

Planning Approval Consistency Assessment Form

SM ES-FT-414

Sydney Metro Integrated Management System (IMS)

Assessment Name:	Temporary Transport Plan October 2022 school holidays
Prepared by:	Sydney Metro
Prepared for:	Sydney Metro
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1. Existing Approved Project

Planning approval reference details (Application/Document No. (including modifications)):

SSI_8256 Sydney Metro City & Southwest – Sydenham to Bankstown
 SSI_8256 Sydney Metro City & Southwest – Sydenham to Bankstown Station: Modification 1 – October 2020

Date of determination:	Infrastructure Approval date – 12 December 2018 Modification 1 Approval date – 22 October 2020	Type of planning approval:	Critical State Significant Infrastructure
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Relevant background information (including EA, REF, Submissions Report, Director General's Report, MCoA):

Sydenham to Bankstown Environmental Impact Statement (EIS) – September 2017
 Sydenham to Bankstown Submissions and Preferred Infrastructure Report (SPIR) – June 2018
 Sydenham to Bankstown Submissions Report (SR) – September 2018
 Sydenham to Bankstown Modified Conditions of Approval – October 2020
 Consistency Assessment Temporary Transport Plan July 2022 school holidays (TfNSW54 July 2022)
 July 2022 Possessions Traffic Consistency Assessment (Appendix B) – June 2022

All proposed works identified in the assessment would be undertaken in accordance with the mitigation measures identified in the EIS, SPIR and SR and the conditions of approval.

Description of existing approved project you are assessing for consistency:

Approved project

The approved project includes construction and operation of a metro rail line, approximately 13km long, between west of Sydenham Station and west of Bankstown Station, including ten metro stations west of Sydenham (Marrickville to Bankstown inclusive) and associated ancillary infrastructure. The works include station works, track and rail system facility works and other works to support metro operations.

Description of approved project between Sydenham and Bankstown

Sydney Metro City and Southwest – Sydenham to Bankstown works includes the following:

Station works

In addition to the station upgrades to improve accessibility, works to meet the standards required for metro services include:

- Installation of platform screen doors
- Provision of operational facilities, such as station service buildings
- Accessibility upgrades for buildings
- Works related to integration with other modes of transport.

Track and rail system facility works

The upgrade of track and rail systems to enable operation of metro services include:

- Track works where required along the rail corridor, including upgrading tracks and adjusting alignments, between west of Sydenham Station and west of Bankstown Station
- New turn back facilities and track crossovers
- Installing Sydney Metro rail systems and adjusting existing Sydney Trains rail systems
- Overhead wiring adjustments.

Other Project elements

- Upgrading existing bridges and underpasses
- Security measures, such as fencing
- Noise barriers
- Modifications to corridor access gates and tracks
- Augmentation of existing power supply, including new traction sub-stations

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- Utility and rail system protection.
- Bridge protection works
- Combined Service Route
- Drainage works to reduce flooding and manage stormwater
- Provision of temporary facilities to support construction, including construction compounds and work sites

Temporary Transport Plan (TTP) during possessions

The Sydney Metro City and Southwest station upgrades between Sydenham and Bankstown include various construction activities that require the temporary shutdown of part of the rail line. The Environmental Impact Statement (EIS) for the project was exhibited in August 2017. The EIS presented a Temporary Transport Strategy (TTS) which outlined the use of bus replacement services over track possession periods, including assessments when trains could not run on the T3 Bankstown Line during construction. The possession periods that were assessed included school holiday possession periods (two (2) weeks in July and six (6) weeks in December/January for five (5) years), four (4) additional weekend possessions per year (in addition to the standard Sydney Trains possessions) and a final possession of up to six (6) months.

The Temporary Transport Strategy is presented in Appendix G of the EIS which states that rail possessions during school holiday periods had only been proposed for the July and December-January school holidays. The possession schedule was planned to avoid the April school holidays when events such as the Easter Show are held, and the October school holidays when sporting finals are often held. However, the needs of each special event will be considered separately. In many cases, the standard TTP would be able to accommodate the increased customer demand, subject to increasing bus frequencies to peak hour levels if the event occurs during the evening or on a weekend. If customer demand levels are high enough, an adapted version of the TTP could be implemented where special services carry customers all the way to event destination.

Following exhibition of the EIS, changes were made to the exhibited project in the Submissions and Preferred Infrastructure Report (SPIR). Given the reduction in the construction activities required to deliver the scope of works identified in the SPIR, there was also a change to the proposed temporary transport arrangements. Key changes to these arrangements included:

- Changes to possession periods:
 - Additional eight (8) weekend possessions per year
 - Two (2) week possessions during December holiday periods only
 - Occasional weekday night-time possessions
- Concurrent closure of three (3) stations for up to two (2) months.

A Temporary Transport Plan (TTP) has been successfully delivered across holiday possession periods in 2019, 2020 and 2021, including a July school holiday period in 2021 and 2022.

2. Description of proposed change which is the subject of this assessment

This Consistency Assessment relates to the two-week possession period in September/October 2022 over the school holidays.

The SPIR assessed the two week possession for the December holiday periods only, with the planned possession schedule to avoid the October school holidays due to sporting finals. Due to industrial action preventing the work required over past possession periods to be adequately completed, the two week October shutdown is required to deliver the Sydney Metro project.

A comparison of the approved possessions and closures against the proposed is as follows:

Rail Possessions and Closures	Approved Rail Possessions and Station Closures (Section 2.7.2 and Section 2.7.3 of Appendix B of the SPIR)	Proposed Rail Possessions and Station Closures
Standard weekend possessions (Sydney Trains possessions utilised by Sydney Metro).	Up to four weekends each calendar year.	No change.
Additional weekend possessions.	Up to eight weekend possessions required each year.	No change.
School holiday possessions	Two week possessions of the T3 Bankstown line (either in part or full) during the Christmas school holiday periods.	Two week track possessions would be taken over school holiday periods, including outside Christmas school holiday periods. A two-week possession was undertaken during the July school holiday period (2-16 July 2022) and a two-week possession would be taken over the October 2022 school holiday period between the 24 September to 9 October.
Freight track possessions The section of rail corridor between east of Marrickville and west of Campsie is shared with freight tracks managed by ARTC.	Up to four weekend possessions a year (these periods coincide with the standard Sydney Trains possession described above).	No change.
Night-time weekday possessions	Required on an occasional basis to prepare the rail corridor ahead of weekend or school holiday possessions.	No change.
Final possession	Between three and six months once the stations have been upgraded.	No change.

(Uncontrolled when printed)

<p>Temporary station closures</p>	<p>Individual stations may be closed for up to 2 months to complete the station works. Up to three stations may be closed at any one time.</p>	<p>The proposed activity avoids the need for 4 two-month station closures.</p>
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The additional full line closure would be required for two weeks in the October 2022 school holiday period (24 September – 9 October) to enable construction of the approved project. Stations between Sydenham and Birrong, along the T3 Bankstown Line, would be temporarily closed between 2am Saturday 24 September to 2am Monday 10 October 2022.

Between 24 September to 7 October 2022, the T3 Bankstown Line would be closed between Birrong and Sydenham, and between the 8 to 9 October stations would be closed between Birrong and Sydenham as well as Birrong to Cabramatta.

Sydenham Station would remain open during the rail line closure as an interchange station between trains and replacement bus services. Trains would continue to operate west of Birrong Station and along the City Circle line between the 24 September to 7 October 2022. Between 8 to 9 October stations between Birrong and Cabramatta would also be closed with Cabramatta Station remained open during this weekend.

During the NRL grand final day on Sunday 2 October 2022, extra bus services would be added to the standard weekend timetable.

Frequent bus services would replace trains between the closed stations during this period. Bus replacement services would be provided on five routes on weekdays and the weekends, with lower frequency of bus services on the weekend except for 2 October for the NRL grand final. For travel between Sydenham and Bankstown, the replacement bus routes would be:

- 10T3 – All stops between Sydenham and Bankstown
- 33T3 – Limited Stops: Sydenham to Belmore, then all stops to Bankstown
- 13T3 – Limited stops: Sydenham to Canterbury, then Campsie

For travel between Bankstown and Lidcombe, the replacement bus routes would be:

- 8T3 – All stops between Bankstown and Lidcombe
- 8AT3 – Express: Bankstown then Lidcombe

On Saturday 8 and Sunday 9 October, buses would also replace trains between Bankstown and Cabramatta on the following replacement bus routes:

- 14T3 – All stops between Bankstown and Cabramatta
- 15T3 – Express: Bankstown and Cabramatta

Train replacement bus map

- Train replacement bus route, 8 & 9 October -14T3 & 15T3
- Train line closed
- Train replacement bus route
- T3 Bankstown Line
- T4 Eastern Suburbs & Illawarra and South Coast lines
- T8 Airport & South Line via Sydenham or Airport

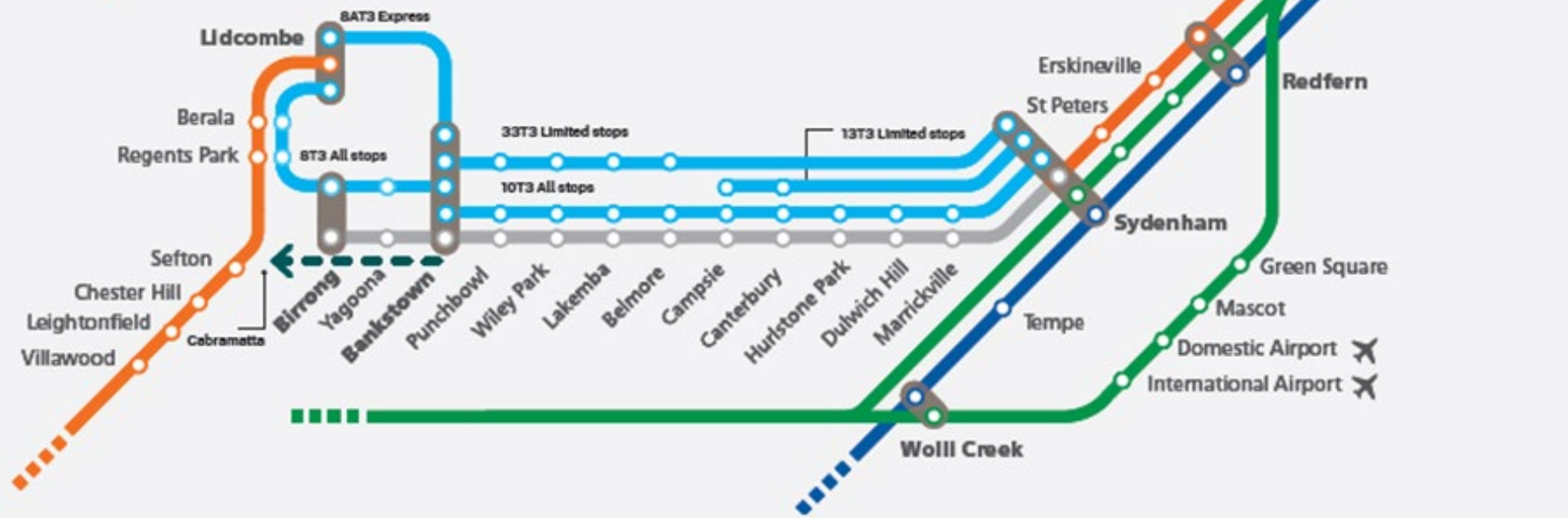


Figure 1 – Replacement and alternative services – Saturday 24 September to Sunday 9 October 2022 (Source: TfNSW)

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3. Timeframe

When will the proposed change take place? For how long?

For two weeks during the October school holidays from the end of September to early October 2022 (the proposed dates are 24 September – 9 October).

4. Site description

The temporary bus stops and routes are in the streets surrounding the Sydenham to Bankstown rail corridor, with focus on the streets between Bankstown and Sydenham, Campsie and Sydenham, and Lidcombe and Bankstown. See Appendix B for further details regarding the site.

5. Site Environmental Characteristics

Refer to the Environmental Impact Statement for a description of the existing environment. The proposed construction works would impact nearby receivers and the bus replacement services would impact on pedestrian spaces, parking spaces and Taxi Zones around affected train stations and existing road network only.

6. Justification for the proposed change

The Sydney Metro City & Southwest are upgrading all ten stations between Sydenham and Bankstown to meet current accessibility standards before converting the T3 Bankstown Line to Metro operations. The shutdown is needed to allow construction to take place on Sydney Metro.

A review of the construction scheduling identified a delay in the commencement of station construction due to the availability of possessions (rail shutdowns) and impacts of industrial action. This has implications on the date of station and milestone completion and therefore delivery of the wider Approved Project. The proposed additional possession is required to mitigate construction delays.

As a result of the proposed works (and other temporary transport arrangements as part of the existing planning approval), there is no longer a need for up to four two-month station closures where up to three stations would be closed at one time. This is an improved overall customer outcome.

Due to Sydney Trains industrial action, the full July 2022 TTP two week shutdown that was assessed could not be completed, with only one week of possession being completed. The October shutdown was added to the possession regime to provide additional time for the work that requires rail line possession to be fully completed.

7. Environmental Benefit

The additional two-week possession would assist in mitigating overall project construction delays, reducing the total period of time where community and environmental impacts are occurring from construction works. The inclusion of the additional two-week school holiday possession periods, removes the need for up to four (4) two-month station closures, which is also an improved overall customer outcome by reducing total disruption.

8. Control Measures

Will a project and site specific EMP be prepared?	<input type="checkbox"/> Yes	Are appropriate control measures already identified in an existing EMP?	<input type="checkbox"/> Yes
	<input checked="" type="checkbox"/> No		<input checked="" type="checkbox"/> No

9. Conditions of approval

Will the proposal be consistent with the conditions of approval?	<input checked="" type="checkbox"/> Yes
	<input type="checkbox"/> No

10. Impact Assessment – Construction

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed change, relative to the relevant impact in the Approved Project	Proposed Control Measures in addition to project CoA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	No change from Approved Project.	No additional measures required.	Y	Y	
Water	No change from Approved Project.	No additional measures required.	Y	Y	
Soils and contamination	No change from Approved Project.	No additional measures required.	Y	Y	
Air quality	The proposed temporary bus routes have the potential for localised air quality impacts however, this is anticipated to be balanced by the line-wide shutdown of the rail corridor during this period. Nevertheless, any localised air quality impacts are considered to be negligible relative to the Approved Project.	No additional measures required.	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed change, relative to the relevant impact in the Approved Project	Proposed Control Measures in addition to project CoA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Noise and vibration	<p>The additional possession period and replacement bus services would result in minor noise impacts to nearby properties.</p> <p>The extent of construction noise and vibration impacts are expected to be similar to other possession periods assessed in the Approved Project. Construction noise and vibration was assessed in Volume 3, Technical Paper 2 of the EIS. These impacts would be mitigated in accordance with the measures contained within the Construction Noise and Vibration Management Plan and associated Construction Noise and Vibration Impact Statements.</p> <p>The impacts would be consistent with the noise impacts as assessed within the EIS and would be temporary in nature over the two week period. It is considered that the additional noise impacts from the bus routes present a negligible change from the Approved Project.</p>	No additional measures required.	Y	Y	
Aboriginal heritage	No change from Approved Project.	No additional measures required.	Y	Y	
Non-Aboriginal heritage	No change from Approved Project.	No additional measures required.	Y	Y	

<p>Community and socio-economic</p>	<p>The proposed activity would result in community impacts, by way of inconveniences and delays, as the train line would not be in operation for two weeks. However, there has been a significant attempt to mitigate these impacts by providing five bus replacement routes between 24 September to 7 October and providing two replacement bus routes between 8 to 9 October, including express services, limited stop services and also routes to all train lines which is anticipated to provide a more direct connection to Central Station than an all stops rail replacement service to cater for everyone’s requirements. Increased bus frequencies would be provided to provide access to the stadium for the NRL grand final day (2 October).</p> <p>The additional school holiday possession periods removes social impacts which would have resulted from four two-month stations closures. An additional mitigation measure is proposed requiring consultation with the local community prior to the October possession.</p> <p>There is potential for the proposed activity to result in economic impacts to businesses surrounding rail stations due to loss of rail patronage and some nearby car parking. However, the loss of rail patronage is temporary only and anticipated to be mitigated by additional patronage from construction workers and bus users. The car parking impacts are likely to be similar to other rail shutdowns being undertaken, for example over the Christmas or July possession. Any economic impact from the proposed activity is anticipated to be negligible relative to the Approved Project.</p>	<p>Consultation with the local community is to be undertaken prior to the two-week October possession and the community is continuously updated in the lead-up to the shutdown via email.</p> <p>A 24/7 phone number is available to answer any questions and a project web page was created to provide more information. See Appendix D for further community consultation.</p> <p>Bus marshals would be available during the busiest parts of the day and to cover the additional passenger demand caused by the NRL grand final, to assist customers with accessibility needs.</p>	<p>Y</p>	<p>Y</p>	
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Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed change, relative to the relevant impact in the Approved Project	Proposed Control Measures in addition to project CoA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Traffic and transport	<p>Traffic In accordance with Condition of Approval E48, a Temporary Transport Management Plan has been prepared and sent to DPE.</p> <p>To support this Consistency Assessment, a memo was prepared (Appendix A) that concludes that due to lower service levels in TTP buses during the September/October possession period and the expected similar traffic volume patterns to those assessed for the July school holiday possession, additional traffic assessment is not required. Lower service levels are proposed as there were substantially additional services provided during the July rail possession than was required to meet the demand. Therefore, it is expected that key intersections would perform at or better than during the July possession period. Therefore, the construction impact assessment is expected to be similar to the outcomes of the July TTP Transport Consistency Assessment (Appendix B). Construction haulage traffic is consistent with the EIS.</p> <p>Majority of the intersections along two TTP routes between Lidcombe and Bankstown (08T3 and 08AT3) have been excluded from the sensitivity assessments/modelling as the bus frequencies are very low and the network is identified to have sufficient spare capacity to accommodate the small increase in TTP buses during the peak periods. The traffic impact of these routes is considered negligible.</p>	<p>Where there are more significant delays and oversaturated conditions and/or impacts to the intersection performance as a result of addition of TTP buses, recommended signal phasing/timing changes shall be considered in accordance with the revised environmental mitigation measure TC6.</p> <p>These intersections include:</p> <ul style="list-style-type: none"> • Sydenham Road / Victoria Road (AM peak) • Hume Highway/ Chapel Road/ Rookwood Road (PM peak) • Canterbury Road/ Kingsgrove Road / Sharp Street (AM peak) 	Y	Y	

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed change, relative to the relevant impact in the Approved Project	Proposed Control Measures in addition to project CoA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
	<p>Three intersections have multiple routes passing through, which results in a combined high frequency of TTP services during the peak hours.</p> <p>The impacts on key intersections are considered acceptable, subject to implementation of mitigation measures, and the assessment in the Transport Consistency Assessment (Appendix B) are summarised as follows:</p> <ul style="list-style-type: none"> • Marrickville Road/ Wardell Road – AM peak hour volumes are less than 15 and therefore have negligible impacts. The PM peak hour would accommodate 50 replacement services and is likely to result in satisfactory intersection operations. • Marrickville Road/ Victoria Road – the addition of replacement services in the AM and PM peak hour is likely to have satisfactory operations. • Sydenham Road/ Illawara Road – During PM peak, the volumes are less than 15 buses. Therefore, the addition of TTP buses to this intersection is likely to have negligible impacts. • Marrickville Road/ Illawara Road - In the PM peak hour, the intersection is likely to accommodate 96 bus replacement services. This is based on the previous SPIR assessment. The addition of replacement services in the AM and PM 				

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed change, relative to the relevant impact in the Approved Project	Proposed Control Measures in addition to project CoA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
	<p>peak hour is likely to have acceptable operations.</p> <ul style="list-style-type: none"> • New Canterbury Road / Constitution Road – In the PM peak hour, the intersection is likely to accommodate 65 bus replacement services. This addition of replacement services in the AM and PM peak hour is likely to have acceptable operations. • Wardell Road / Ewart Street - The addition of replacement services in the AM and PM peak hour is likely to have acceptable operations. • The Boulevard / Arthur Street – Though the TTP bus volumes have increased (by about 15 buses per hour), the impact of these additional buses on the intersection is expected to be similar or lower compared with the SPIR assessments. Therefore, the intersection would operate better compared to the SPIR forecasts for both AM and PM peak hours. • Sydenham Road / Park Road / Petersham Road – This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal. • Canterbury Road / Minter Street – This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal. 				

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed change, relative to the relevant impact in the Approved Project	Proposed Control Measures in addition to project CoA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
	<ul style="list-style-type: none"> • Railway Parade/ Gleeson Avenue – The bus volumes during the AM peak hour are 17 buses and therefore likely to have negligible impacts in the AM peak hour. In the PM peak hour, the intersection is likely to have capacity to accommodate 84 replacement services. This is based on the SPIR assessment. Thus, the addition of 84 replacement services in the PM peak hour is likely to result in satisfactory intersection operations. • Beamish Street / South Parade / Lilian Lane - The addition of 51 replacement services in the AM peak hour and 68 replacement services in the PM peak hour is likely to result in satisfactory intersection operations. • Canterbury Road / Duke Street - This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal. • Beamish Street / Clissold Parade – The intersection is likely to have capacity to accommodate 47 bus replacement services. In the PM peak hour, the intersection is likely to accommodate 46 bus replacement services. AM peak hour would operate LOS A and PM peak hour would operate at LOS E. • Sydenham Road / Centennial Street – This is a minor intersection with TTP buses going straight through the 				

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed change, relative to the relevant impact in the Approved Project	Proposed Control Measures in addition to project CoA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
	<p>intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.</p> <p>Majority of the signalised intersections have only slight increases in delays (less than 20 seconds) and the overall intersection performance is maintained as a result of the additional construction traffic and TTP buses during the October 2022 possession period. As the impact on the public would be minimal at this level of delay and the possession is for a short period (2 weeks) during the October 2022 school holiday period, it would not warrant specific mitigations.</p> <p>Parking The temporary bus stops and provision for bus layover and standby buses would temporarily impact street parking and Taxi Zones during the two-week possession period. Impacts to street parking have been minimised as much as possible by strategic location of the bus stops and where possible, limiting impacts only during weekday peak periods.</p> <p>During the possession, street parking would also be impacted by construction vehicle parking, and also the loss of some commuter car parking areas for use for material, equipment and machinery lay down areas.</p> <p>Street parking impacts are expected to be greatest in streets adjacent to stations, access areas to the</p>				

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed change, relative to the relevant impact in the Approved Project	Proposed Control Measures in addition to project CoA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
	<p>rail corridor and commuter parking areas. This is due to proposed Bus Zones impacting parking spaces and the relocation of Taxi Zones impacting parking spaces.</p> <p>Temporary kerbside changes have been managed in the Community Consultation Reports with the affected LGAs. Most changes were consistent with the previous TTP in December 2021 with no reported issues whilst other changes would be managed, such as with additional signage placed well in advance to provide clear information.</p> <p>Commuter parking demand around the stations is expected to drop significantly during the possession period which would assist with offsetting parking impacts from construction worker vehicles and material, equipment and machinery laydown areas.</p> <p>Impact to street parking during possession periods was assessed in Volume 2, Technical Paper 1 of the EIS, and the proposed activity is considered to be consistent with the Approved Project. The Conditions of Approval require a Temporary Transport Management Plan to be prepared and this would incorporate measures to minimise impact to on-street parking and surrounding residences and commercial properties. In addition to this, a mitigation measure is proposed, requiring consultation to be undertaken with businesses impacted by temporary bus stops and loss of car parking.</p>				

Aspect	Nature and extent of impacts (negative and positive) during construction (if control measures implemented) of the proposed change, relative to the relevant impact in the Approved Project	Proposed Control Measures in addition to project CoA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Waste and resource management	No change from Approved Project.	No additional measures required.	Y	Y	
Visual	Minor visual impacts would result from the temporary bus stops. However, this is considered to be temporary only and negligible relative to the Approved Project.	No additional measures required.	Y	Y	
Land use and property	No change from Approved Project.	No additional measures required.	Y	Y	
Hazard and risk	No change from Approved Project.	No additional measures required.	Y	Y	
Other	No change from Approved Project.	No additional measures required.	Y	Y	

11. Impact Assessment – Operation

The proposed works are during construction only.

Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed change, relative to the relevant impact in the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Flora and fauna	No change from Approved Project.	No additional measures required.	N/A	Y	
Water	No change from Approved Project.	No additional measures required.	N/A	Y	
Soils and contamination	No change from Approved Project.	No additional measures required.	N/A	Y	
Air quality	No change from Approved Project.	No additional measures required.	N/A	Y	
Noise and vibration	No change from Approved Project.	No additional measures required.	N/A	Y	
Aboriginal heritage	No change from Approved Project.	No additional measures required.	N/A	Y	
Non-Aboriginal heritage	No change from Approved Project.	No additional measures required.	N/A	Y	
Community and socio-economic	No change from Approved Project.	No additional measures required.	N/A	Y	
Traffic and transport	No change from Approved Project.	No additional measures required.	N/A	Y	
Waste and resource management	No change from Approved Project.	No additional measures required.	N/A	Y	
Visual and urban design	No change from Approved Project.	No additional measures required.	N/A	Y	

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Aspect	Nature and extent of impacts (negative and positive) during operation (if control measures implemented) of the proposed change, relative to the relevant impact in the Approved Project	Proposed Control Measures in addition to project COA and REMMs	Minimal Impact Y/N	Endorsed	
				Y/N	Comments
Land use and property	No change from Approved Project.	No additional measures required.	N/A	Y	
Hazard and risk	No change from Approved Project.	No additional measures required.	N/A	Y	
Other	No change from Approved Project.	No additional measures required.	N/A	Y	

12. Consistency with the Approved Project

Question	Consider the following:
Is the project (including the proposed changes) consistent with the conditions of approval?	Yes. The proposed works would be consistent with the conditions of approval.
Is the project (including the proposed changes) consistent with the objectives and functions of elements of the Approved Project?	Yes. The changes identified in this assessment are consistent with the objectives and functions of the elements of the Approved Project.
Are the environmental impacts of the proposed change consistent with the impacts of the approved project?	Yes. The proposed works do not result in any new environmental impacts beyond those considered in the Approved Project.
Is the change within the envelope of what has been approved?	Yes. The changes identified in this assessment are consistent with the objectives and functions of the Approved Project and the environmental impacts been adequately assessed.
Are there any new environmental impacts as a result of the proposed works/project changes?	All risks would be adequately addressed through the application of the mitigation measures in the above impact assessment tables. There would be no new environmental risks as a result of the proposed works.
Are the impacts of the proposed activity/works known and understood?	Yes. The impacts of the proposed works are understood and will be accounted for by implementing the control measures within this document, and relevant plans (October 2022 School Holidays TTMP).
Are the impacts of the proposed activity/works able to be managed so as not to have an adverse impact?	Yes. The impacts of the proposed works can be managed so as to avoid an adverse impact.
Is the proposed change/s consistent with the approval (having regard to the above assessment)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

13. Other Environmental Approvals

Identify all other approvals required for the proposed works:	N/A
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14. Recommendation

Based on the above impact assessment, and with reference to the Sydney Metro Sydenham to Bankstown EIS, SPIR, SR, and including the conditions of approval, it is recommended that:

Tick relevant box	
The proposed change has negligible or more than negligible impacts on the environment or community however is consistent with the Approval , including the conditions of approval. The proposed impacts are consistent with those assessed for the Approved Project (i.e., does not trigger a change to the conditions of approval).	<input checked="" type="checkbox"/>
The proposed change is not consistent with the Approved Project including the conditions of approval and would be subject to a separate modification application.	
The proposed change is not substantially the same as the Approved Project and is considered a radical transformation. A new planning pathway should be considered.	

Author certification

I certify that to the best of my knowledge this Consistency Checklist:

- Examines and takes into account the fullest extent possible all matters affecting or likely to affect the environment as a result of activities associated with the proposed change; and
- Examines the consistency of the proposed change with the Approved Project; is accurate in all material respects and does not omit any material information.

Name:	Isabella Caruso	Signature:	
Title:	Planning Officer		
Company:	Sydney Metro	Date:	06/09/2022

Assessment Supporting Signature

Application supported and submitted by

Name:	Yvette Buchli	Date:	07/09/2022
Title:	Associate Director Planning Approvals	Comments:	
Signature:			


Assessment Endorsement

Based on the above assessment, are the impacts and scope of the proposed change consistent with the existing Approved Project?

Yes The proposed change is consistent with the Approved Project and no further assessment is required.

No The proposed change is not consistent with the Approved Project.

A modification or a new activity approval/ consent is required. Advise Senior Project Manager of appropriate alternative planning approvals pathway to be undertaken.

Endorsed by			
Name:	Fil Cerone	Date:	7 September 2022
Title:	Director City & Southwest, Environment, Sustainability and Planning	Comments:	
Signature:			

Appendix A – Memo – October TTP – Traffic Consistency Assessment



Memo

To Isabella Caruso - Planning Officer, Planning Approvals

From Jay Shanmugam – Transport Planning Analyst, Customer Journey Planning
Nita Hutapea - Manager Network Modelling Advisory – Sydney Metro

Date 15 August 2022

Priority ROUTINE

Due date

The Sydney Metro City & Southwest will upgrade all 10 stations between Sydenham and Bankstown to meet current accessibility standards before converting the T3 Bankstown Line to Metro operations. This upgrade will include various construction activities that require the temporary closure of part or all of the rail line. The recent closure of T3 Bankstown train line occurred between Saturday 2 July and Friday 15 July 2022 (July TTP) due to Sydney Metro upgrade works. A Temporary Transport Plan (TTP) has been successfully delivered during the train line closure where five temporary bus routes were in operation. As part of the EIS requirements, a traffic consistency assessment has been carried out at all traffic-controlled intersections where the TTP buses in operation.

There is an upcoming train line closure along T3 Bankstown line between Saturday 24 September 2022 and Sunday 09 October 2022. This closure will also include the NRL grand final day on 02 October 2022. The short-term temporary planning team is currently planning the TTP bus operations for the upcoming closure. As part of the TTP planning, the bus timetables were reviewed and refined based on the following factors:

- Re-forecasted patronage demand: A reduction of 27 percentage to the 2019 patronage demand profiles. Factors may include recoveries from COVID travel patterns and work from home. Source: (<http://forecast.aai.transport.nsw.gov.au>)
- No restrictions to bus capacity due to COVID: As of 30 April 2022, TfNSW has removed all restrictions on the capacity of public transport modes. As such, it is assumed that all bus services may carry up to 54 passengers per bus.

- July 2022 TTP supply vs demand data: A comparison between the supply and the demand of the July 2022 TTP showed that there were additional services during the AM and PM peak periods.

The revised timetables for the upcoming September/October TTP had 22% fewer services in the AM peak and 19% fewer services in the PM peak. A comparison between the service levels are outlined in the table below:

Route	Direction	Towards	July 2022 TTP				September/October - 2022 TTP			
			Frequencies (services/hr)				Frequencies (services/hr)			
			AM	PM	IP	Weekend	AM	PM	IP	Weekend
			0800-0900	1700-1800	1100-1200	1200-0100	0800-0900	1700-1800	1100-1200	1200-0100
10T3	Inbound	Sydenham	38	12	12	8	25	10	9	10
10T3	Outbound	Bankstown	9	34	8	8	7	24	7	9
13T3	Inbound	Sydenham	25	5	7	8	21	6	7	7
13T3	Outbound	Campsie	4	22	4	8	6	18	6	5
33T3	Inbound	Sydenham	32	10	10	8	21	9	8	8
33T3	Outbound	Bankstown	4	28	6	8	6	20	5	7
8AT3	Inbound	Bankstown	6	8	4	4	5	7	4	4
8AT3	Outbound	Lidcombe	6	8	4	4	5	6	4	4
8T3	Inbound	Bankstown	8	12	4	4	8	11	4	4
8T3	Outbound	Lidcombe	10	10	4	4	7	9	4	4
TOTAL			142	149	63	64	111	120	58	62
% Difference over Oct TTP			22%	19%	8%	3%				

A review of SCATS traffic volume data for July 2019 and October 2019 school holiday periods has been undertaken to compare the traffic volumes at key intersections along the TTP bus routes. The analysis revealed that the October 2019 traffic volume is lower/ higher between -1% to +4% compared to July 2019 traffic volume. It is considered that the additional 4% traffic would not have significant impacts to the road network.

Recommendations

It is considered that due to lower service levels in TTP buses during the September/October TTP and the similar traffic volume patterns a subsequent traffic consistency assessment is not required. It is expected that key intersections will perform at or better than during the July TTP.

Appendix B – July 2022 Possessions Traffic Consistency Assessment

July 2022 Possessions Traffic Consistency Assessment

15-Jun-2022
Sydney Metro City & Southwest Sydenham to Bankstown Upgrade

July 2022 Possessions Traffic Consistency Assessment

Client: Sydney Metro

ABN: 12 354 063 515

Prepared by

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In association with

GHD

15-Jun-2022

Job No.: 60489141

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Quality Information

Document July 2022 Possessions Traffic Consistency Assessment

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Date 15-Jun-2022

Prepared by Mark Yeung / Nirman Kesari

Reviewed by Anoop Sridhar / Andrew Cook

Revision History


Rev	Revision Date	Details	Authorised	
			Name/Position	Signature
A	03-June-2022	First draft for Sydney Metro review	Kim Skellern AECOM specialist manager	
B	10-Jun-2022	Final	Kim Skellern AECOM specialist manager	
C	15-Jun-2022	Revised Final	Kim Skellern AECOM specialist manager	

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1.0 Introduction

1.1 Background

Sydney Metro has received approval for the Sydenham to Bankstown upgrade component of the Sydney Metro City & Southwest (the project) in December 2018. The project involves upgrading 10 existing stations west of Sydenham (Marrickville to Bankstown inclusive), and a 13-kilometre-long section of the Sydney Trains T3 Bankstown Line, between west of Sydenham Station and east of Bankstown Station, to improve accessibility for customers and meet the standards required for metro operations. The project would enable Sydney Metro to operate beyond Sydenham, to Bankstown.

1.1.1 Environmental Impact Statement (EIS)

An Environmental Impact Statement (EIS) for the project was exhibited in August 2017 (the exhibited project). The EIS included a Temporary Transport Strategy (TTS) which outlined the use of bus replacement services over track possession periods, periods when trains could not run on the T3 Bankstown Line, during construction.

This assessment analysed the potential impacts of the project during the required possession periods. The possession periods that were assessed included school holiday possession periods:

- Two weeks in July and six weeks in December/January for five years
- Four additional weekend possessions per year in addition to the standard Sydney Trains possessions

Typical weekday demand on the T3 Bankstown Line was assumed in the assessment to be in the order of 90,000 trips per day, of which the vast majority were between Sydenham and Bankstown Stations. A 6% per annum growth in demand was projected for the T3 Bankstown Line. To meet this demand, a Baseline Temporary Transport Plan (TTP) and a Refined TTP was developed which provided a potential network and frequencies of replacement bus services.

A Baseline Temporary Transport Plan included replacement buses during possession periods that provide a full rail capacity replacement by buses only, as currently occurs during typical weekend possession. This Baseline Temporary Transport Plan was assessed in the EIS and indicated that there would be extensive impacts with both intersection capacities and the ability to provide safe and efficient boarding and alighting facilities at stations being affected. As this scenario would have the potential to adversely affect not just the amenity for passengers using the rail replacement service, but those on existing bus routes in the area, private car users and cyclists, a Refined Baseline TTP scenario was also developed as part of the EIS. The Refined Baseline TTP was tested to assess an alternative rail replacement strategy to convey passengers west of Campsie to parallel rail lines and reduce the impact on intersections between Dulwich Hill and Marrickville.

The addition of buses on existing infrastructure may cause potential bottlenecks at certain intersections. To understand potential pinch-points traffic assessments were undertaken and EIS assessed the following scenarios:

- Scenario A: Existing 2016 background traffic flows for a typical day
- Scenario B: Future 2023 traffic flows for a typical day
- Scenario C: Future 2023 traffic + construction traffic
- Scenario D: Future 2023 traffic + construction traffic + Baseline TTP
- Scenario E: Future 2023 traffic + construction traffic + Refined TTP

The EIS was subsequently updated by the Submissions and Preferred Infrastructure Report (PIR) in 2018.

1.1.2 Submissions and Preferred Infrastructure Report (SPIR)

Following the exhibition of the EIS, several changes were proposed to the exhibited project. The 'preferred project' enabled several issues raised in submissions to be addressed, but also significantly

minimised potential impacts – especially in respect of construction noise, traffic, heritage and vegetation impacts.

Key changes during the assessment of the preferred project included:

- Changes to construction sequencing and possession periods
 - Additional eight (8) weekend possessions per year
 - Two (2) week possessions during December holiday periods only (July possession period excluded)
 - Occasional weekday night-time possessions
- Concurrent closure of three (3) stations for up to two (2) months
- Revised works to road bridges
- Retaining and enhancing existing station layouts to facilitate improved operations with supporting precinct improvements to promote customer service.

The SPIR assessed the following scenarios:

- Scenario A: Future 2023 traffic flows for a typical day (from EIS)
- Scenario B: Future 2023 traffic + construction traffic + Refined TTP (from EIS)
- Scenario C: Future 2023 December traffic flows
- Scenario D: Future 2023 December traffic + construction traffic
- Scenario E: Future 2023 December traffic + construction traffic + Refined TTP.

1.1.3 July 2021 consistency assessment (previous assessment)

A revised TTP network and service frequencies were proposed by Sydney Metro over the July 2021 school holiday period. This period was excluded from the SPIR but was included under the EIS.

A full line closure was required for two weeks in July 2021 and bus replacement services were provided on seven routes to enable construction. The July 2021 consistency assessment (previous assessment) assessed the potential traffic impacts of providing bus replacement services along these seven routes.

1.1.4 July 2022 consistency assessment (this assessment)

An updated TTP network and service frequencies are proposed by Sydney Metro over the July 2022 school holiday period – 4 July 2022 to 15 July 2022. During this period, a full line closure would be required for two weeks, and bus replacement services would be provided on five routes to enable construction.

This assessment will assess the potential traffic impacts of providing bus replacement services along these five routes. Three of these routes were assessed during the previous assessment, however, two of these have been modified as part of the July 2022 TTP. Therefore, this will require the assessment of new intersections along these modified routes. Two new routes are also proposed that were not part of the previous assessment.

A preliminary sensitivity assessment was conducted that considered the bus replacement routes, frequencies, intersection control type, spare capacity likely to be available at the intersection, terminating and turn-around facilities as well as using a methodology similar to the EIS to determine the intersections requiring assessment.

The methodology for this assessment is discussed in further detail in Section 2.0.

1.2 Structure of this report

This report is structured in a manner that broadly replicates the SPIR.

- Section 2.0 describes the general transport context of this assessment and project area, as well as provides details of the methodology used for this assessment.
- Section 2.8 provides the assessment of potential impacts due to the July 2022 possessions during the construction phase.
- Section 4.0 provides the updated mitigation measures as an outcome from this assessment.

2.0 Methodology

2.1 Temporary transport strategy

The temporary transport strategy provides bus replacement services for commuters travelling from Sydenham to Bankstown. The proposed TTP routes, likely to operate during track possession period during July 2022 run along the train route, connecting all stations shown in Figure 1.

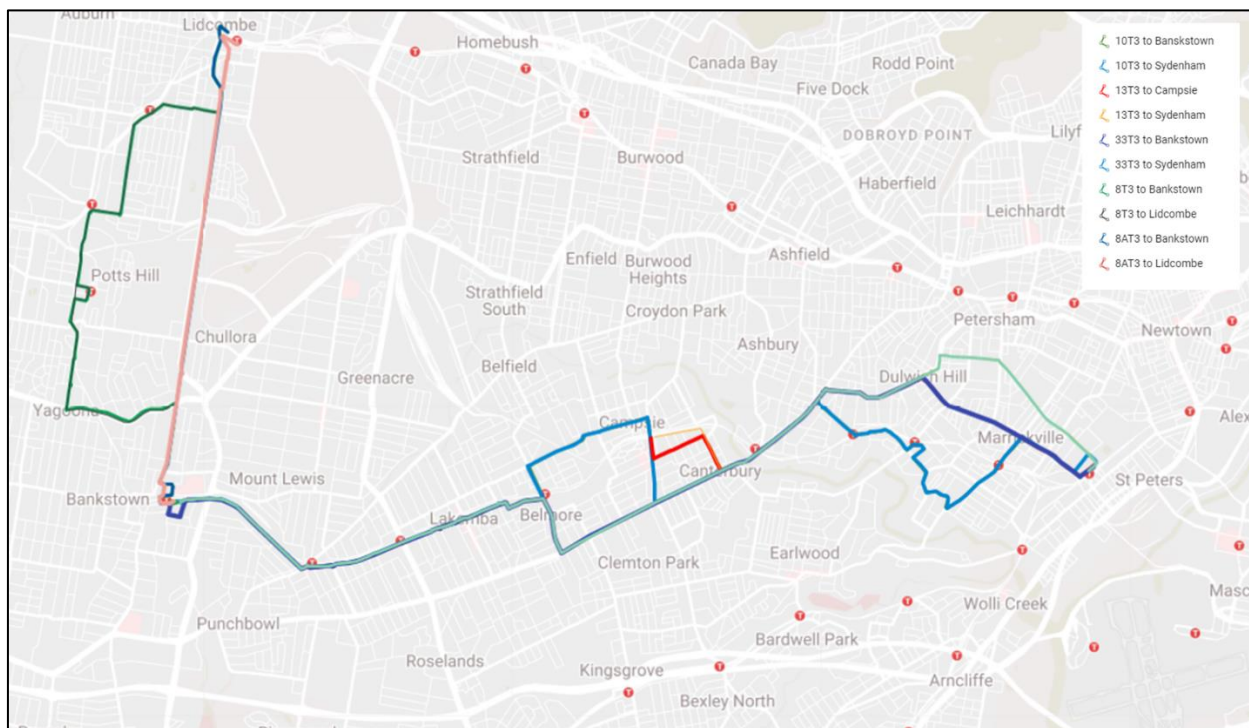


Figure 1 Project area and proposed July 2022 TTP routes

2.1.1 Proposed TTP routes

Broad descriptions of the bus replacement services proposed for the July 2022 possession period used for this assessment are given in Table 1.

Table 1 Proposed TTP routes for July 2022 possession

Route	Description
10T3	Bankstown to Sydenham (all stops)
13T3	Campsie to Sydenham (Limited stops - Canterbury then Sydenham)
33T3	Bankstown to Sydenham (Limited stops – All stops to Belmore then Sydenham)
8T3	Lidcombe to Bankstown (all stops)
8AT3	Lidcombe to Bankstown (Express to Lidcombe)

Detailed maps for the proposed TTP routes are included in Appendix A.

Route 10T3, Route 13T3 and Route 33T3 are proposed to be east-west routes running parallel to the T3 line and are proposed to be all stops services. Route 10T3 and Route 33T3 will run the full length of the rail line possession area from Bankstown to Sydenham. Route 13T3 will service the eastern segment of the possession area and only run between Campsie and Sydenham.

Route 8T3 and Route 8AT3 are proposed to service the western segment of the possession area by transporting passengers to the T1 parallel service to the north and are proposed to be all stop services. Both routes will transport passengers to Lidcombe from Bankstown.

2.1.2 Frequencies

The proposed frequency of bus replacement services (TTP) during the AM and PM peak periods as well as the Inter-Peak (IP) and weekends for the July 2022 possession period, is presented in Table 2.

Table 2 Proposed frequency of TTP routes for July 2022 possession

Route	Direction	Towards	Frequency (services/hour)			
			AM	PM	IP	Weekend
10T3	Inbound	Sydenham	38	12	12	8
10T3	Outbound	Bankstown	9	34	8	8
13T3	Inbound	Sydenham	25	5	7	8
13T3	Outbound	Campsie	4	22	4	8
33T3	Inbound	Sydenham	32	10	10	8
33T3	Outbound	Bankstown	4	28	6	8
8T3	Inbound	Bankstown	8	12	4	4
8T3	Outbound	Lidcombe	10	10	4	4
8AT3	Inbound	Bankstown	6	8	4	4
8AT3	Outbound	Lidcombe	6	8	4	4

The bus replacement service frequencies proposed for the July 2022 possession period were compared to the frequencies adopted for the EIS, SPIR and previous assessment. A preliminary sensitivity analysis determined list of previously modelled intersections that would potentially require reassessment as well as identify intersections that require new models to be developed. The methodology adopted for the preliminary sensitivity analysis is included in Appendix B.

Impacts of the bus replacement services during the IP and weekend (Saturdays and Sundays) have not been assessed. This is due to lower background traffic generally observed on weekends and proposed frequency of TTP routes during the weekend being lower in comparison to the weekday peak period. Thus, the impacts on network due to the TTP services during the weekend peak period are likely to be similar or lower compared to the weekday peak period.

2.2 Intersection selection methodology

The methodology used during the preliminary sensitivity analysis to determine intersections for inclusion in this assessment is detailed below. As shown in Figure 2, a combination of sensitivity analysis and Level of Service (LOS) filter was used to optimise the number of intersections to be modelled.

Detailed methodology and outcomes from the preliminary sensitivity analysis are included in Appendix B.

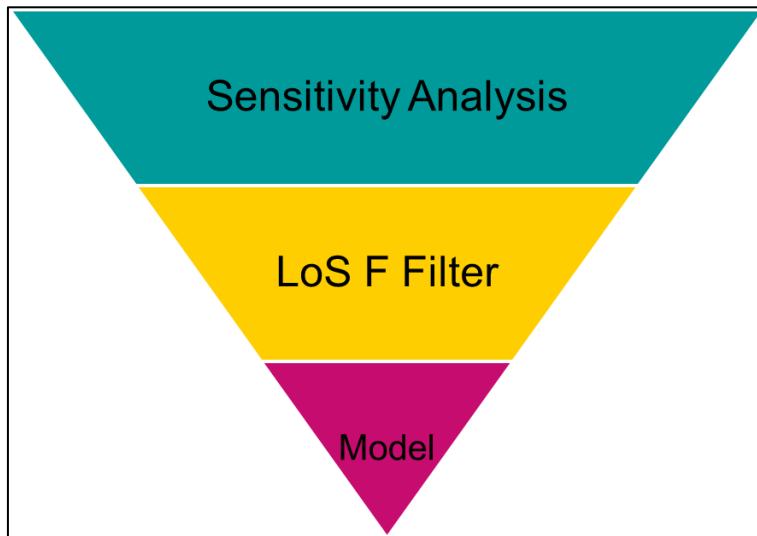


Figure 2 Methodology adopted for preliminary sensitivity analysis

Based on the methodology detailed in Appendix B, intersections were allocated to five different categories. These categories are:

- Category 1 – New modelling assessment: Intersections that were not previously assessed and where bus volumes are higher than 15 buses per hour and those that do not qualify under Category 4
- Category 2 – Modelling re-assessment: ‘Reassessment’ intersections were those intersections where the proposed routes would pass with higher expected bus volumes than those previously assessed
- Category 3 – No modelling re-assessment: ‘No Reassessment’ intersections were those intersections where only construction routes would pass and/ or where the proposed routes would pass but with similar or lower bus volumes when compared to the EIS, SPIR or the previous assessment (July 2021 CA). These intersections could therefore be reasonably expected to perform similarly or better during a July 2022 scenario as a worse-case scenario had already been assessed
- Category 4 – Sensitivity test: ‘Sensitivity test’ intersections were those intersections where the proposed routes would pass with lower or similar bus volumes when compared to the EIS, SPIR or the previous assessment but did not require modelling re-assessment based on sensitivity testing as detailed in 2.2.4
- New modelling assessment, but disregarded: Intersections that are new but do not meet the criteria to fall under Category 1.

The preliminary sensitivity analysis enabled the identification of intersections that are likely to have potential impacts due to the addition of TTP buses and therefore requiring further detailed analysis under Category 1, 2 and 4. The potential impacts of providing TTP services on the existing network are discussed in Section 3.0 followed by mitigation measures discussed in Section 4.0.

2.2.1 Category 1 – New modelling assessment

In the study area, thirteen (13) intersections were categorised as Category 1. The intersections that are included in Category 1 are shown in Figure 3 with the description of each included in Table 3.

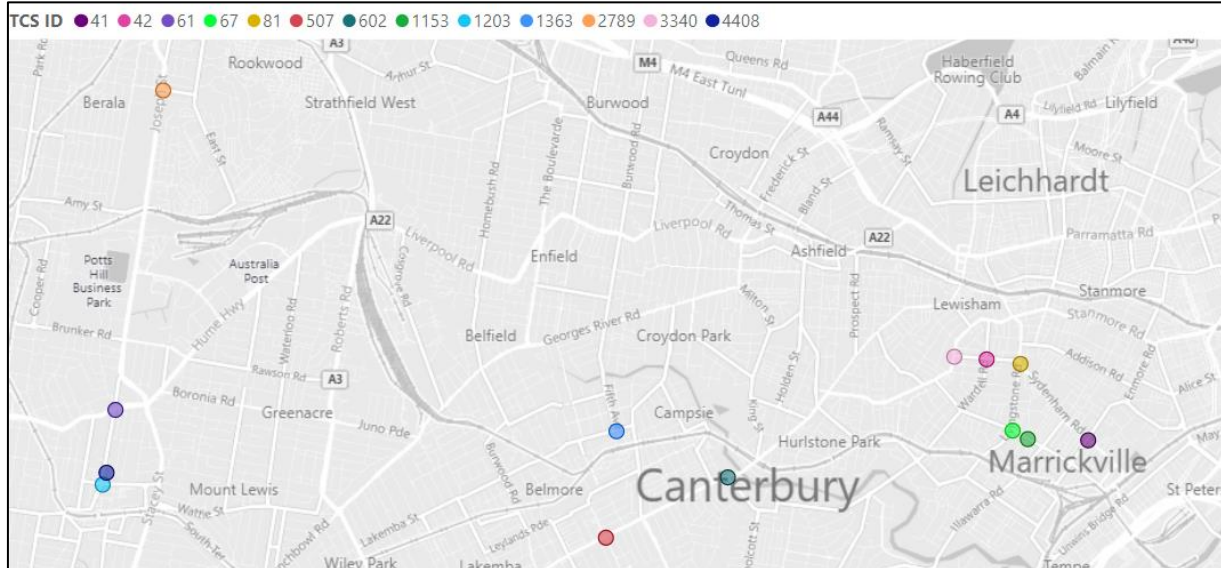


Figure 3 Category 1 intersections site map

Table 3 Category 1 intersections

TCS	Intersection description
TCS 41	Sydenham Road / Victoria Road
TCS 42	Wardell Road / Frazer Street
TCS 61	Hume Highway / Chapel Road / Rookwood Road
TCS 67	Marrickville Road / Livingstone Road
TCS 81	Livingstone Road / Sydenham Road / Frazer Street
TCS 507	Canterbury Road / Charlotte Street / Thorncraft Parade
TCS 602	Canterbury Road / Fore Street
TCS 1153	Marrickville Road / Petersham Road
TCS 1203	Chapel Road / Rickard Road
TCS 1363	Fifth Avenue / Ninth Avenue
TCS 2789	Joseph Street / Georges Avenue
TCS 3340	New Canterbury Road / Frazer Street
TCS 4408	Chapel Road / French Avenue

2.2.2 Category 2 – Modelling re-assessment

In the study area, fourteen (14) intersections were categorised as Category 2 and required re-assessing the model setup as part of previous assessments. The intersections that are included in Category 2 are shown in Figure 4 with the description of each included in Table 4.

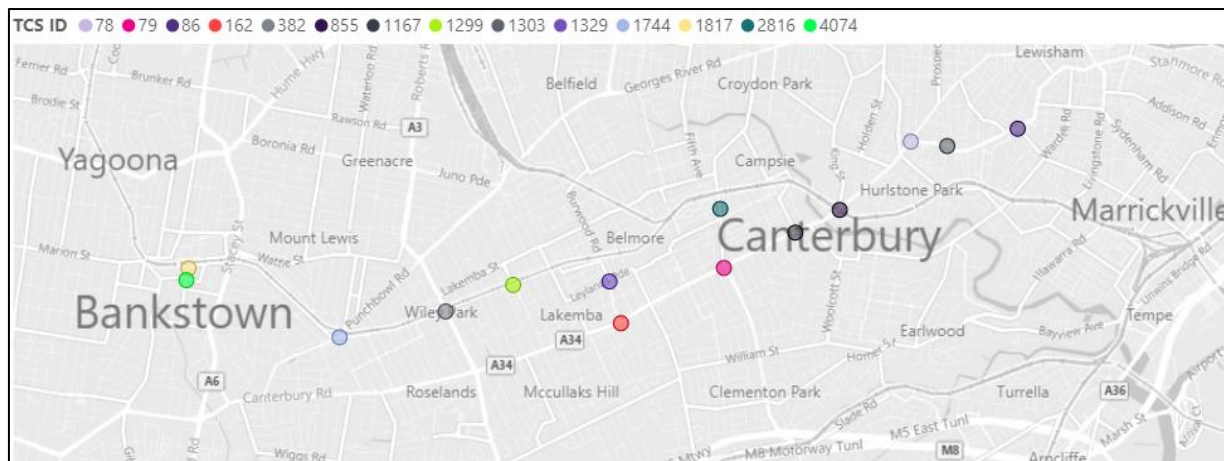


Figure 4 Category 2 intersections site map

Table 4 Category 2 intersections

TCS	Intersection description
TCS 78	New Canterbury Road / Canterbury Road
TCS 79	Canterbury Road / Beamish Street / Bexley Road
TCS 86	New Canterbury Road / Marrickville Road / Dulwich Street
TCS 162	Canterbury Road / Burwood Road
TCS 382	King Georges Road / The Boulevarde
TCS 855	Canterbury Road / Jeffrey Street
TCS 1167	Canterbury Road / Wonga Street
TCS 1299	Haldon Street / The Boulevarde
TCS 1303	New Canterbury Road / Duntroon Street
TCS 1329	Burwood Road / Leylands Parade
TCS 1744	Punchbowl Road / The Boulevarde / South Terrace
TCS 1817	Restwell Street / South Terrace
TSC 2816	Beamish Street / Amy Street
TCS 4074	Restwell Street / Raymond Street / Greenfield Parade

2.2.3 Category 3 – No modelling re-assessment

In the study area, fourteen (14) intersections were categorised as Category 3 and require no modelling re-assessment of previous models. The intersections that are included in Category 3 are shown in Figure 5 with the description of each included in Table 5.

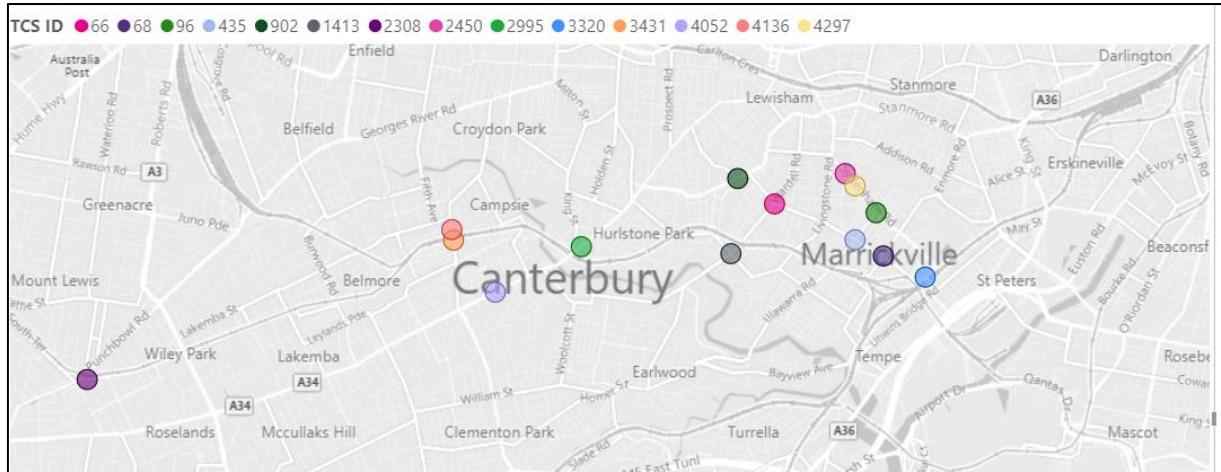


Figure 5 Category 3 intersections site map

Table 5 Category 3 intersections

TCS	Intersection description	Justification
TCS 66	Marrickville Road / Wardell Road	<p>During the possession period in July 2022, the intersection is expected to have:</p> <ul style="list-style-type: none"> • 8 TTP buses in the AM peak • 50 TTP buses in the PM peak <p>The bus volumes during the AM peak hour are less than 15 and therefore likely to have negligible impacts in the AM peak hour.</p> <p>In the PM peak hour, the intersection is likely to have capacity to accommodate 50 replacement services. This is based on the SPIR assessment where the intersection was able to accommodate 84 bus replacement services in the PM peak hour and operate at satisfactory level of service C.</p> <p>Thus, the addition of 50 replacement services in the PM peak hour is likely to result in satisfactory intersection operations.</p>

TCS	Intersection description	Justification
TCS 68	Marrickville Road / Victoria Road	<p>During the possession period in July 2022, the intersection is expected to have:</p> <ul style="list-style-type: none"> • 55 TTP buses in the AM peak • 96 TTP buses in the PM peak <p>The intersection is likely to have capacity to accommodate 55 bus replacement services. This is based on previous SPIR assessment where intersection was able to accommodate 111 bus replacement services in the AM peak hour and operate at LOS C.</p> <p>In the PM peak hour, the intersection is likely to accommodate 96 bus replacement services. This is based on the previous SPIR assessment where intersection was able to accommodate 113 bus replacement services in the PM peak hour and operate at LOS D.</p> <p>Thus, the addition of replacement services in the AM and PM peak hour is likely to have satisfactory operations.</p>
TCS 96	Sydenham Road / Illawarra Road	<p>This intersection is near the intersection of Sydenham Road and Victoria Road (TCS 41) and possess similarities in intersection geometry and potential traffic volumes in the peak hours.</p> <p>During the possession period in July 2022, the intersection is expected to have:</p> <ul style="list-style-type: none"> • 57 TTP buses in the AM peak • 15 TTP buses in the PM peak <p>The intersection is likely to operate similar to the intersection of Sydenham Road and Victoria Road (TCS 41) as detailed in Section 3.2.1.</p> <p>During the PM peak, the volumes are less than 15 buses in the peak hour. Therefore, the addition of TTP buses to this intersection is likely to have negligible impacts in the PM peak hour.</p>
TCS 435	Marrickville Road / Illawarra Road	<p>During the possession period in July 2022, the intersection is expected to have:</p> <ul style="list-style-type: none"> • 55 TTP buses in the AM peak • 96 TTP buses in the PM peak <p>The intersection is likely to have capacity to accommodate 55 bus replacement services. This is based on previous SPIR assessment where intersection was able to accommodate 111 bus replacement services in the AM peak hour and operate at LOS B.</p> <p>In the PM peak hour, the intersection is likely to accommodate 96 bus replacement services. This is based on the previous SPIR assessment where intersection was able to accommodate 113 bus replacement services in the PM peak hour and operate at LOS C.</p> <p>Thus, the addition of replacement services in the AM and PM peak hour is likely to have acceptable operations.</p>

TCS	Intersection description	Justification
TCS 902	New Canterbury Road / Constitution Road	<p>This intersection is adjacent to the intersection of Canterbury Road and Marrickville Road (TCS 86) and possess similarities in intersection geometry and potential traffic volumes in the peak hours.</p> <p>During the possession period in July 2022, the intersection is expected to have:</p> <ul style="list-style-type: none"> • 65 TTP buses in the AM peak • 65 TTP buses in the PM peak <p>The intersection is likely to have capacity to accommodate 65 bus replacement services. This is based on previous SPIR assessment of TCS 86 where intersection was able to accommodate 51 bus replacement services in the AM peak hour and operate at LOS B. Traffic volumes in the AM peak hour are expected to be lower in July 2022 by 200 vehicles in comparison to volumes assessed in SPIR.</p> <p>In the PM peak hour, the intersection is likely to accommodate 65 bus replacement services. This is based on the results of refurbished TCS 86 model in this assessment.</p> <p>This addition of replacement services in the AM and PM peak hour is likely to have acceptable operations.</p>
TCS 1413	Wardell Road / Ewart Street	<p>During the possession period in July 2022, the intersection is expected to have:</p> <ul style="list-style-type: none"> • 47 TTP buses in the AM peak • 46 TTP buses in the PM peak <p>The intersection is likely to have capacity to accommodate 47 bus replacement services. This is based on previous SPIR assessment where intersection was able to accommodate 62 bus replacement services in the AM peak hour and operate at LOS C.</p> <p>This the addition of replacement services in the AM and PM peak hour is likely to have acceptable operations.</p> <p>In the PM peak hour, the intersection is likely to accommodate 65 bus replacement services. This is based on the previous SPIR assessment where intersection was able to accommodate 61 bus replacement services in the PM peak hour and operate at LOS E.</p>
TCS 2308	The Boulevard / Arthur Street	<p>During the possession period in July 2022, the intersection is expected to have:</p> <ul style="list-style-type: none"> • 83 TTP buses in the AM peak • 84 TTP buses in the PM peak <p>The intersection is likely to have capacity to accommodate 83 bus replacement services. This is based on previous SPIR assessment where intersection was able to accommodate 60 bus replacement services in the AM peak hour and operate at LOS B.</p>

TCS	Intersection description	Justification
		<p>In the PM peak hour, the intersection is likely to have capacity to accommodate 84 replacement services. This is based on the SPIR assessment where the intersection was able to accommodate 60 bus replacement services in the PM peak hour and operate at LOS B.</p> <p>Though the TTP bus volumes have increased (by about 15 buses per hour), the impact of these additional buses on the intersection is expected to be similar or lower compared with the SPIR assessments, as the forecast July 2022 traffic volumes are lower (than those forecast in the SPIR. As such, it is likely that the intersection will operate at LOS B or better compared to the SPIR forecasts for both AM and PM peak hours.</p>
TCS 2450	Sydenham Road / Park Road / Petersham Road	This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.
TCS 2995	Canterbury Road / Minter Street	This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.
TCS 3320	Railway Parade / Gleeson Avenue	<p>During the possession period in July 2022, the intersection is expected to have:</p> <ul style="list-style-type: none"> • 17 TTP buses in the AM peak • 50 TTP buses in the PM peak <p>The bus volumes during the AM peak hour are 17 buses and therefore likely to have negligible impacts in the AM peak hour.</p> <p>In the PM peak hour, the intersection is likely to have capacity to accommodate 84 replacement services. This is based on the SPIR assessment where the intersection was able to accommodate 139 bus replacement services in the PM peak hour and operate at LOS A.</p> <p>Thus, the addition of 84 replacement services in the PM peak hour is likely to result in satisfactory intersection operations.</p>
TCS 3431	Beamish Street / South Parade / Lilian Lane	<p>During the possession period in July 2022, the intersection is expected to have:</p> <ul style="list-style-type: none"> • 51 TTP buses in the AM peak • 68 TTP buses in the PM peak <p>The intersection is likely to have capacity to accommodate 51 bus replacement services. This is based on previous SPIR assessment where intersection was able to accommodate 81 bus replacement services in the AM peak hour and operate at LOS B.</p> <p>In the PM peak hour, the intersection is likely to accommodate 68 bus replacement services. This is based on the previous SPIR assessment where intersection was able to accommodate 80 bus replacement services in the PM peak hour and operate at LOS C.</p> <p>Thus, the addition of 51 replacement services in the AM peak hour and 68 replacement services in the PM peak hour is likely to result in satisfactory intersection operations.</p>

TCS	Intersection description	Justification
TCS 4052	Canterbury Road / Duke Street	This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.
TCS 4136	Beamish Street / Clissold Parade	<p>During the possession period in July 2022, the intersection is expected to have:</p> <ul style="list-style-type: none"> 47 TTP buses in the AM peak 46 TTP buses in the PM peak <p>The intersection is likely to have capacity to accommodate 47 bus replacement services. This is based on previous SPIR assessment where intersection was able to accommodate 82 bus replacement services in the AM peak hour and operate at LOS A.</p> <p>In the PM peak hour, the intersection is likely to accommodate 46 bus replacement services. This is based on the previous SPIR assessment where intersection was able to accommodate 82 bus replacement services in the PM peak hour and operate at LOS E.</p>
TCS 4297	Sydenham Road / Centennial Street	This is a minor intersection with TTP buses going straight through the intersection. Therefore, the potential impacts due to TTP buses are expected to be minimal.

2.2.4 Category 4 – Sensitivity test

In the study area seven (7) intersections were categorised as Category 4. The intersections that are included in Category 3 are shown in Figure 6 with the description of each included in Table 6.

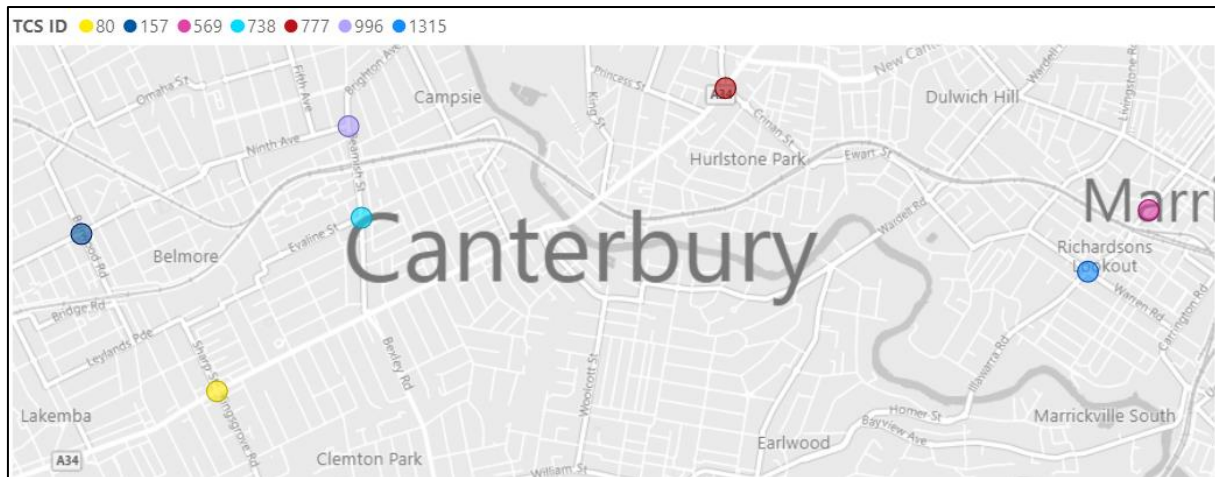


Figure 6 Category 4 intersection site map

Table 6 Category 4 intersections

TCS	Intersection description
TCS 80	Canterbury Road / Kingsgrove Road / Sharp Street
TCS 157	Burwood Road / Lakemba Street
TCS 569	Illawarra Road / Petersham Road
TCS 738	Beamish Street / Evaline Street
TCS 777	Canterbury Road / Queen Street / Crinan Street

TCS	Intersection description
TCS 996	Beamish Street / Ninth Avenue
TCS 1315	Illawarra Road / Warren Road

Sensitivity testing was undertaken using two levels of analysis:

- Sensitivity analysis; a comparison between the previously modelled total volumes (EIS, SPIR or July 2021 CA) and the forecast July 2022 total volumes
- LOS filtering; filtering criteria set for the previously modelled intersection LOS (EIS, SPIR or July 2021 CA) – a LOS A, B or C were expected to perform with a similar LOS with the additional TTP buses, and a LOS E or F, which is near or over capacity, were likely to perform the same (i.e. poor conditions)

The outcomes from the sensitivity tests are presented in Figure 7 for the AM peak and Figure 8 for the PM peak. It is evident that for the intersections in Category 4, the modelled volumes from the previous assessments are generally higher or similar compared to the forecast volumes for July 2022 during both AM and PM peak hours, except TCS 80 where there is a marginal increase. These intersections could therefore be reasonably expected to perform similar or better during a July 2022 scenario as a worse-case scenario had already been assessed.

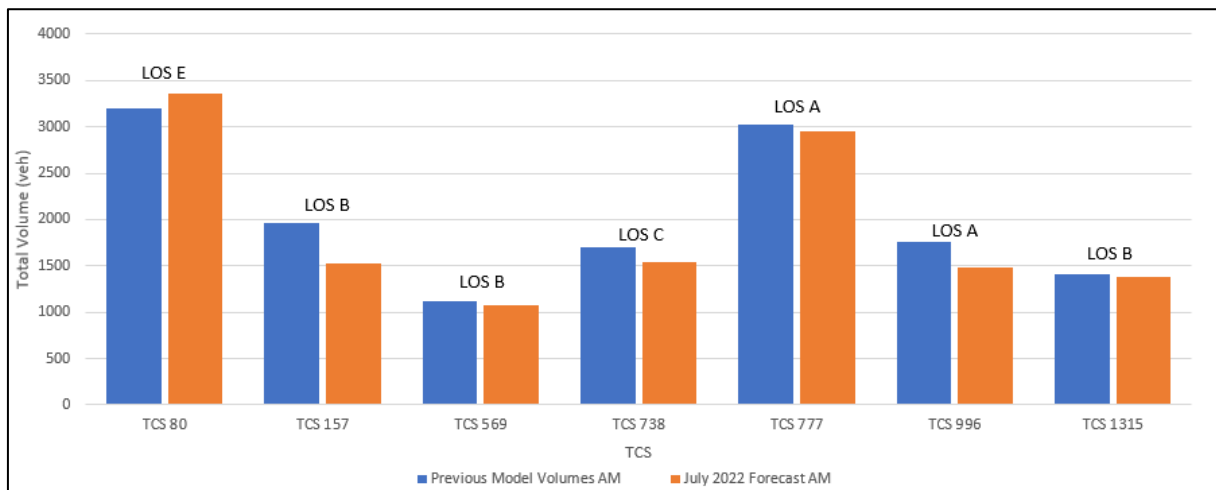


Figure 7 Category 4 intersections – Sensitivity tests for AM peak hour

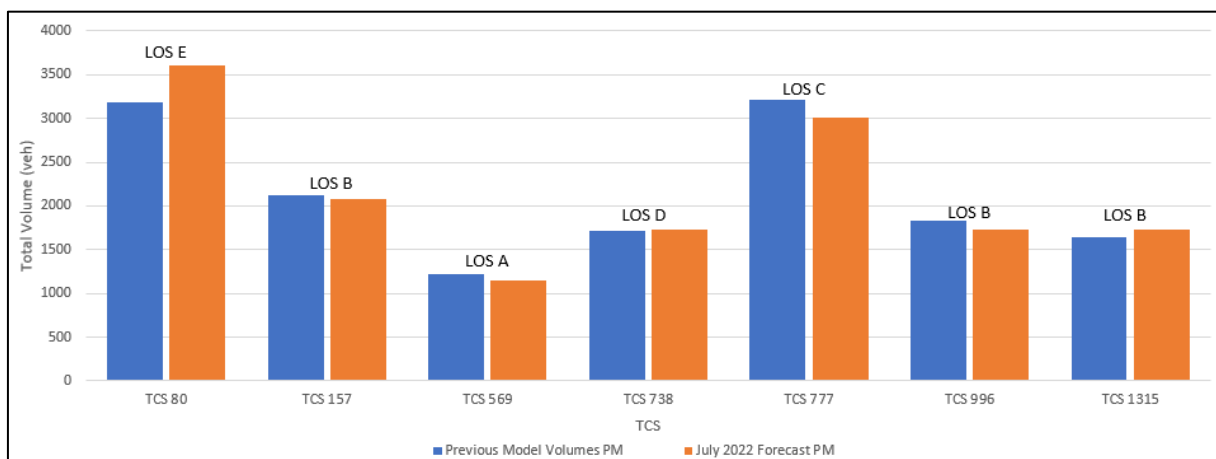


Figure 8 Category 4 intersections – Sensitivity tests for PM peak hour

2.2.5 New assessment, but disregarded

In the study area, thirty (30) intersections were disregarded from the assessment based on the filtering criteria detailed in Section 2.2. The intersections in this category are included in Table 7.

Table 7 New assessment, but disregarded intersections

TCS	Site Description
TCS 225	Rookwood Road/ Bruncker Road
TCS 436	Hume Highway / Auburn Road / William Street
TCS 935	Olympic Drive / Joseph Street
TCS 1135	Hume Highway / Meredith Street / The Boulevarde
TCS 1159	Rookwood Road / Muir Road
TCS 1326	Olympic Dr / Church Street / Bridge Street
TCS 1414	Marrickville Road / Gladstone Street
TCS 1451	Joseph Street / Amy Street / Weeroona Road
TCS 1542	Hume Highway / Cooper Road
TCS 1545	Hume Highway / Highland Avenue
TCS 1597	Church Street / John Street
TCS 1725	Joseph Street / Botanica Drive
TCS 1771	Auburn Road / Ferrier Road
TCS 1921	Illawarra Road / Arthur Street
TCS 1932	New Canterbury Road / Myra Road / Union Street
TCS 1966	New Canterbury Road / Pigott Street
TCS 1991	Chapel Road (N) / Raw Avenue
TCS 2015	The Boulevarde / Croydon Street (E)
TCS 2065	Sydenham Road / Farr Street
TCS 2072	Burwood Road (N) / Bridge Road
TCS 2192	Auburn Road / Pobje Avenue / Gazzard Street
TCS 2206	North Terrace / Fetherstone Street / Bankstown City Plaza
TCS 2468	Olympic Drive / Vaughan Street
TCS 2649	Olympic Dr / New Street W
TCS 2800	Joseph Street / Vaughan Street
TCS 2935	The Mall / The Appian Way
TCS 3222	Olympic Drive / Kerrs Road
TCS 3492	Rookwood Road / Boardman Street
TCS 3628	Evaline Street / Beamish Street
TCS 4127	South Terrace / Railway Station

2.3 Performance indicators

In order to assess the impact of the above scenarios on the performance of the intersections, the main indicators were:

- Degree of Saturation (DoS): the ratio between traffic volumes and capacity (v/c) of the intersection, used to measure how close to capacity an intersection is operating. The DoS is a direct measure of the congestion level of the intersection and as DoS approaches 1.0, both queue length and delays increase rapidly. Satisfactory operations usually occur with a DoS lower than 0.9.
- Average Delay: duration, in seconds, of the average vehicle waiting time at an intersection.
- Level of Service (LoS): a measure of the overall performance of the intersection. The levels of service (LoS) presented in Table 8 are in accordance with the TfNSW Traffic Modelling Guidelines and LoS gives an indication of how well the intersection is performing regarding delay incurred by vehicles. For signalised intersections the LoS is based on the average intersection delay, and the most delayed movement for priority-controlled intersections and roundabouts.

Table 8 Level of Service criteria

Level of service (LOS)	Average delay / vehicle (sec/veh)	Description
A	< 14	Good operation
B	15 to 28	Good with acceptable delays and spare capacity
C	29 to 42	Satisfactory
D	43 to 56	Operating near capacity
E	57 to 70	At capacity; at signals incidents would cause excessive delays
F	> 70	Exceeds capacity; roundabouts require other control mode

Source: Guide to Traffic Generating Developments, RTA, 2002

2.4 Baseline conditions

For assessment of road traffic conditions during the possession period in July 2022, background traffic volumes (baseline) likely to use the intersections are required to be forecast. As the possessions are planned during the school holiday period, a seasonal reduction factor to account for the lower traffic volumes generally experienced during July school holidays shall be considered. This baseline shall also incorporate post-COVID lockdown impacts in travel behaviour and traffic volume profiles at the intersections.

EIS, SPIR and the previous assessments used growth rates to forecast future traffic volumes. Due to the COVID-19 pandemic, the applied growth factors (about 1.5% per annum) are considered to be high for use in forecasting July 2022 baseline traffic. Therefore, as agreed with Sydney Metro, the future baseline traffic volumes for July 2022 (Scenario 1) were estimated based on recent traffic volume data (March 2022) by applying seasonal reduction factors. SCATS detector data for the intersections observed for a typical weekday have been used to forecast the July 2022 baseline traffic volumes as detailed in Section 2.4.2.

2.4.1 Review of impacts due to COVID-19

An assessment of traffic volumes and peak period traffic profiles during 2019 (pre-COVID lockdowns) and 2022 (post-COVID lockdowns) was undertaken at three sample intersections spread across the study area to determine if the impacts of COVID-19 are still prevalent. This is required to understand if a factor needs to be applied to the forecast traffic volumes for July 2022 to account for potential impacts

on traffic volumes due to COVID-19. The location of the sample intersections identified for this assessment is presented in Figure 9.

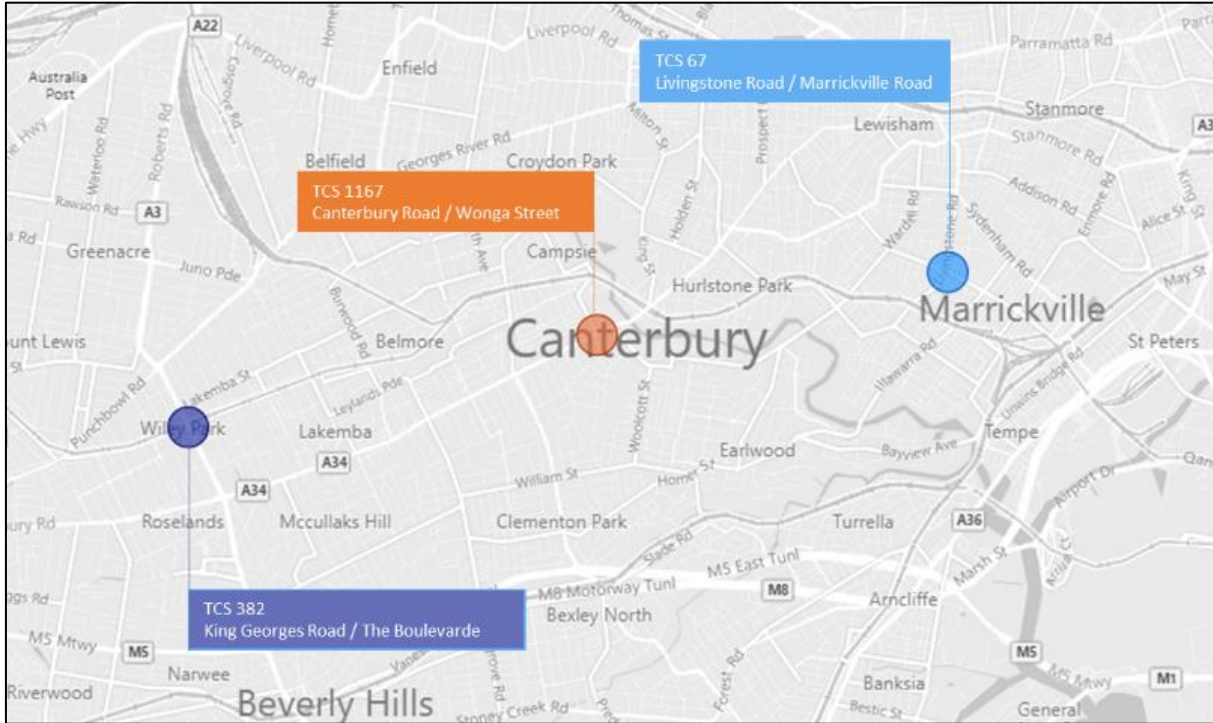


Figure 9: Location of sample sites reviewed

The assessment was undertaken using SCATS detector data for a typical weekday for the selected intersections from March 2019 and March 2022. The assessment indicates that traffic volumes and peak period traffic profiles for March 2022 are observed to be similar to or slightly lower in comparison to March 2019, as presented in Figure 10, Figure 11 and Figure 12. Therefore, the use of March 2022 SCATS detector data to forecast July 2022 traffic volumes shall include changes in travel behaviour post COVID-19. As such, no adjustments to traffic data are required to be applied to consider impacts of COVID-19.

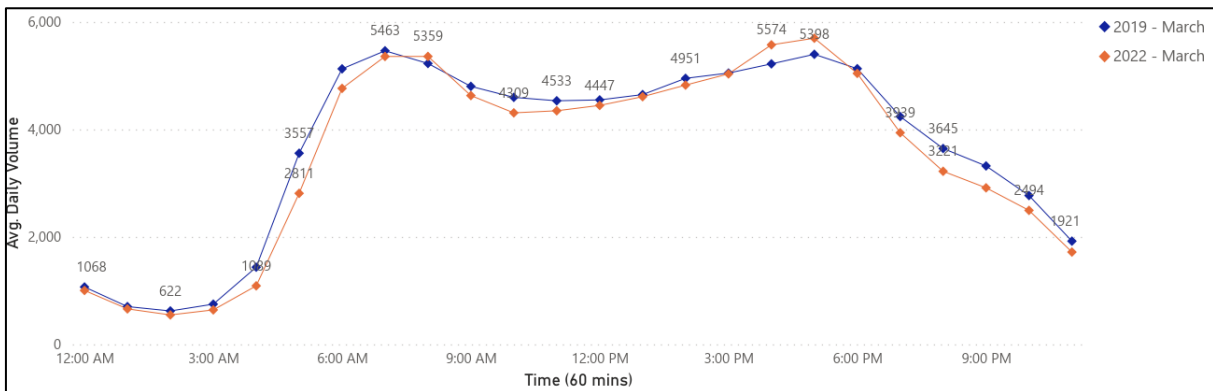


Figure 10: TCS 382 - King Georges Road / The Boulevard

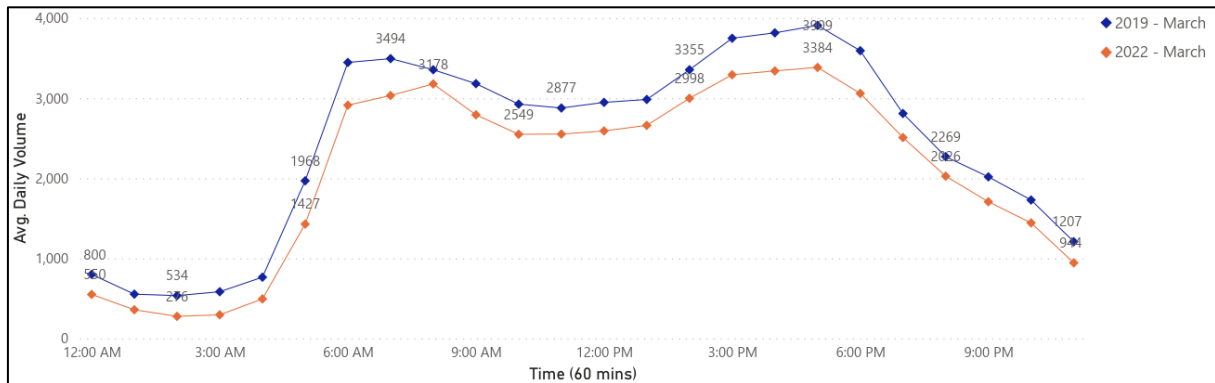


Figure 11: TCS 1167 - Canterbury Road / Wonga Street

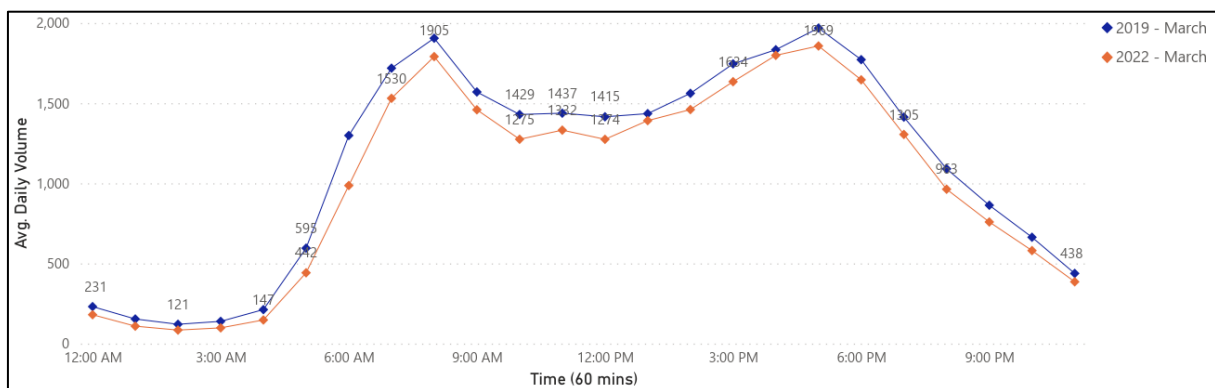


Figure 12: TCS 67 - Marrickville Road / Livingstone Road

2.4.2 Factors to produce July 2022 traffic volumes

Seasonal trends and school holidays tend to impact travel behaviours on the road network. To account for this, the following steps were undertaken to forecast July 2022 traffic volumes:

- Seasonal factors were calculated for each intersection by comparing peak hour traffic volumes recorded using SCATS detector loops in March 2019 (normal period) and July 2019 (school holiday period).
- The seasonal factors determined for each intersection were then applied to peak hour traffic volumes observed at the intersections in March 2022 to forecast the baseline traffic volumes for July 2022 (possession period) during the AM and PM peak hours.
- The turning proportions for traffic volumes on shared traffic lanes and the proportion of heavy vehicles and light vehicles at Category 1 intersections (new sites) were obtained from sample traffic counts undertaken during May 2022. For Category 2 models (re-assessment), both proportions were obtained from the previous assessments.
- A 10% correction factor is applied to the July 2022 forecast volumes to account for potential SCATS detector errors.
- Construction traffic volumes at the study area intersections were obtained from the EIS scenario for the peak construction period (2023).
- Alignment of proposed TTP bus routes and their frequencies were received from Sydney Metro (as detailed in Table 2). Based on this information, the number of TTP buses passing through each intersection during the AM and PM peak hour were estimated. This accounts for multiple routes passing through an intersection, if any.

2.5 Assessment scenarios

The scenarios assessed as part of this assessment are presented in Table 9.

Table 9 Assessment scenarios

Scenario	Description
Scenario 1	July 2022 (Future base) – This is used as the baseline conditions of background traffic during July 2022.
Scenario 2	July 2022 (Future base + SM Construction traffic) – This is used to test impacts of Sydney Metro construction traffic.
Scenario 3	July 2022 (Future base + SM Construction traffic + TTP) – This is used as the test scenario for the replacement bus services (5 routes).

For Category 2 sites, in addition to the future base scenario for July 2022 (Scenario 1), a comparison with the relevant assessment (EIS, SPIR or previous assessment) are also made.

For Category 4 sites, the assessment results include outcomes from the relevant assessment (EIS, SPIR or previous assessment), as new assessments were not completed.

2.6 Construction haulage traffic

Construction haulage routes were also considered during the Gap Analysis in the selection of intersections for assessment. These routes were categorised as follows, as per the EIS:

- Primary routes forming the main access for construction haulage vehicles
- Secondary routes provide links to the primary routes and State Roads
- Tertiary (alternative) routes are used as backup routes to connect to the primary and secondary routes

In the SPIR, construction works associated with the preferred project were revised since the assessment of the exhibited project in the EIS. However, in traffic terms, the peak hourly construction traffic volumes were found to be the same in the SPIR and EIS although there would be a reduction in the duration of the peak construction periods. So, whilst the total impact from construction may have been reduced as a result of the preferred project, the peak hourly volumes are expected to remain as per the EIS.

The EIS analysed the volumes of material required to be moved to and from each construction compound to determine the duration of construction and the total number of haulage vehicle movements required. A flat profile of haulage movements per day was assumed and a process of manual assignment of haulage vehicle movements to peak hours was undertaken.

Where daily haulage vehicle volumes to a compound were low (less than 10 per day), all haulage movements were assumed to take place during the peak hours. Where there were 10 or more haulage vehicles per day, 20% of vehicle movements were assigned to each of the peak hours.

This assessment follows the same methodology and uses the same construction traffic volumes as per the EIS. This assumption has been confirmed by Sydney Metro.

2.7 Bridge works

One of the most significant changes as a result of the preferred project was the revised bridge works along the project area. The assessment described in the EIS showed that there was a total of 26 bridges with different types of bridge closures that required significant bridge closures and diversions and resulted in significant impacts on the road network.

Bridge works for the preferred project include the installation of new traffic barriers, anti-throw screens as well as other protection measures as required. The preferred project does not require the closure of

the bridges for extended periods. It is also assumed that bridge works would be scheduled to minimise disruption to the traffic network and would not interface with the TTP scenario buses. Therefore, it is anticipated that bridges would be able to remain open to traffic during the bridge works. As such, impacts because of bridge works have not been assessed as part of this assessment.

2.8 Assumptions

The following assumptions were made to categorise the intersections:

- a. The proposed bus replacement routes and frequencies were as per the information received from Sydney Metro on 22 April 2022, i.e. five replacement services with the provided frequencies. These five routes are generally different to the routes considered in the previous July 2021 consistency assessments.
- b. Changes in the replacement bus routes require a number of new intersections to be assessed. For these new intersections, traffic surveys or recent traffic data has been used to capture turning movements and proportion of heavy and light vehicles to develop future base models.
- c. Seasonal/holiday reduction factors have been applied to account for lower traffic volumes during the school holiday period (in July) as detailed in Section 2.4.2.
- d. Construction haulage traffic is assumed to remain the same as the EIS. For new intersections that are being modelled as part of the July 2022 assessments, construction traffic volumes have been adapted from the EIS.
- e. Network closures/changes as part of Bridge works are assumed not to be in place during the possession period in July 2022.
- f. Covid-19 adjustment factor has not been applied as detailed in Section 2.4.1.
- g. Assessments have been undertaken for one typical weekday for the AM and PM peak hour.
- h. Intersections are excluded from the sensitivity assessments/modelling where the increase in bus volumes are up to 15 per hour. Such a small increase in bus volumes per hour are not anticipated to result in any significant changes to intersection performance.
- i. Majority of the intersections along two TTP routes proposed between Lidcombe and Bankstown (08T3 and 08AT3) have been excluded from the sensitivity assessments/modelling as the bus frequencies are very low and the network is assumed to have sufficient spare capacity to accommodate the small increase in TTP buses during the peak periods. Three intersections have multiple routes passing through, which results in a combined high frequency of TTP services during the peak hours. Therefore, these three intersections were included in the assessments.
- j. Unsignalised intersections along the bus routes have been excluded from the assessments based on the assumption that adjacent signalised intersections are likely to demonstrate the level of impact anticipated during the July 2022 TTP scenario.
- k. Some of the minor signalised intersections along the July 2022 TTP routes have been excluded from modelling/sensitivity assessments where the TTP bus routes go straight through without any turning movements. It is assumed that the impacts on such minor intersections will be minimal and can be assumed to be similar/less than the adjacent major signalised intersections that are being assessed as part of this assessment.
- l. SCATS data (detector volumes, signal phasing etc.) for all intersections, supported by traffic survey data for selected intersections have been used for this assessment. SCATS detector data was increased by 10% to account for any potential detector errors.
- m. 6am to 10am was adopted as the AM peak period and 3pm to 7pm was adopted as the PM peak period for this assessment.
- n. Traffic signal phasing for each site have been adopted from SCATS and the phases that run during the AM and PM peak hours on a typical weekday have been included in the models. As the assessments are being undertaken for a future scenario in July 2022, optimum cycle time settings have been used to replicate the traffic demand-based operations of the SCATS system. The lower and upper limits used for the optimum cycle time settings were adopted from SCATS. The optimum

cycle time for each site identified by SIDRA was also compared with the average cycle times observed during March 2022, and adjusted to ensure realistic cycle times are being used during the future scenario in July 2022.

- o. Lane utilisation was included in the model, where applicable, based on SCATS detector volumes observed on each lane during March 2022.

2.9 Summary

In the study area, seventy-eight (78) signalised intersections were considered as part of this assessment. Based on the methodology detailed in Section 2.2 and Appendix B, intersections were allocated to five different categories. Thirty (30) intersections were disregarded from the assessment and fourteen (14) were categorised as Category 3 (no assessments), based on the filtering criteria detailed in Section 2.2. The remaining thirty-four (34) intersections were categorised for further assessments as follows:

- Category 1: Thirteen (13) intersections
- Category 2: Fourteen (14) intersections
- Category 4: Seven (7) intersections

The intersection assessments are detailed in Section 3.0. For a list of all the intersections considered as part of this assessment, refer to Appendix B.

3.0 Construction assessment

3.1 Assessment scenarios

This section presents the intersection modelling assessments undertaken for the July 2022 possession period. As discussed in Section 2.3, Category 1 and Category 2 intersections were assessed using the July 2022 forecast traffic volumes, whereas Category 4 intersections adopted either the EIS, SPIR or July 2021 assessments.

The following scenarios were included as part of the assessment as detailed in Section 2.5:

- Scenario 1: July 2022 (Future base) – This is used as the baseline conditions of background traffic during July 2022.
- Scenario 2: July 2022 (Future base + SM Construction traffic) – This is used to test impacts of Sydney Metro construction traffic.
- Scenario 3: July 2022 (Future base + SM Construction traffic + TTP) – This is used as the test scenario for the replacement bus services (5 routes).

Modelled traffic volumes for Category 1 and Category 2 intersections are included in Appendix C with the detailed intersection movement summaries included in Appendix D.

3.2 Sydenham Station

Two (2) Category 1 intersections were assessed in the area surrounding Sydenham Station. These intersections are shown in Figure 13 with the category and description of each included in

Table 10.

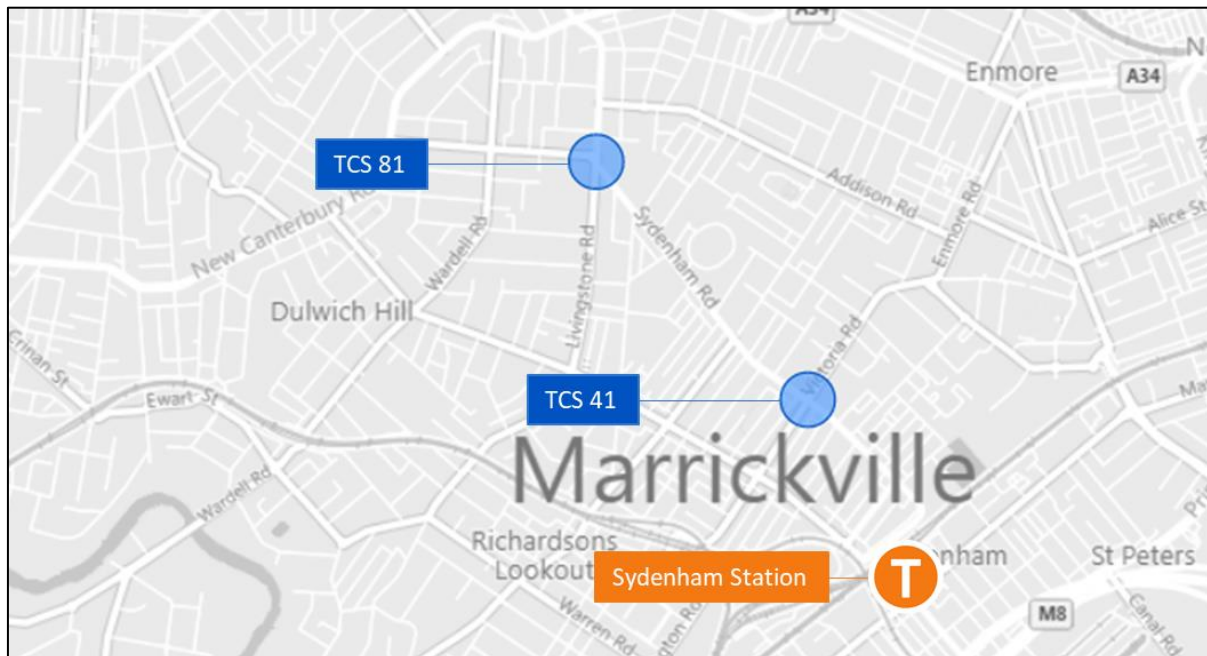


Figure 13 Intersections assessed near Sydenham Station

Table 10 Intersections assessed near Sydenham Station

TCS	Intersection description
Category 1	
TCS 41	Sydenham Road / Victoria Road
TCS 81	Livingstone Road / Sydenham Road / Frazer Street

3.2.1 TCS 41 – Sydenham Road / Victoria Road [Category 1]

Table 11 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 11 TCS 41 Sydenham Road / Victoria Road – intersection layout and SIDRA model layout

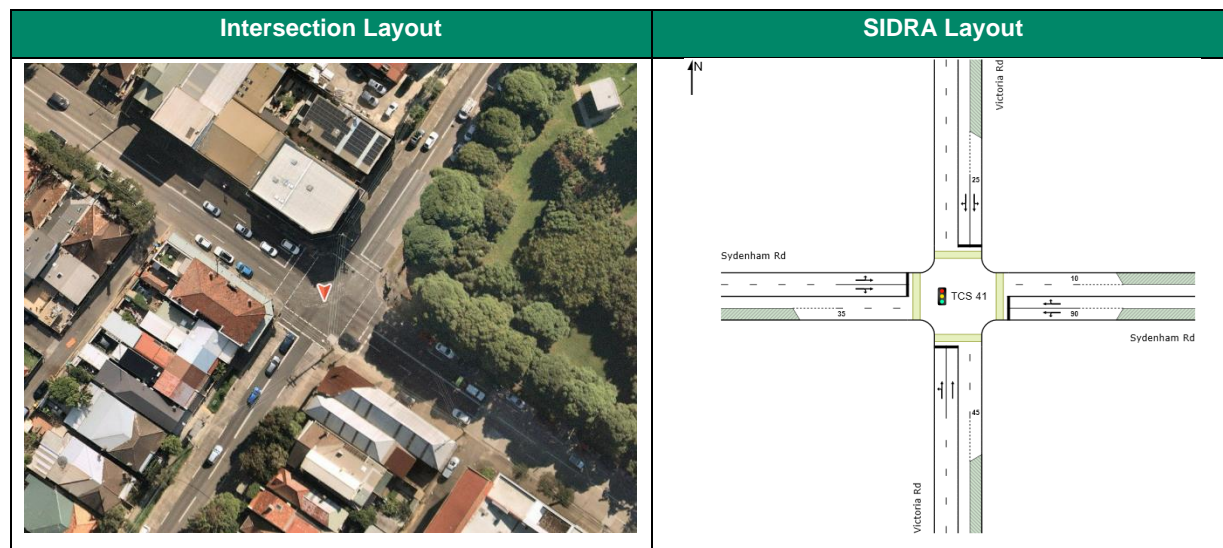


Table 12 provides a summary of the intersection performance assessment for this intersection.

Table 12 Sydenham Road / Victoria Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	2519	0.963	41.4	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	2548	0.996	46.8	LOS D
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2608	1.064	71.8	LOS F
Scenario 3 with proposed mitigation	2608	1.044	55.6	LOS D
PM Peak (4pm to 5pm)				
Scenario 1: July 2022 (Future base)	TTP bus volumes are less than or equal to 15 buses per hour in the PM peak. Impacts are expected to be negligible as a result of additional TTP buses at this intersection during the PM peak.			
Scenario 2: July 2022 (Future base + SM Construction traffic)				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				

The Sydenham Road / Victoria Road intersection (Scenario 1) is forecast to operate at LOS D during the AM peak hour. The addition of TTP buses (Scenario 3) is forecast to increase the average delay (by about 30 seconds) and result in a reduced intersection performance (LOS F).

To improve the intersection performance during the AM peak, signal optimisation (in line with approved mitigation TC6) has been considered as shown in Table 13. By reducing the cycle time and

subsequently the phase times, the intersection performance during the AM peak is forecast to improve from LOS F to LOS D as shown in Table 12. The existing phase times are based on average phase times observed at this intersection during a typical weekday in March 2022.

Modelling the intersection in Scenario 3 with additional green time for the TTP bus movements indicates that the intersection is forecast to operate at LOS D with a slight increase in delay (less than 15 seconds) compared to Scenario 1.

Table 13 Sydenham Road / Victoria Road – Optimised signal phase time

Phase Time			
Phase	A	B	C
Phase Diagram			
Existing Phase Time (sec)	31	14	53
Proposed Phase Time (sec)	16	12	45
Difference (Proposed - Existing)	-15	-2	-8

3.2.2 TCS 81 – Livingstone Road / Sydenham Road / Frazer Street [Category 1]

Table 14 presents the layout of the intersection as per latest the NearMap imagery and the modelled layout in SIDRA.

Table 14 TCS 81 Livingstone Road / Sydenham Road / Frazer Street – intersection layout and SIDRA model layout


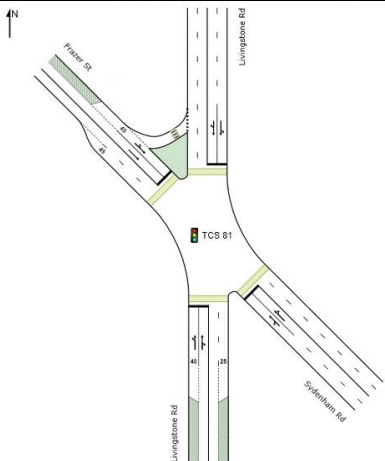
Intersection Layout	SIDRA Layout
	

Table 15 provides a summary of the intersection performance assessment for this intersection.

Table 15 Livingstone Road / Sydenham Road / Frazer Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	2080	0.773	20.5	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	2080	0.773	20.5	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2140	0.883	21.6	LOS B
PM Peak				
Scenario 1: July 2022 (Future base)	TTP bus volumes are less than or equal to 15 buses per hour in the PM peak. Impacts are expected to be negligible as a result of additional TTP buses at this intersection during the PM peak.			
Scenario 2: July 2022 (Future base + SM Construction traffic)				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				

The Marrickville Road / Livingstone Road intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B. LOS B would not cause noticeable delays for commuters in the peak hour.

3.3 Marrickville Station

Two (2) Category 1 and two (2) Category 4 intersections were assessed in the area surrounding Marrickville Station. These intersections are shown in Figure 14 with the category and description of each included in Table 16.

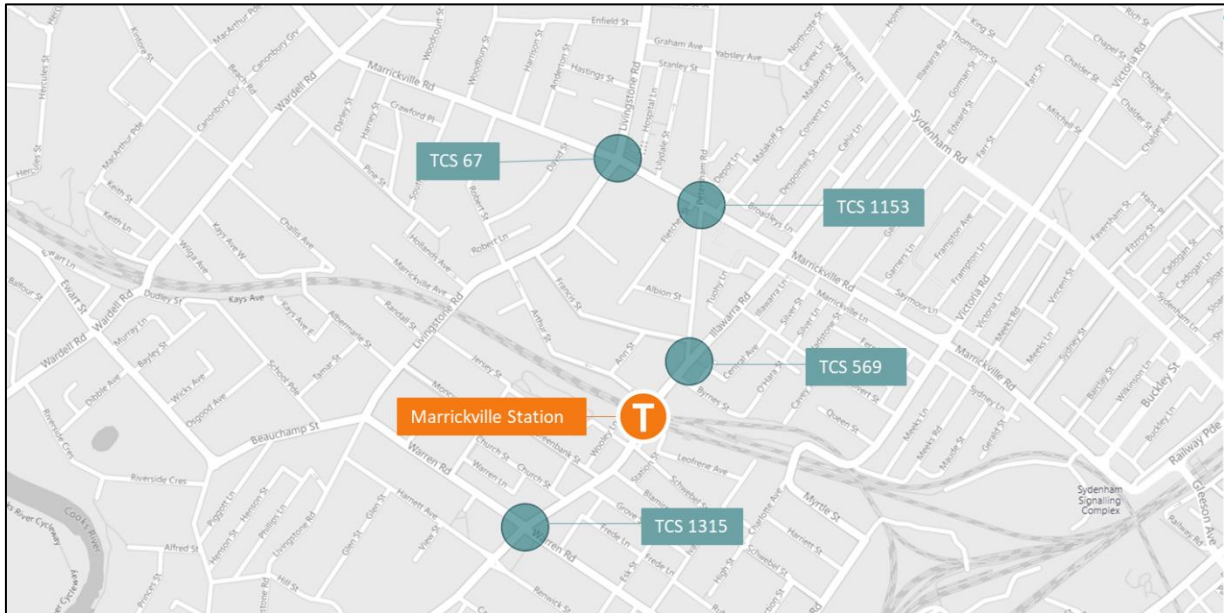


Figure 14: Intersections assessed near Marrickville Station

Table 16 Marrickville Station assessed intersections

TCS	Intersection description
Category 1	
TCS 67	Marrickville Road / Livingstone Road
TCS 1153	Marrickville Road / Petersham Road
Category 4	
TCS 569	Illawarra Road / Petersham Road
TCS 1315	Illawarra Road / Warren Road

3.3.1 TCS 67 – Marrickville Road / Livingstone Road [Category 1]

Table 17 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 17 TCS 67 Marrickville Road / Livingstone Road – intersection layout and SIDRA model layout


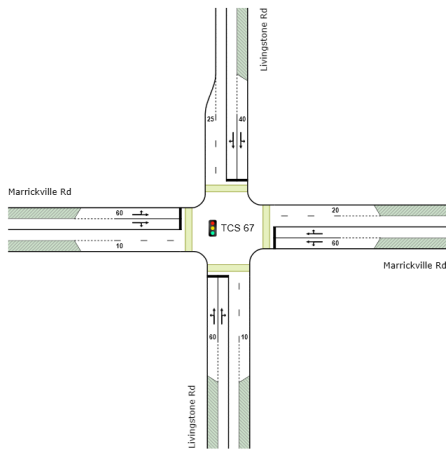
Intersection Layout	SIDRA Layout
	

Table 18 provides a summary of the intersection performance assessment for this intersection.

Table 18 Marrickville Road / Livingstone Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	TTP bus volumes are less than or equal to 15 buses per hour in the AM peak. Impacts are expected to be negligible as a result of additional TTP buses at this intersection during the AM peak.			
Scenario 2: July 2022 (Future base + SM Construction traffic)				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	2037	0.688	14.7	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	2037	0.688	14.7	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2089	0.711	14.9	LOS B

The Marrickville Road / Livingstone Road intersection is forecast to operate at LOS B during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B. LOS B would not cause noticeable delays for commuters in the peak hour.

3.3.2 TCS 1153 – Marrickville Road / Petersham Road [Category 1]

Table 19 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 19 TCS 1153 Marrickville Road / Petersham Road – intersection layout and SIDRA model layout


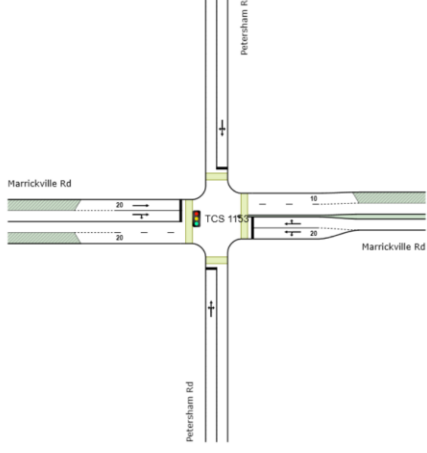
Intersection Layout	SIDRA Layout
	

Table 20 provides a summary of the intersection performance assessment for this intersection.

Table 20 Marrickville Road / Petersham Road - intersection assessment summary


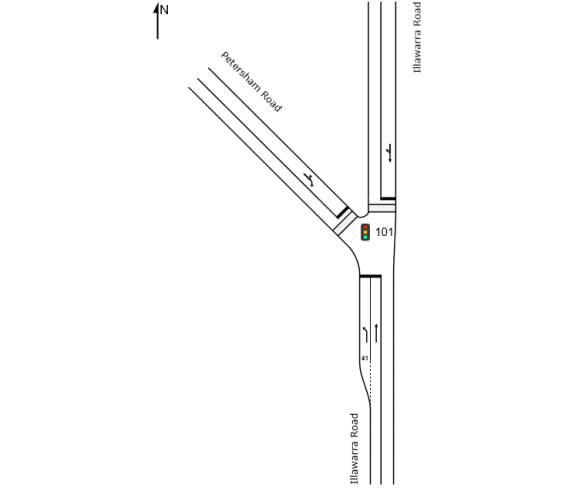
	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	TTP bus volumes are less than or equal to 15 buses per hour in the AM. Impacts are expected to be negligible as a result of additional TTP buses at this intersection during the AM peak.			
Scenario 2: July 2022 (Future base + SM Construction traffic)				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	1628	0.507	11	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	1628	0.507	11	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1681	0.542	10.6	LOS A

The Marrickville Road / Petersham Road intersection is forecast to operate at LOS A during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS A. LOS A would not cause noticeable delays for commuters in the peak hour.

3.3.3 TCS 569 – Illawarra Road / Petersham Road [Category 4]

Table 21 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 21 TCS 569 Illawarra Road / Petersham Road – intersection layout and SIDRA model layout

Intersection Layout	SIDRA Layout
	

Intersection performance results were adopted from the previous assessment as detailed in Section 2.2. Table 22 provides a summary of the intersection performance assessment for this intersection.

Table 22 Illawarra Road / Petersham Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	1271	0.5	17	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1297	0.52	16	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1328	0.54	16	LOS B
PM Peak				
Scenario 1: July 2022 (Future base)	1381	0.53	12	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	1407	0.55	12	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1437	0.58	12	LOS A

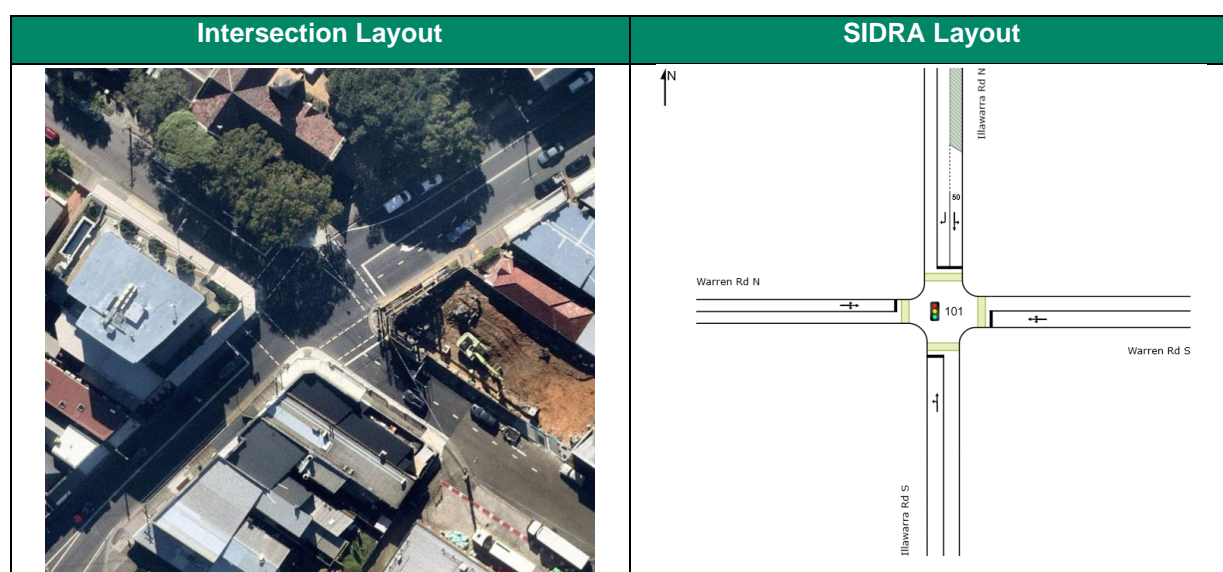
The Illawarra Road / Petersham Road intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B. LOS B would not cause noticeable delays for commuters in the peak hour.

The Illawarra Road / Petersham Road intersection is forecast to operate at LOS A during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS A. LOS A would not cause noticeable delays for commuters in the peak hour.

3.3.4 TCS 1315 – Illawarra Road / Warren Road [Category 4]

Table 23 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 23 Illawarra Road / Warren Road – intersection layout and SIDRA model layout



Intersection performance results were adopted from the previous assessment as detailed in Section 2.1.2. Table 24 provides a summary of the intersection performance assessment for this intersection.

Table 24 Illawarra Road / Warren Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	1545	0.81	25	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1545	0.81	25	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1575	0.89	28	LOS B

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
PM Peak				
Scenario 1: July 2022 (Future base)	1847	0.89	22	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1847	0.89	22	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1878	0.88	23	LOS B

The Illawarra Road / Warren Road intersection is forecast to operate at LOS B during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during both AM and PM peak hours. LOS B would not cause noticeable delays for commuters in the peak hour.

3.4 Dulwich Hill Station

Two (2) Category 1 and one (1) Category 2 intersections were assessed in the area surrounding Dulwich Hill Station. These intersections are shown in Figure 15 with the category and description of each included in Table 25.

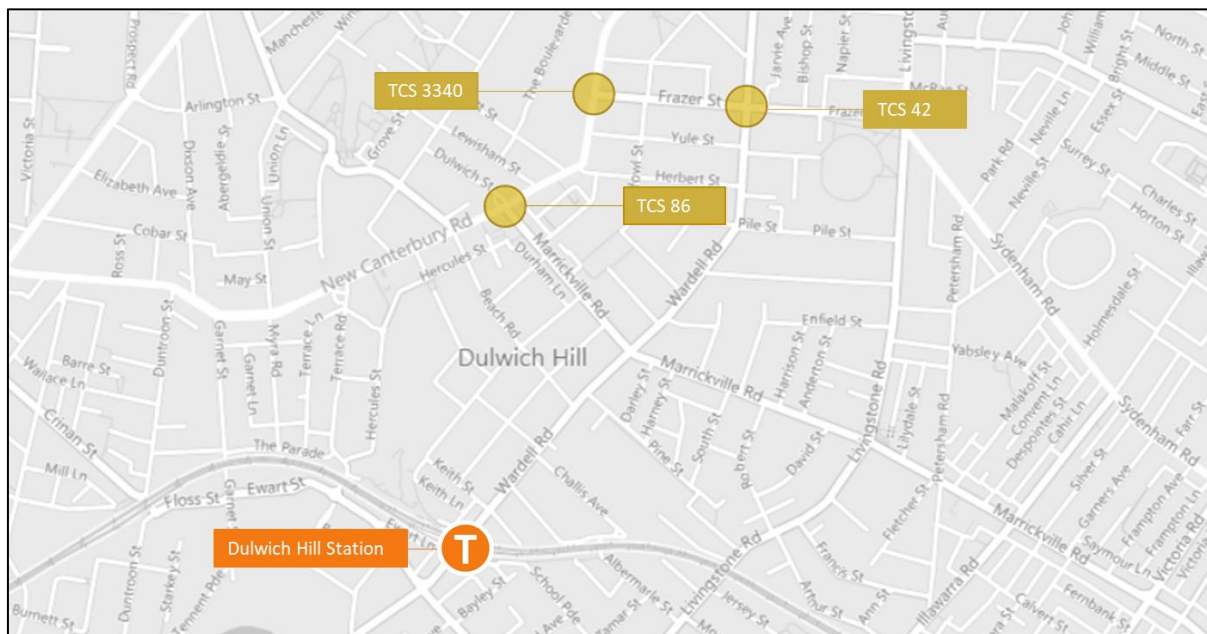


Figure 15: Intersections assessed near Dulwich Hill Station

Table 25 Dulwich Station assessed intersections

TCS	Intersection description
Category 1	
TCS 42	Wardell Road / Frazer Street
TCS 3340	New Canterbury Road / Frazer Street
Category 2	
TCS 86	New Canterbury Road / Marrickville Road / Dulwich Street

3.4.1 TCS 42 – Wardell Road / Frazer Street [Category 1]

Table 26 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 26 TCS 42 Wardell Road / Frazer Street – intersection layout and SIDRA model layout

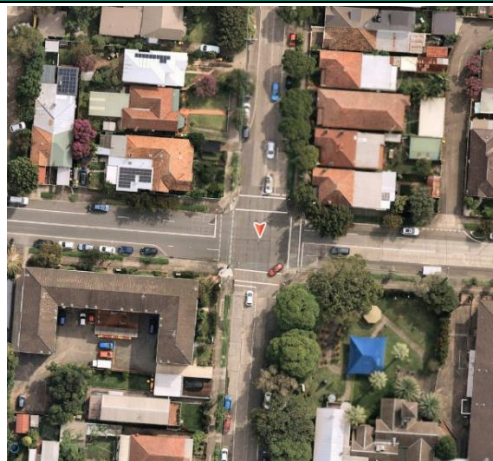
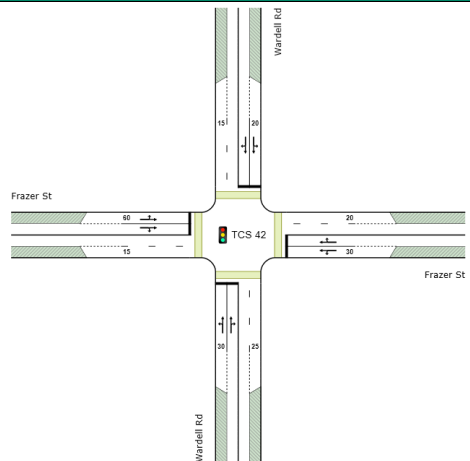
Intersection Layout	SIDRA Layout
	

Table 27 provides a summary of the intersection performance assessment for this intersection.

Table 27 Wardell Road / Frazer Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	1337	0.768	12.7	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	1337	0.768	12.7	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1397	0.722	14.2	LOS A
PM Peak				
Scenario 1: July 2022 (Future base)	TTP bus volumes are less than or equal to 15 buses per hour in the PM peak. Impacts are expected to be negligible as a result of additional TTP buses at this intersection during the PM peak.			
Scenario 2: July 2022 (Future base + SM Construction traffic)				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				

The Wardell Road / Frazer Street intersection is forecast to operate at LOS A during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS A. LOS A would not cause noticeable delays for commuters in the peak hour.

3.4.2 TCS 3340 – New Canterbury Road / Frazer Street [Category 1]

Table 28 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 28 TCS 3340 New Canterbury Road / Frazer Street – intersection layout and SIDRA model layout

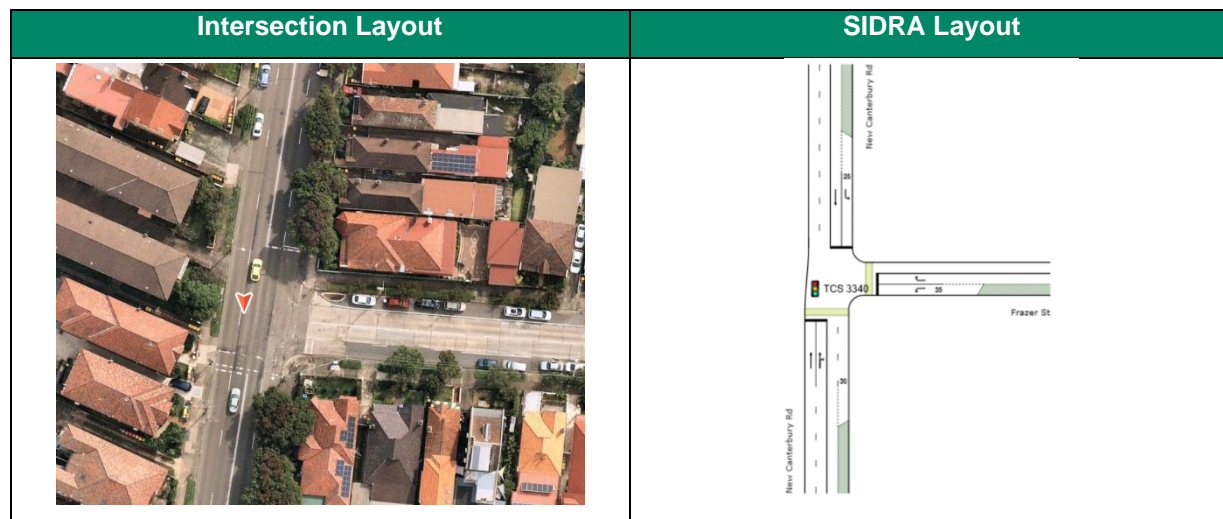


Table 29 provides a summary of the intersection performance assessment for this intersection.

Table 29 New Canterbury Road / Frazer Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	1889	0.709	16.3	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1889	0.709	16.3	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1949	0.753	17.4	LOS B
PM Peak				
Scenario 1: July 2022 (Future base)	TTP bus volumes are less than or equal to 15 buses per hour in the PM peak. Impacts are expected to be negligible as a result of additional TTP buses at this intersection during the PM peak.			
Scenario 2: July 2022 (Future base + SM Construction traffic)				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				

The New Canterbury Road / Frazer Street intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B. LOS B would not cause noticeable delays for commuters in the peak hour.

3.4.3 TCS 86 – New Canterbury Road / Marrickville Road / Dulwich Street [Category 2]

Table 30 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 30 TCS 86 New Canterbury Road / Marrickville Road / Dulwich Street – intersection layout and SIDRA model layout


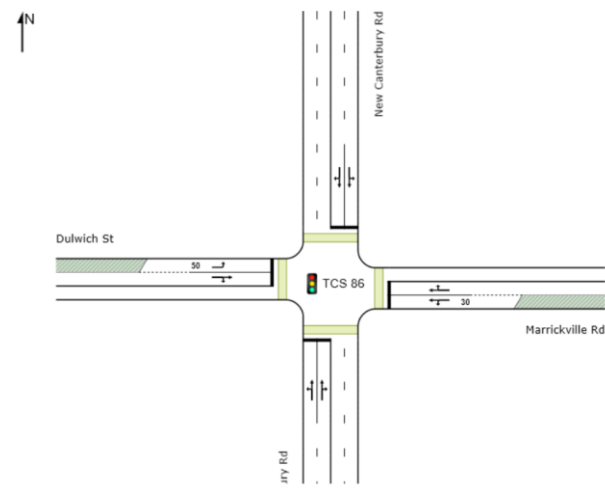
Intersection Layout	SIDRA Layout
	

Table 31 provides a summary of the intersection performance assessment for this intersection.

Table 31 New Canterbury Road / Marrickville Road / Dulwich Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	The July 2022 forecast traffic volumes (for Scenario 1) are lower by about 200 vehicles than the previously modelled traffic volumes used in the SPIR assessment for the AM peak hour (for the peak year of construction, which is 2023). PSIR assessment forecast the intersection to operate at LOS B during both the future base scenario (Scenario 1) and TTP Scenario (Scenario 3). The SPIR assessed the intersection performance with the addition of 51 TTP buses during the AM peak hour. The proposed TTP bus volumes for the July 2022 possession are 65 buses per hour. Though the TTP bus volumes have increased (by about 15 buses per hour), the impact of these additional buses on the intersection is expected to be similar or lower compared with the SPIR assessments, as the forecast July 2022 traffic volumes are lower than those forecast in the SPIR. As such, it is likely that the intersection will operate at LOS B or better compared to the SPIR forecasts for the AM peak hour during all scenarios (Scenarios 1 to 3).			
Scenario 2: July 2022 (Future base + SM Construction traffic)				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	2489	0.637	27.4	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	2489	0.637	27.4	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2558	0.7	28.1	LOS B

The New Canterbury Road / Marrickville Road / Dulwich Street intersection is forecast to operate at LOS B during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during the PM peak hours. This aligns with the outcomes from the previous assessment which forecast a similar intersection performance (LOS B) during all scenarios. LOS B would not cause noticeable delays for commuters in the peak hour.

3.5 Hurlstone Park Station

Two (2) Category 2 and one (1) Category 4 intersections were assessed in the area surrounding Hurlstone Park Station. These intersections are show in Figure 16 with the category and description of each included in Table 32.

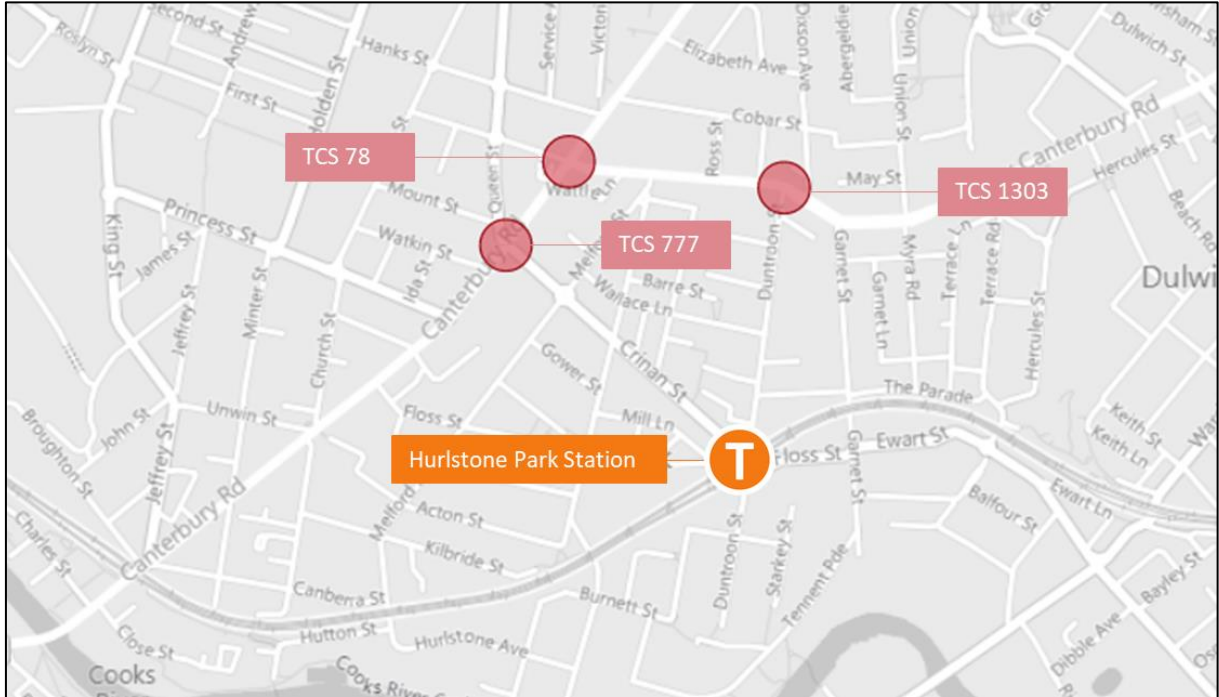


Figure 16: Intersections assessed near Hurlstone Park Station

Table 32 Hurlstone Park Station assessed intersections

TCS	Intersection description
Category 2	
TCS 78	New Canterbury Road / Canterbury Road
TCS 1303	New Canterbury Road / Duntroon Street
Category 4	
TCS 777	Canterbury Road / Queen Street / Crinan Street

3.5.1 TCS 78 – New Canterbury Road / Canterbury Road [Category 2]

Table 33 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 33 TCS 78 New Canterbury Road / Canterbury Road – intersection layout and SIDRA model layout

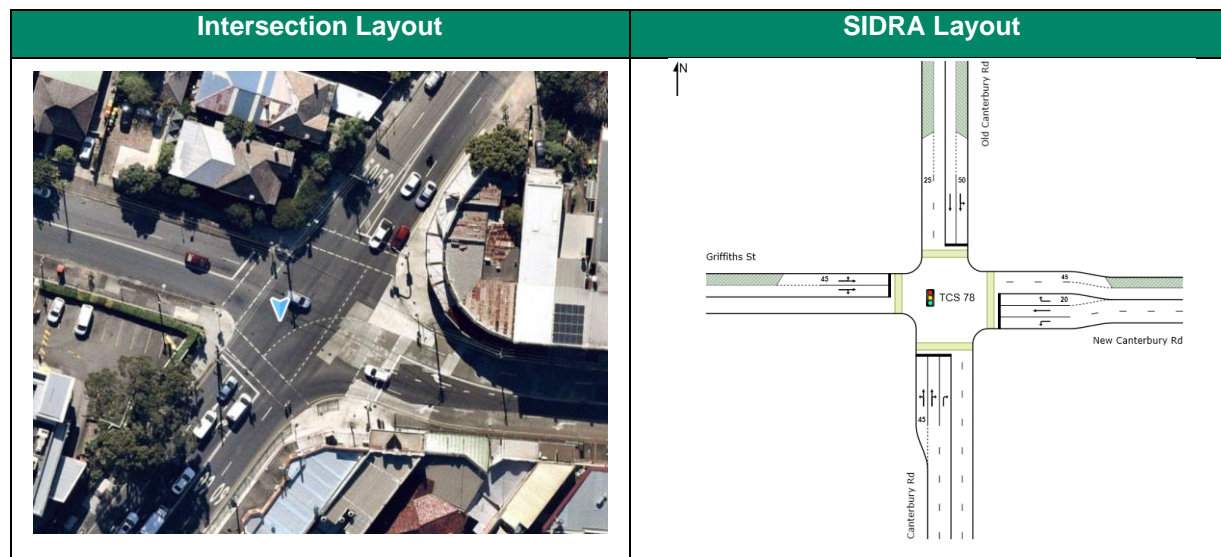


Table 34 provides a summary of the intersection performance assessment for this intersection.

Table 34 New Canterbury Road / Canterbury Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	3052	0.918	23.1	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3278	0.908	24.7	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3415	0.974	29.6	LOS C
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	3357	0.908	29	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	3482	0.902	29.5	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3619	0.93	34.1	LOS C

The New Canterbury Road / Canterbury Road intersection is forecast to operate at LOS B during the AM peak in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (less than 10 seconds) and result in a reduced intersection performance (LOS C). This aligns with the outcomes from the previous assessment which forecast a similar intersection performance (LOS C) during Scenario 3. LOS C would generally be considered acceptable during peak periods.

The New Canterbury Road / Canterbury Road intersection is forecast to operate at LOS C during the PM peak in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS C during the PM peak hour. This aligns with the outcomes from the previous assessment which forecast a similar intersection performance (LOS C) during Scenario 3. LOS C would generally be considered acceptable during peak periods.

3.5.2 TCS 1303 – New Canterbury Road / Duntroon Street [Category 2]

Table 35 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 35 TCS 1303 New Canterbury Road / Duntroon Street – intersection layout and SIDRA model layout

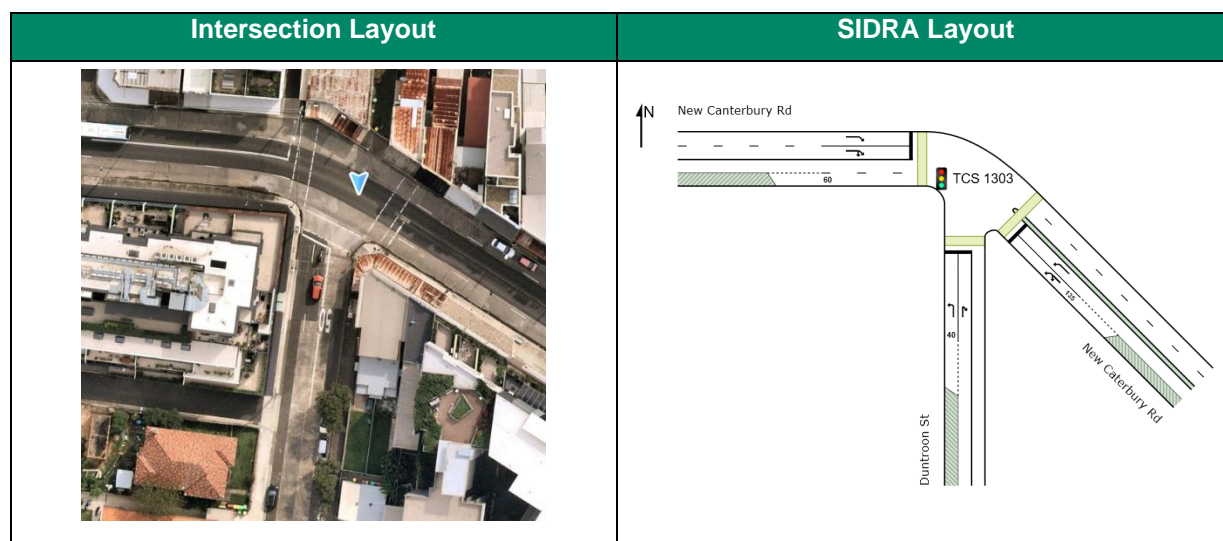


Table 36 provides a summary of the intersection performance assessment for this intersection.

Table 36 New Canterbury Road / Duntroon Street - intersection assessment summary


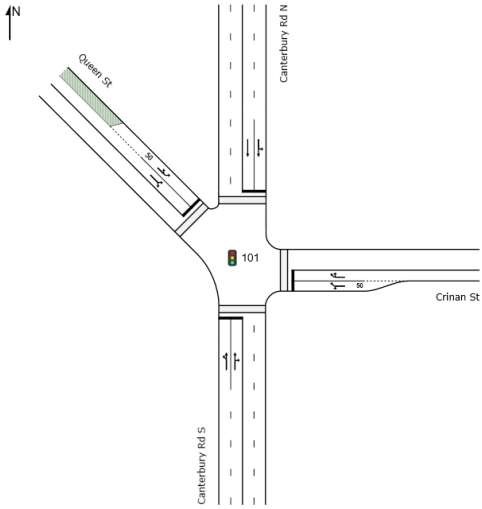
	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	1868	0.494	11.6	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	1868	0.494	11.6	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1937	0.531	11.4	LOS A
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	2220	0.662	10.1	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	2220	0.662	10.1	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2288	0.695	10.2	LOS A

The New Canterbury Road / Duntroon Street intersection is forecast to operate at LOS A during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS A during both peak hours. These outcomes are better than the outcomes from the previous assessment which forecast an intersection performance (LOS B) during all scenarios. LOS A would not cause noticeable delays for commuters in the peak hour.

3.5.3 TCS 777 – Canterbury Road / Queen Street / Crinan Street [Category 4]

Table 37 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 37 TCS 777 – Canterbury Road / Queen Street / Crinan Street – intersection layout and SIDRA model layout

Intersection Layout	SIDRA Layout
	

Intersection performance results were adopted from the previous assessment as detailed in Section 2.2. Table 38 provides a summary of the intersection performance assessment for this intersection.

Table 38 Canterbury Road / Queen Street / Crinan Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	3322	0.67	24	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3356	0.68	25	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3436	0.73	26	LOS B
PM Peak				
Scenario 1: July 2022 (Future base)	3595	0.78	20	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3629	0.8	22	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3710	0.83	27	LOS C

The Canterbury Road / Queen Street / Crinan Street intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B. LOS B would not cause noticeable delays for commuters in the peak hour.

The Canterbury Road / Queen Street / Crinan Street intersection is forecast to operate at LOS B during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to result in a slight increase to the average delay (less than 10 seconds) and is likely to result in a reduced intersection performance at LOS C. LOS C would generally be considered acceptable during the peak periods.

3.6 Canterbury Station

One (1) Category 1 and two (2) Category 2 intersections were assessed in the area surrounding Canterbury Station. These intersections are shown in Figure 17 with the category and description of each included in

Table 39.

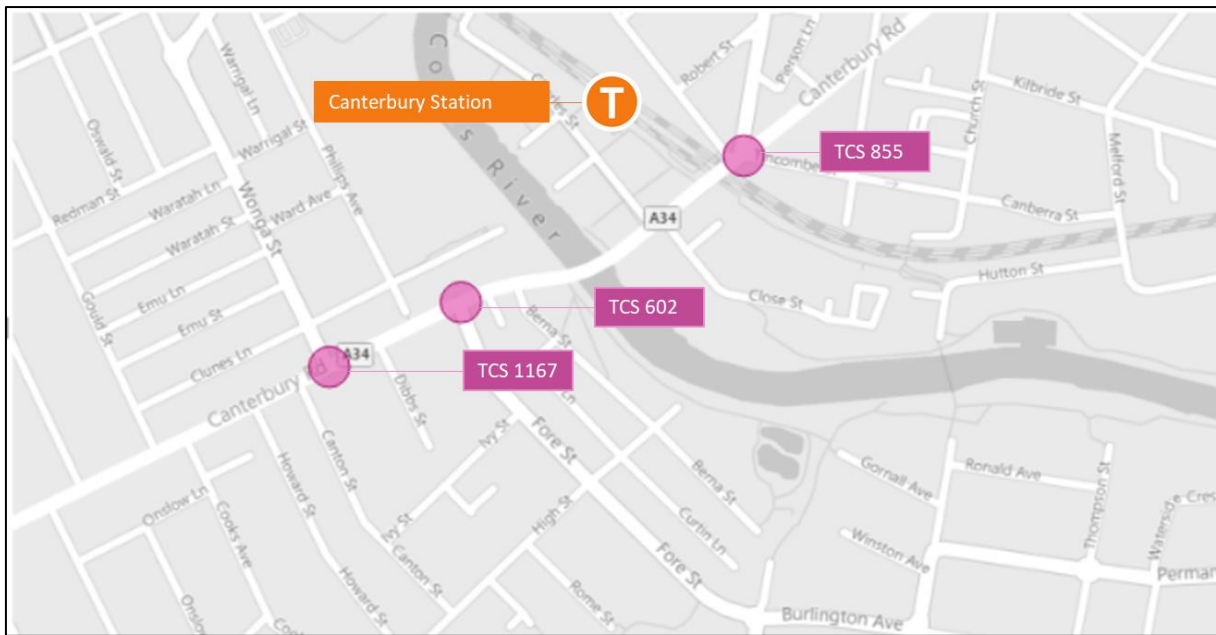


Figure 17: Intersections assessed near Canterbury Station

Table 39 Canterbury Station assessed intersections

TCS	Intersection description
Category 1	
TCS 602	Canterbury Road / Fore Street
Category 2	
TCS 855	Canterbury Road / Jeffrey Street
TCS 1167	Canterbury Road / Wonga Street

3.6.1 TCS 602 – Canterbury Road / Fore Street [Category 1]

Table 40 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 40 TCS 602 Canterbury Road / Fore Street – intersection layout and SIDRA model layout

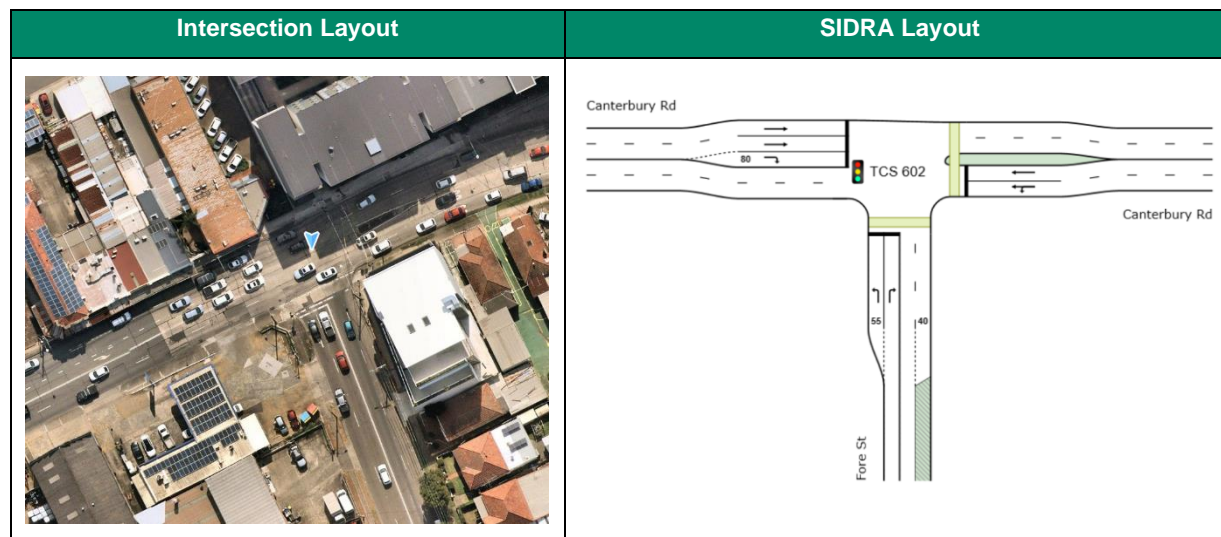


Table 41 provides a summary of the intersection performance assessment for this intersection.

Table 41 Canterbury Road / Fore Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	3644	0.835	23.7	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3644	0.835	23.7	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3762	0.857	25.5	LOS B
PM Peak (4pm to 5pm)				
Scenario 1: July 2022 (Future base)	3792	0.847	22.6	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3792	0.847	22.6	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3908	0.874	25.8	LOS B

The Canterbury Road / Fore Street intersection is forecast to operate at LOS B during both the AM and PM peak hours. The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and result in a similar intersection performance at LOS B during both AM and PM peak hours. LOS B would not cause noticeable delays for commuters in the peak hour.

3.6.2 TCS 855 – Canterbury Road / Jeffrey Street [Category 2]

Table 42 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 42 TCS 855 Canterbury Road / Jeffrey Street – intersection layout and SIDRA model layout


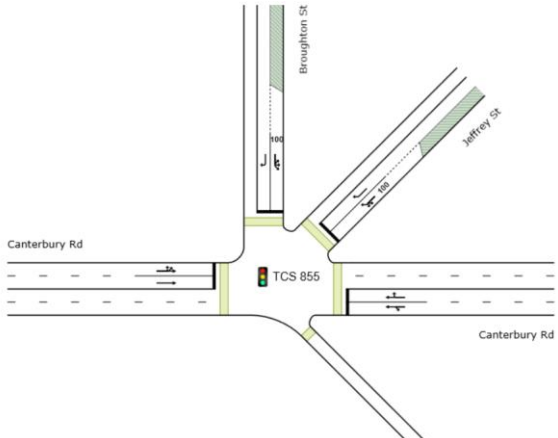
Intersection Layout	SIDRA Layout
	

Table 43 provides a summary of the intersection performance assessment for this intersection.

Table 43 Canterbury Road / Jeffrey Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	3353	0.859	18.6	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3394	0.87	19.2	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3512	1.289	36.1	LOS C
PM Peak				
Scenario 1: July 2022 (Future base)	The July 2022 forecast traffic volumes (for Scenario 1) are lower by about 75 vehicles than the previously modelled traffic volumes used in the EIS assessment for the PM peak hour (for the peak year of construction, which is 2023). EIS assessment forecast the intersection to operate at LOS C during both the future base scenario (Scenario 1) and TTP Scenario (Scenario 3). The EIS assessed the intersection performance with the addition of 81 TTP buses during the PM peak hour. The proposed TTP bus volumes for the July 2022 possession are 111 buses per hour. Though the TTP bus volumes have increased (by about 30 buses per hour), the impact of these additional buses on the intersection is expected to be similar or lower compared with the SPIR assessments, as the forecast July 2022 traffic volumes are lower than those forecast in the EIS. As such, it is likely that the intersection will operate at LOS C or better compared to the EIS forecasts for the PM peak hour during all scenarios (Scenarios 1 to 3).			
Scenario 2: July 2022 (Future base + SM Construction traffic)				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				

The Canterbury Road / Jeffry Street intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to increase the average delay and is likely to result in a reduced intersection performance at LOS C. The assessments are aligned with the outcomes from the previous assessment which forecast a similar intersection performance (LOS B) for Scenario 1 and Scenario 2. Scenario 3 has a reduced intersection performance; however, the intersection is expected to perform at satisfactory levels at LOS C during the AM peak hour.

3.6.3 TCS 1167 – Canterbury Road / Wonga Street [Category 2]

Table 44 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 44 TCS 1167 Canterbury Road / Wonga Street – intersection layout and SIDRA model layout


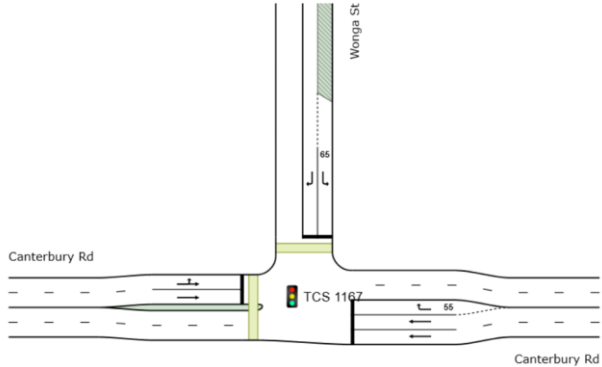
Intersection Layout	SIDRA Layout
	

Table 45 provides a summary of the intersection performance assessment for this intersection.

Table 45 Canterbury Road / Wonga Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	3481	0.804	14.6	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3481	0.804	14.6	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3599	0.964	18.3	LOS B
PM Peak (3pm to 4pm)				
Scenario 1: July 2022 (Future base)	3936	0.873	16.2	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3936	0.873	16.2	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	4053	0.878	19.6	LOS B

The Canterbury Road / Wonga Street intersection is forecast to operate at LOS B during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during both peak hours. This aligns with the outcomes from the previous assessment which forecast a similar intersection performance (LOS B) during all scenarios. LOS B would not cause noticeable delays for commuters in the peak hour.

3.7 Campsie Station

Two (2) Category 1, two (2) Category 2 and two (2) Category 4 intersections were assessed in the area surrounding Campsie Station. These intersections are shown in Figure 18 with the category and description of each included in Table 46.

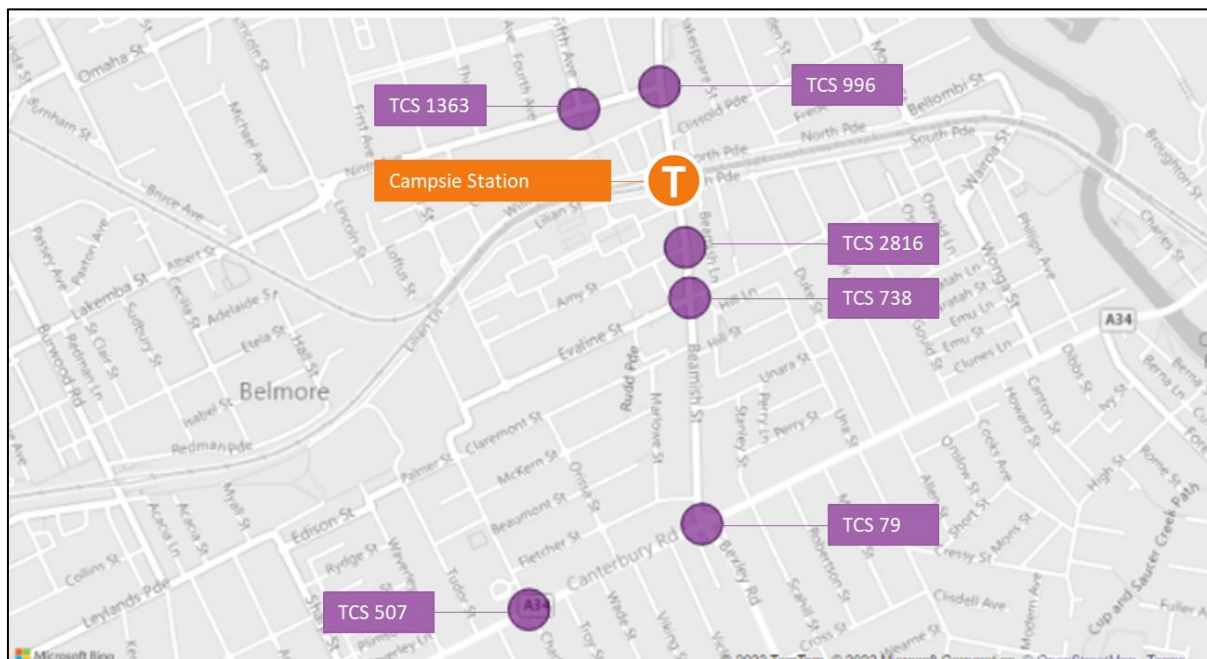


Figure 18: Intersections assessed near Campsie Station

Table 46 Campsie Station assessed intersections

TCS	Intersection description
Category 1	
TCS 507	Canterbury Road / Charlotte Street / Thorncraft Parade
TCS 1363	Fifth Avenue / Ninth Avenue
Category 2	
TCS 79	Canterbury Road / Beamish Street / Bexley Road
TCS 2816	Beamish Street / Amy Street
Category 4	
TCS 738	Beamish Street / Evaline Street
TCS 996	Beamish Street / Ninth Avenue

3.7.1 TCS 507 – Canterbury Road / Charlotte Street / Thorncraft Parade [Category 1]

Table 53 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 47 TCS 507 Canterbury Road / Charlotte Street / Thorncraft Parade – intersection layout and SIDRA model layout

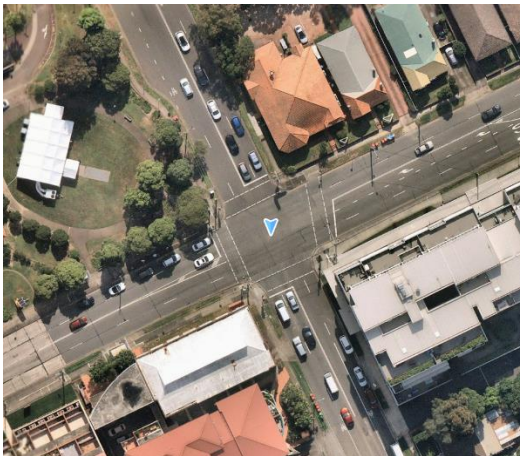
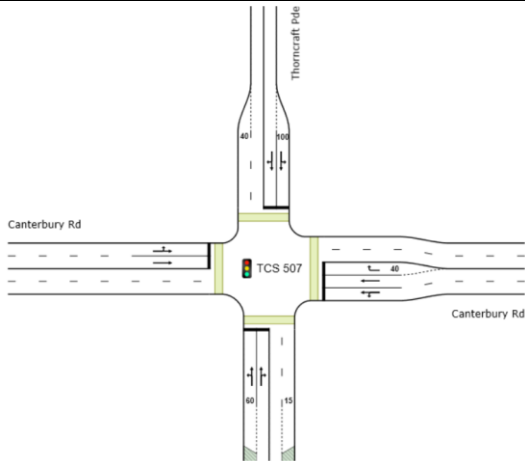
Intersection Layout	SIDRA Layout
	

Table 54 provides a summary of the intersection performance assessment for this intersection.

Table 48 Canterbury Road / Charlotte Street / Thorncraft Parade - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	3247	1.02	48.3	LOS D
Scenario 2: July 2022 (Future base + SM Construction traffic)	3247	1.02	48.3	LOS D
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3247	1.01	49.0	LOS D
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	3829	0.997	38.9	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	3829	0.997	38.9	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3869	0.947	40.4	LOS C

The Canterbury Road / Charlotte Street / Thorncraft Parade intersection is forecast to operate at LOS D during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS D. LOS D would generally be considered reasonable during the peak periods.

The Canterbury Road / Charlotte Street / Thorncraft Parade intersection is forecast to operate at LOS C during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS C. LOS C would generally be considered acceptable during the peak periods.

3.7.2 TCS 1363 – Fifth Avenue / Ninth Avenue [Category 1]

Table 49 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 49 TCS 1363 Fifth Avenue / Ninth Avenue – intersection layout and SIDRA model layout

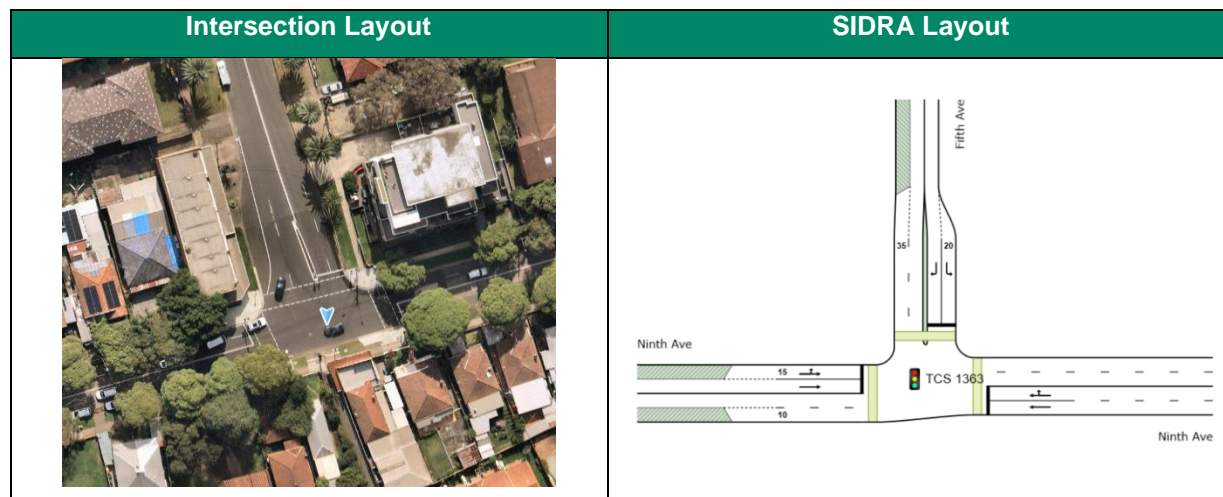


Table 50 provides a summary of the intersection performance assessment for this intersection.

Table 50 Fifth Avenue / Ninth Avenue - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	1121	0.558	16.7	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1121	0.558	16.7	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1171	0.602	16.3	LOS B
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	1408	0.629	16.8	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1408	0.629	16.8	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1457	0.642	16.4	LOS B

The Fifth Avenue / Ninth Avenue intersection is forecast to operate at LOS B during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during both AM and PM peak hours. LOS B would not cause noticeable delays for commuters in the peak hour.

3.7.3 TCS 79 – Canterbury Road / Beamish Street / Bexley Road [Category 2]

Table 51 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 51 TCS 79 Canterbury Road / Beamish Street / Bexley Road – intersection layout and SIDRA model layout


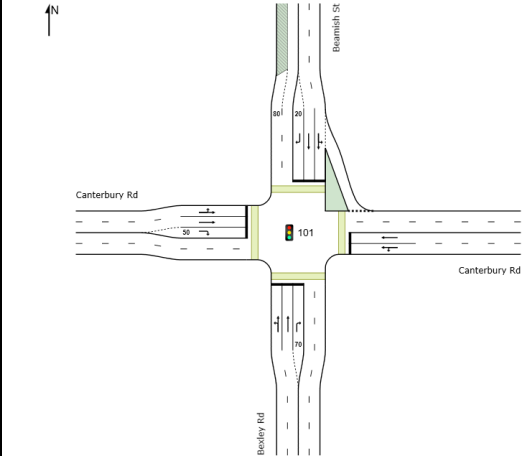
Intersection Layout	SIDRA Layout
	

Table 52 provides a summary of the intersection performance assessment for this intersection.

Table 52 Canterbury Road / Beamish Street / Bexley Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	4111	0.773	20.6	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	4111	0.773	20.6	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	4188	0.847	20.2	LOS B
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	4032	0.837	21.4	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	4032	0.837	21.4	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	4084	0.849	19.2	LOS B

The Canterbury Road / Beamish Street / Bexley Road intersection is forecast to operate at LOS B during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during both peak hours. These outcomes are better than the outcomes from the previous assessment which forecast an intersection performance (LOS C) during all scenarios. LOS B would not cause noticeable delays for commuters in the peak hour.

3.7.4 TCS 2816 – Beamish Street / Amy Street [Category 2]

Table 53 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 53 TCS 2816 Beamish Street / Amy Street – intersection layout and SIDRA model layout

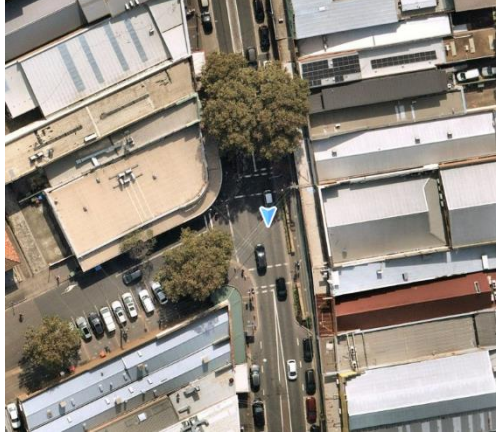
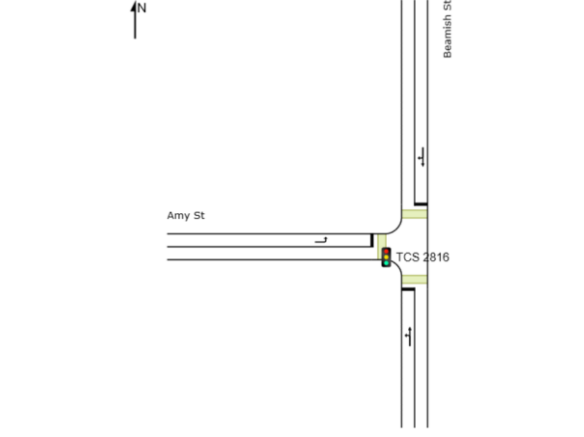
Intersection Layout	SIDRA Layout
	

Table 54 provides a summary of the intersection performance assessment for this intersection.

Table 54 Beamish Street / Amy Street – intersection assessment summary

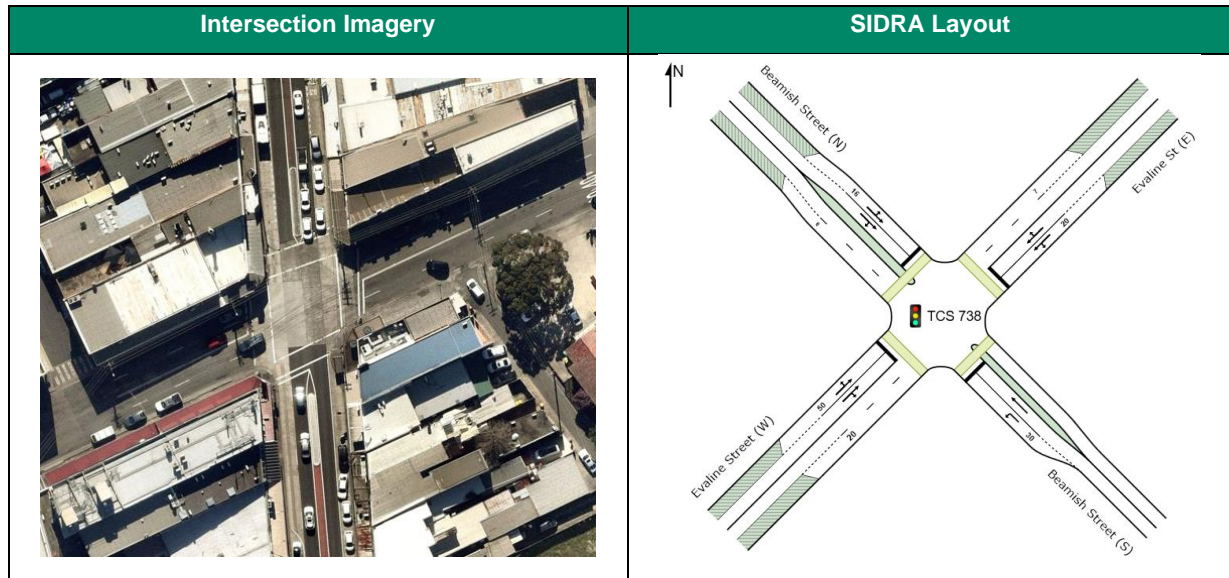
	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	1159	0.481	6.8	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	1159	0.481	6.8	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1213	0.501	6.9	LOS A
PM Peak (4pm to 5pm)				
Scenario 1: July 2022 (Future base)	1381	0.631	14.4	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	1381	0.631	14.4	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1453	0.715	13.9	LOS A

The Beamish Street / Amy Street intersection is forecast to operate at LOS A during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS A during both peak hours. These outcomes are better than the outcomes from the previous assessment which forecast a similar intersection performance (LOS A during the AM peak hour and LOS B during the PM peak hour) during all scenarios. LOS A would not cause noticeable delays for commuters in the peak hour.

3.7.5 TCS 738 – Beamish Street / Evaline Street [Category 4]

Table 55 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 55 TCS 738 – Beamish Street / Evaline Street – intersection layout and SIDRA model layout



Intersection performance results were adopted from the previous assessment as detailed in Section 2.2. Table 56 provides a summary of the intersection performance assessment for this intersection.

Table 56 Beamish Street / Evaline Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	The future base scenario (Scenario 1) was not assessed in the previous assessment.			
Scenario 2: July 2022 (Future base + SM Construction traffic)	1639	0.76	29	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1681	0.93	31	LOS C
PM Peak				
Scenario 1: July 2022 (Future base)	The future base scenario (Scenario 1) was not assessed in the previous assessment.			
Scenario 2: July 2022 (Future base + SM Construction traffic)	1732	0.83	31	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1790	1.11	47	LOS D

The Beamish Street / Evaline Street intersection is forecast to operate at LOS C during the AM peak hour in the future base scenario with SM construction traffic (Scenario 2). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS C during the AM peak hour. LOS C would generally be considered acceptable during peak periods.

The Beamish Street / Evaline Street intersection is forecast to operate at LOS C during the PM peak hour in the future base scenario with SM construction traffic (Scenario 2). The addition of TTP buses (Scenario 3) is expected to have an increase in average delay (by about 15 seconds) and is forecast to result in a reduced intersection performance at LOS D. LOS D would generally be considered reasonable during peak periods.

3.7.6 TCS 996 – Beamish Street / Ninth Avenue [Category 4]

Table 57 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 57 TCS 996 – Beamish Street / Ninth Avenue – intersection layout and SIDRA model layout

Intersection Layout	SIDRA Layout
	

Intersection performance results were adopted from the previous assessment as detailed in Section 2.2. Table 58 provides a summary of the intersection performance assessment for this intersection.

Table 58 Beamish Street / Ninth Avenue - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	1944	0.69	15	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1960	0.69	16	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1990	0.71	16	LOS B
PM Peak				
Scenario 1: July 2022 (Future base)	2065	0.71	17	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	2081	0.73	17	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2111	0.79	18	LOS B

The Beamish Street / Ninth Avenue intersection is forecast to operate at LOS B during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during both AM and PM peak hours. LOS B would not cause noticeable delays for commuters in the peak hour.

3.8 Belmore Station

Two (2) Category 2 and two (2) Category 4 intersections were assessed in the area surrounding Belmore Station. These intersections are shown in Figure 19 with the category and description of each included in Table 59.

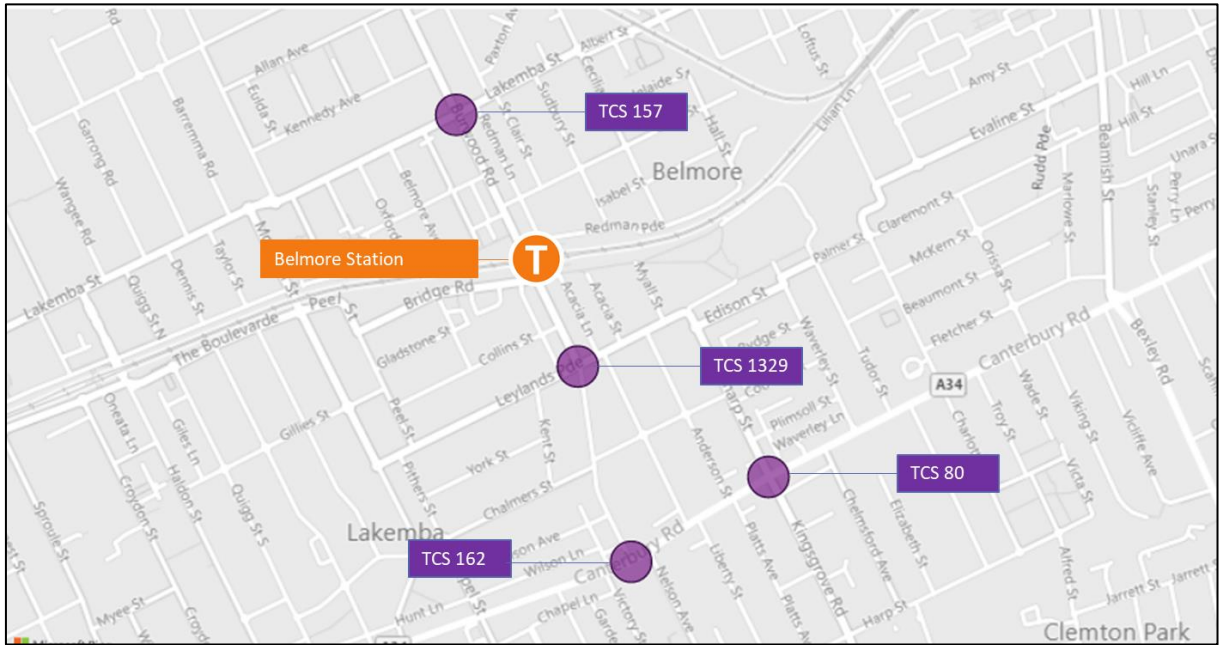


Figure 19: Intersections assessed near Belmore Station

Table 59 Belmore Station assessed intersections

TCS	Site Description
Category 2	
TCS 162	Canterbury Road / Burwood Road
TCS 1329	Burwood Road / Leylands Parade
Category 4	
TCS 80	Canterbury Road / Kingsgrove Road / Sharp Street
TCS 157	Burwood Road / Lakemba Street

3.8.1 TCS 162 – Canterbury Road / Burwood Road [Category 2]

Table 60 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 60 TCS 162 Canterbury Road / Burwood Road – intersection layout and SIDRA model layout

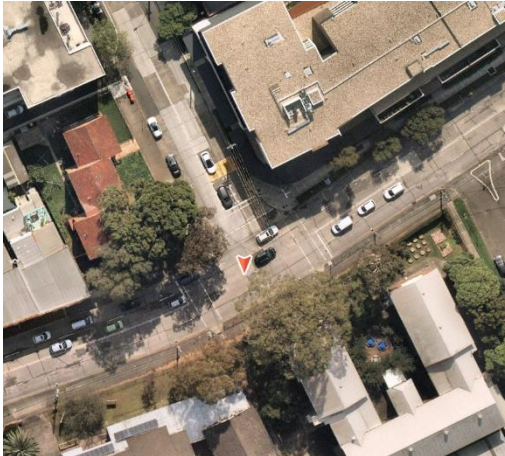
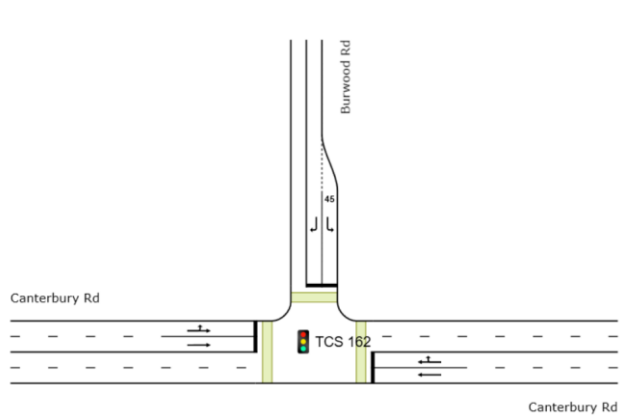
Intersection Layout	SIDRA Layout
	

Table 61 provides a summary of the intersection performance assessment for this intersection.

Table 61 Canterbury Road / Burwood Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (7am to 8am)				
Scenario 1: July 2022 (Future base)	The previous assessment included the addition of 21 TTP buses during the AM peak hour. The proposed TTP bus volumes for the July 2022 possession are 36 buses per hour. As the increase in TTP bus volumes are minor (15 buses per hour), the impact of these additional buses on the intersection is expected to be similar compared with the July 2021 CA assessments. As such, it is likely that the intersection will operate at LOS A similar to the previous assessment forecasts for the AM peak hour during all scenarios (Scenarios 1 to 3).			
Scenario 2: July 2022 (Future base + SM Construction traffic)				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	3160	1.037	21.4	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	3160	1.037	21.4	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3200	0.889	22.1	LOS B

The Canterbury Road / Burwood Road intersection is forecast to operate at LOS B during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B. This aligns with the outcomes from the previous assessment which forecast a similar intersection performance (LOS B) during all scenarios. LOS B would not cause noticeable delays for commuters in the peak hour.

3.8.2 TCS 1329 – Burwood Road / Leylands Parade [Category 2]

Table 62 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 62 TCS 1329 Burwood Road / Leylands Parade – intersection layout and SIDRA model layout


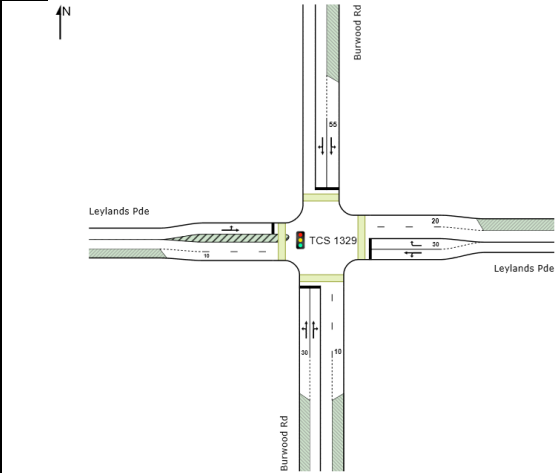
Intersection Layout	SIDRA Layout
	

Table 63 provides a summary of the intersection performance assessment for this intersection.

Table 63 Burwood Road / Leylands Parade - intersection assessment summary

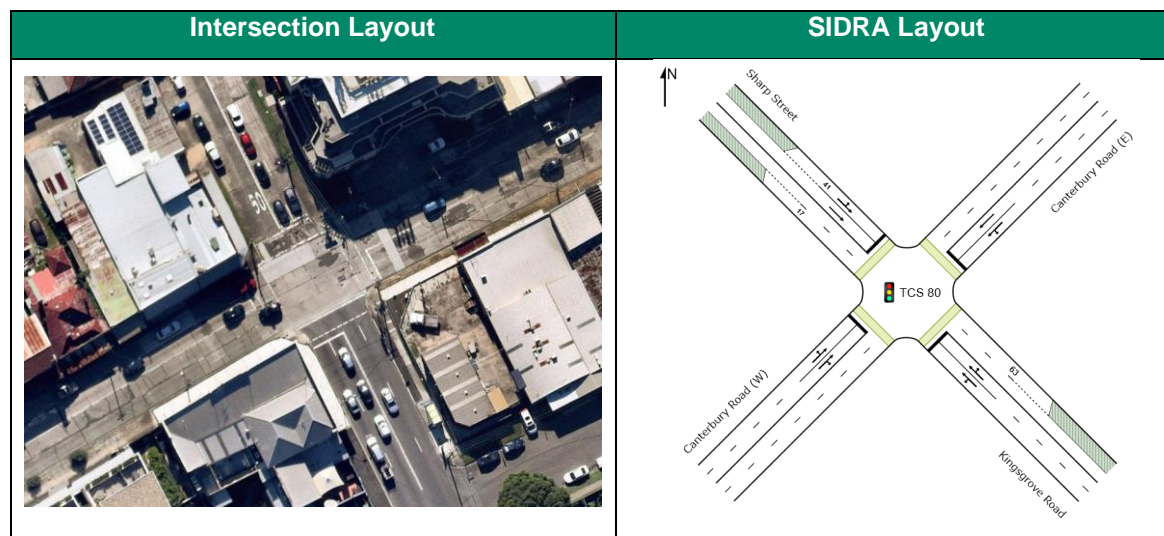
	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	The July 2022 forecast traffic volumes (for Scenario 1) are lower by about 350 vehicles than the modelled traffic volumes used in the SPIR for the AM peak hour (for the peak year of construction, which is 2023). The previous assessment forecast the intersection to operate at LOS E during both the future base scenario (Scenario 1) and TTP Scenario (Scenario 3). The proposed TTP bus volumes for the July 2022 possession are 36 buses per hour. The impact of these additional buses on the intersection is expected to be similar or lower compared with the SPIR, as the forecast July 2022 traffic volumes are lower than those forecast in the SPIR. As such, it is likely that the intersection will operate at LOS E or better compared to the previous assessment for the AM peak hour during all scenarios (Scenarios 1 to 3).			
Scenario 2: July 2022 (Future base + SM Construction traffic)				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				
PM Peak (3pm to 4pm)				
Scenario 1: July 2022 (Future base)	1906	1.029	45.6	LOS D
Scenario 2: July 2022 (Future base + SM Construction traffic)	1942	1	47	LOS D
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1982	1.014	52.8	LOS D

The Burwood Road / Leylands Parade intersection is forecast to operate at LOS D during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS D. These outcomes are better than the outcomes from the SPIR which forecast an intersection performance (LOS E) during all scenarios. LOS D would generally be considered reasonable during the peak hour.

3.8.3 TCS 80 – Canterbury Road / Kingsgrove Road / Sharp Street [Category 4]

Table 64 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 64 TCS 80 – Canterbury Road / Kingsgrove Road / Sharp Street – intersection layout and SIDRA model layout



Intersection performance results were adopted from the previous assessment as detailed in Section 2.2. Table 65 provides a summary of the intersection performance assessment for this intersection.

Table 65 Canterbury Road / Kingsgrove Road / Sharp Street - intersection assessment summary

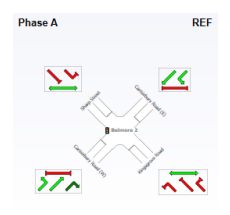
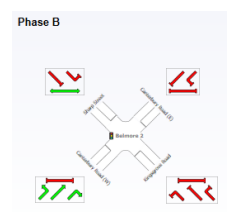
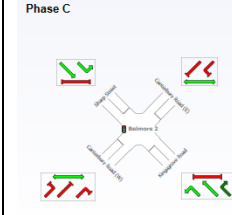
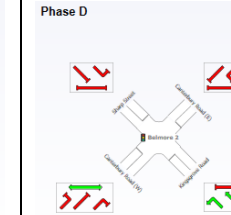
	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	The future base scenario (Scenario 1) was not assessed in the previous assessment.			
Scenario 2: July 2022 (Future base + SM Construction traffic)	3134	0.924	38.8	LOS D
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3157	1.002	67.4	LOS E
Scenario 3 with proposed mitigation	3157	0.934	52.5	LOS D

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
PM Peak				
Scenario 1: July 2022 (Future base)	The future base scenario (Scenario 1) was not assessed in the previous assessment.			
Scenario 2: July 2022 (Future base + SM Construction traffic)	3304	0.953	36.1	LOS D
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	3318	0.937	36.2	LOS D

The Canterbury Road / Kingsgrove Road / Sharp Street intersection is forecast to operate at LOS D during the AM peak hour in the future base scenario with SM construction traffic (Scenario 2). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (30 seconds) and is likely to result degrade intersection performance to LOS E during the AM peak hour. LOS E would generally be considered reasonable during peak periods in a constraint environment.

To improve the intersection performance during AM peak, signal optimisation has been considered as shown in Table 66. By providing more phase times to Phase B (+16 seconds) and reducing phase times for Phase A (-24seconds) and Phase D (-3 seconds), the intersection performance is forecast to improve from LOS E to LOS D. The average delay per vehicle experienced at the intersection is also forecast to reduce from 78 seconds (before optimisation) to 52.5 seconds (after optimisation). LOS D would be generally considered reasonable during peak periods.

Table 66 Canterbury Road / Kingsgrove Road / Sharp Street – Optimised signal phase time

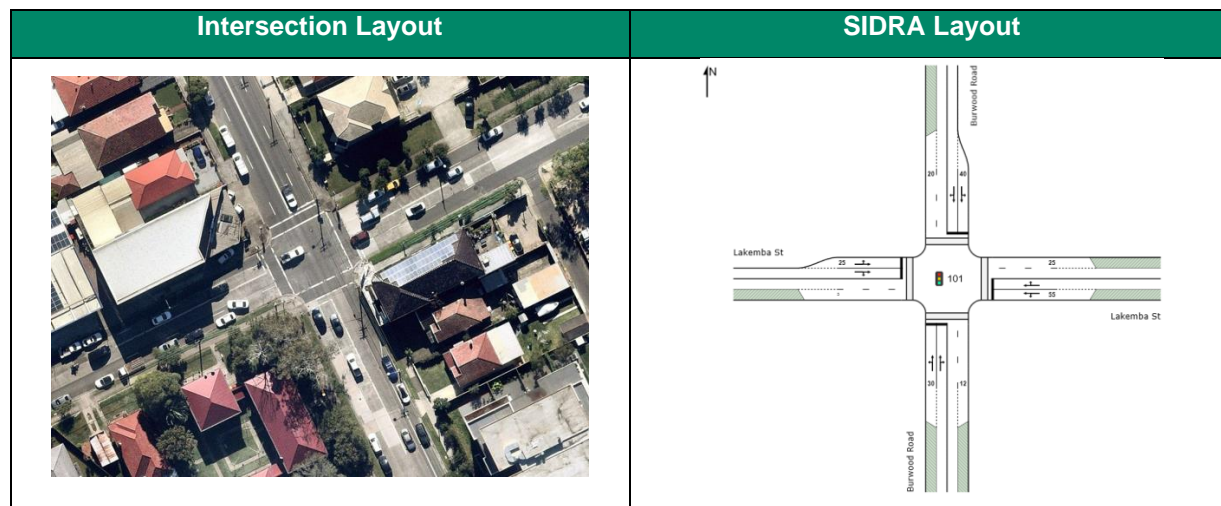
Phase Time				
Phase	A	B	C	D
Phase Diagram				
Phase Time Existing (sec)	63	23	24	23
Phase Time Future (sec)	39	39	24	20
Difference (Future - Existing)	-24	16	0	-3

In the PM peak hour, the intersection is forecast to operate at LOS D. The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS D.

3.8.4 TCS 157 – Burwood Road / Lakemba Street [Category 4]

Table 67 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 67 TCS 157 – Burwood Road / Lakemba Street - intersection layout and SIDRA model layout



Intersection performance results were adopted from the previous assessment as detailed in Section 2.2. Table 68 provides a summary of the intersection performance assessment for this intersection.

Table 68 Burwood Road / Lakemba Street - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	The future base scenario (Scenario 1) was not assessed in the previous assessment.			
Scenario 2: July 2022 (Future base + SM Construction traffic)	1854	0.64	18	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1884	0.73	19	LOS B
PM Peak				
Scenario 1: July 2022 (Future base)	The future base scenario (Scenario 1) was not assessed in the previous assessment.			
Scenario 2: July 2022 (Future base + SM Construction traffic)	2080	0.53	17	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2115	0.57	18	LOS B

The Burwood Road / Lakemba Street intersection is forecast to operate at LOS B during both the AM and PM peak hours in the future base scenario with SM construction traffic (Scenario 2). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS B during both AM and PM peak hours. LOS B would not cause noticeable delays for commuters in the peak hour.

3.9 Lakemba, Wiley Park and Punchbowl Stations

Three (3) Category 2 intersections were assessed in the area surrounding Lakemba, Wiley Park and Punchbowl Stations. These intersections are shown in Figure 20 with the category and description of each included in Table 69.

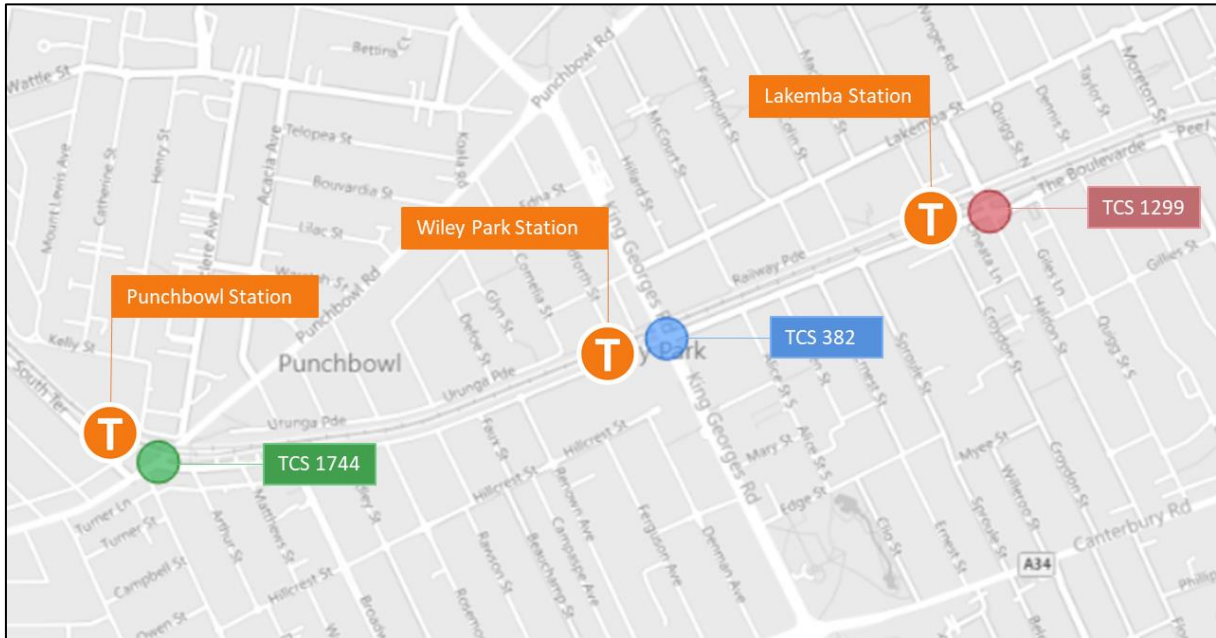


Figure 20: Intersections assessed near Lakemba, Wiley Park and Punchbowl Stations

Table 69 Lakemba, Wiley Park and Punchbowl Stations assessed intersections

TCS	Intersection description
Category 2	
TCS 382	King Georges Road / The Boulevard
TCS 1299	Haldon Street / The Boulevard, Lakemba
TCS 1744	Punchbowl Road / The Boulevard / South Terrace

3.9.1 TCS 382 – King Georges Road / The Boulevard [Category 2]

Table 70 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 70 TCS 382 King Georges Road / The Boulevard – intersection layout and SIDRA model layout

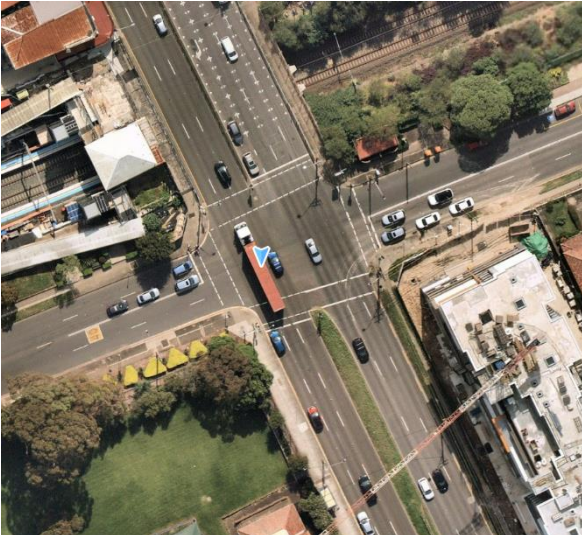
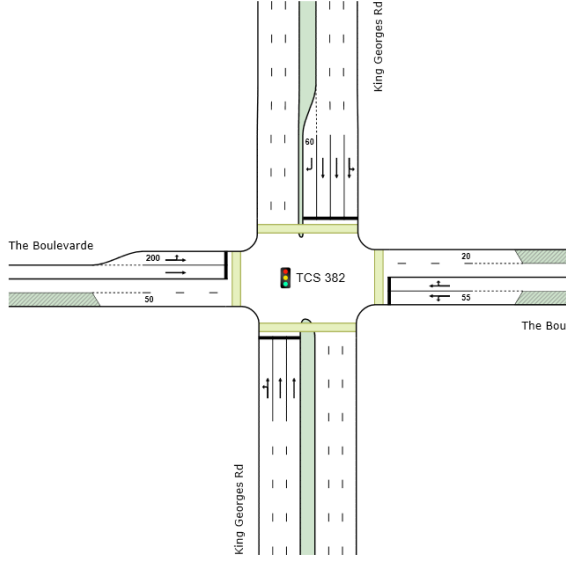
Intersection Layout	SIDRA Layout
	

Table 71 provides a summary of the intersection performance assessment for this intersection.

Table 71 King Georges Road / The Boulevard - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (6am to 7am)				
Scenario 1: July 2022 (Future base)	5727	0.821	25.3	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	5755	0.84	26.4	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	5842	0.976	49.4	LOS D
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	6425	0.877	33.5	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	6453	0.921	36.7	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	6541	0.982	50.3	LOS D

The King Georges Road / The Boulevard intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (less than 25 seconds) and result in a reduced intersection performance (LOS D). These outcomes are better than the outcomes from the previous assessment which forecast an intersection performance (LOS E) during Scenario 3. LOS D would be generally considered reasonable during peak periods.

The King Georges Road / The Boulevard intersection is forecast to operate at LOS C during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (less than 20 seconds) and result in a reduced intersection performance (LOS D). This aligns with the outcomes from the previous assessment which forecast a similar intersection performance (LOS D) during Scenario 3. LOS D would be generally considered reasonable during peak periods.

3.9.2 TCS 1299 – Haldon Street / The Boulevard [Category 2]

Table 72 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 72 TCS 1299 Haldon Street / The Boulevard – intersection layout and SIDRA model layout


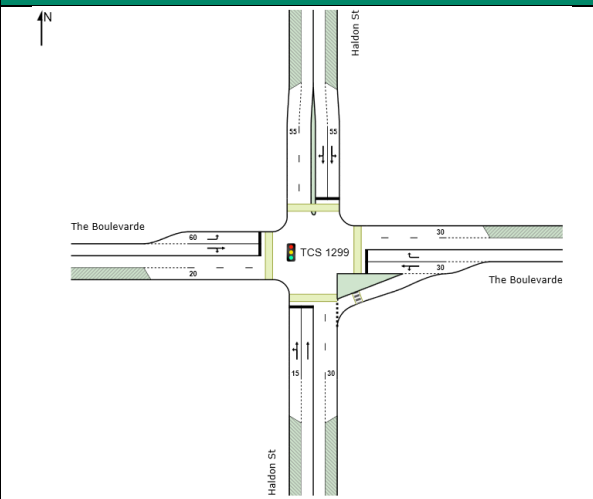
Intersection Layout	SIDRA Layout
	

Table 73 provides a summary of the intersection performance assessment for this intersection.

Table 73 Haldon Street / The Boulevard - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	1614	0.931	39.7	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	1643	0.974	46.6	LOS D
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1731	0.98	47	LOS D

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
PM Peak (3pm to 4pm)				
Scenario 1: July 2022 (Future base)	1772	0.925	32.2	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	1801	0.904	34	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1889	1.003	52.1	LOS D

The Haldon Street / The Boulevard intersection is forecast to operate at LOS C during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (less than 15 seconds) and result in a reduced intersection performance (LOS D). These outcomes are better than the outcomes from the previous assessment which forecast an intersection performance (LOS F) during Scenario 3. LOS D would be generally considered acceptable during peak periods.

The Haldon Street / The Boulevard intersection is forecast to operate at LOS C during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (less than 20 seconds) and result in a reduced intersection performance (LOS D). These outcomes are better than the outcomes from the previous assessment which forecast an intersection performance (LOS F) during Scenario 3. LOS D would be generally considered acceptable during peak periods.

3.9.3 TCS 1744 – Punchbowl Road / The Boulevard / South Terrace [Category 2]

Table 74 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA. This site is modelled as a network.

Table 74 TCS 1744 Punchbowl Road / The Boulevard / South Terrace – intersection layout and SIDRA model layout


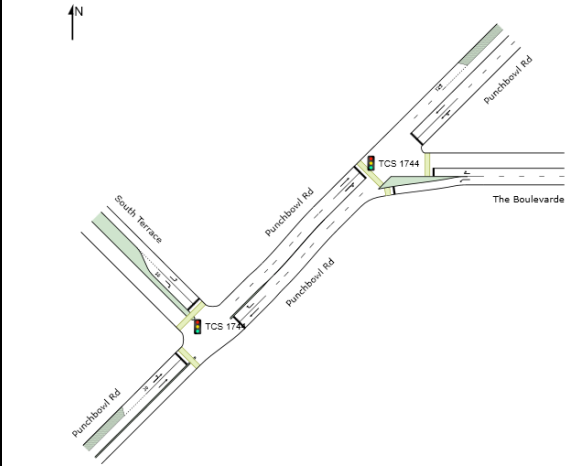
Intersection Layout	SIDRA Layout
	

Table 75 is forecast to operate at LOS B during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to result in a minor increase in the average delay and is likely to result in a reduced intersection performance at LOS C. These are aligned with the outcomes from the previous assessment which forecast an intersection performance of LOS C for Scenario 3. LOS C would generally be considered acceptable during peak periods.

Table 76 provides a summary of the intersection performance assessment for this intersection.

Table 75 Punchbowl Road / The Boulevard - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	The July 2022 forecast traffic volumes (for Scenario 1) are lower than the previously modelled traffic volumes used in the EIS assessment for the AM peak hour (for the peak year of construction, which is 2023). EIS assessment forecast the intersection to operate at LOS C during the future base scenario (Scenario 1) and at LOS D during the TTP Scenario (Scenario 3). The EIS assessed the intersection performance with the addition of 60 TTP buses during the AM peak hour. The proposed TTP bus volumes for the July 2022 possession are 83 buses per hour. Though the TTP bus volumes have increased (by about 25 buses per hour), the impact of these additional buses on the intersection is expected to be similar with the EIS assessments, as the forecast July 2022 traffic volumes are lower than those forecast in the EIS. As such, it is likely that the intersection will operate at LOS D or better compared to the EIS forecasts for the AM peak hour during all scenarios (Scenarios 1 to 3).			
Scenario 2: July 2022 (Future base + SM Construction traffic)				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	2707	0.832	25.8	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	2720	0.852	26.1	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2808	0.852	28.7	LOS C

The Punchbowl Road / The Boulevard intersection is forecast to operate at LOS B during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to result in a minor increase in the average delay and is likely to result in a reduced intersection performance at LOS C. These are aligned with the outcomes from the previous assessment which forecast an intersection performance of LOS C for Scenario 3. LOS C would generally be considered acceptable during peak periods.

Table 76 Punchbowl Road / South Terrace - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak				
Scenario 1: July 2022 (Future base)	The July 2022 forecast traffic volumes (for Scenario 1) are lower than the previously modelled traffic volumes used in the EIS assessment for the AM peak hour (for the peak year of construction, which is 2023). EIS assessment forecast the intersection to operate at LOS F during both the future base scenario (Scenario 1) and TTP Scenario (Scenario 3). The EIS assessed the intersection performance with the addition of 60 TTP buses during the PM peak hour. The proposed TTP bus volumes for the July 2022 possession are 83 buses per hour. Though the TTP bus volumes have increased (by about 25 buses per hour), the impact of these additional buses on the intersection is expected to be similar with the EIS assessments, as the forecast July 2022 traffic volumes are lower than those forecast in the EIS. As such, it is likely that the intersection will operate at LOS F similar to the EIS forecasts for the PM peak hour during all scenarios (Scenarios 1 to 3).			
Scenario 2: July 2022 (Future base + SM Construction traffic)				
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)				
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	2692	0.974	29.8	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	2698	0.977	30.4	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2786	1.012	37.8	LOS C

The Punchbowl Road / South Terrace intersection is forecast to operate at LOS C during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to increase the average delay (by about 10 seconds) and is likely to result in a similar intersection performance at LOS C during the PM peak hour. This is consistent with the outcomes from the previous assessment which forecast a similar intersection performance (LOS C) during Scenario 1 and Scenario 2. LOS C would be generally considered acceptable during the peak periods.

3.10 Bankstown Station

Two (2) Category 1 and two (2) Category 2 intersections were assessed in the area surrounding Bankstown Station. These intersections are shown in Figure 21 with the category and description of each included in Table 77.

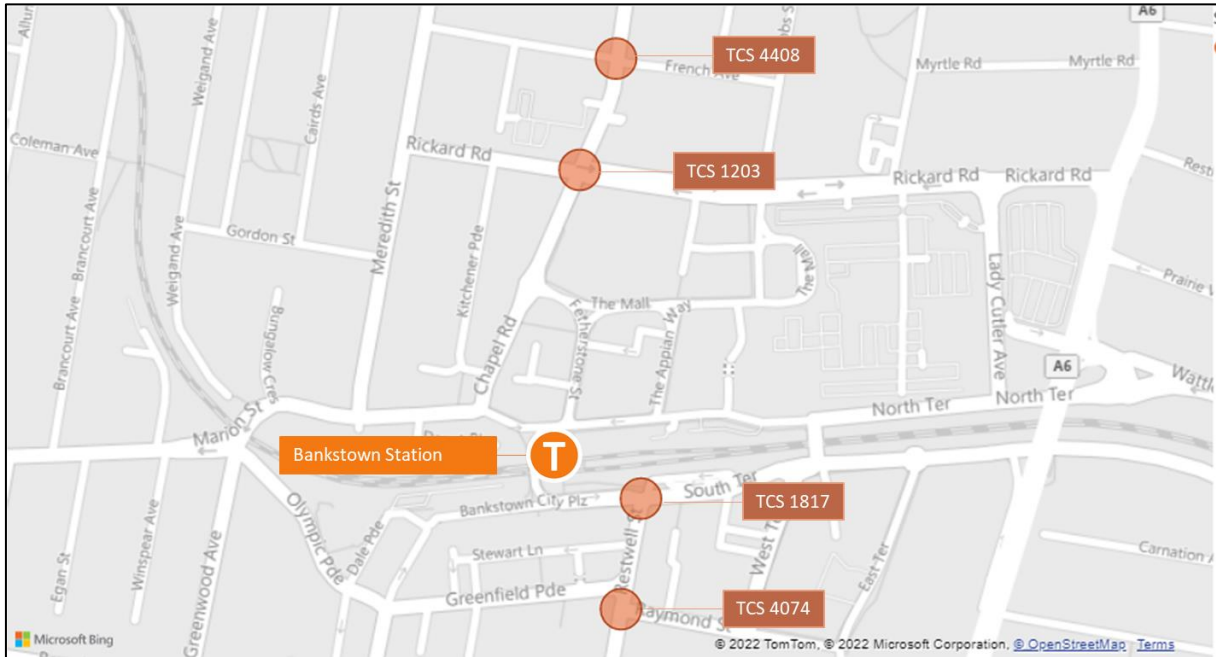


Figure 21: Intersections assessed near Bankstown Station

Table 77 Bankstown Station assessed intersections

TCS	Intersection description
Category 1	
TCS 1203	Chapel Road / Rickard Road
TCS 4408	Chapel Road / French Avenue
Category 2	
TCS 1817	Restwell Street / South Terrace
TCS 4074	Restwell Street / Raymond Street / Greenfield Parade

3.10.1 TCS 1203 – Chapel Road / Rickard Road [Category 1]

Table 78 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 78 TCS 1203 Chapel Road / Rickard Road – intersection layout and SIDRA model layout

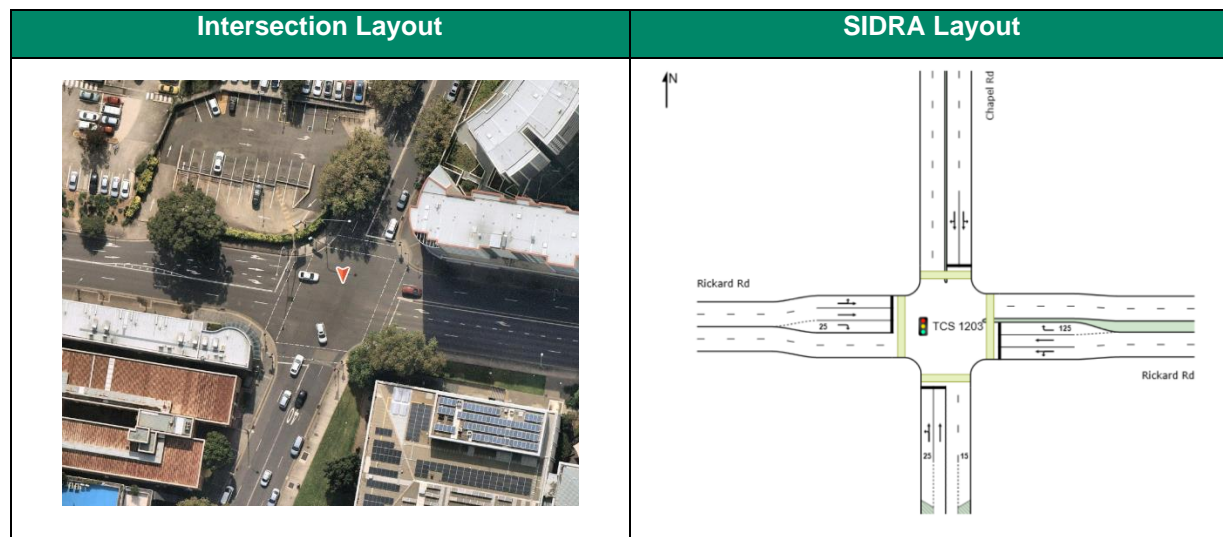


Table 79 provides a summary of the intersection performance assessment for this intersection.

Table 79 Chapel Road / Rickard Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (9am to 10am)				
Scenario 1: July 2022 (Future base)	1817	0.823	19.5	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1827	0.823	19.6	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1859	0.647	20.3	LOS B
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	2883	0.915	29.6	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	2894	0.915	30.5	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	2934	0.891	31.9	LOS C

The Chapel Road / Rickard Road intersection is forecast to operate at LOS B during the AM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and result in a similar intersection performance at LOS B during the AM peak hour. LOS B would not cause noticeable delays for commuters in the peak hour.

The Chapel Road / Rickard Road intersection is forecast to operate at LOS C during the PM peak hour in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and result in a similar intersection performance at LOS C during the AM peak hour. LOS C would be generally considered acceptable during the peak periods.

3.10.2 TCS 4408 – Chapel Road / French Avenue [Category 1]

Table 80 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 80 TCS 4408 Chapel Road / French Avenue – intersection layout and SIDRA model layout

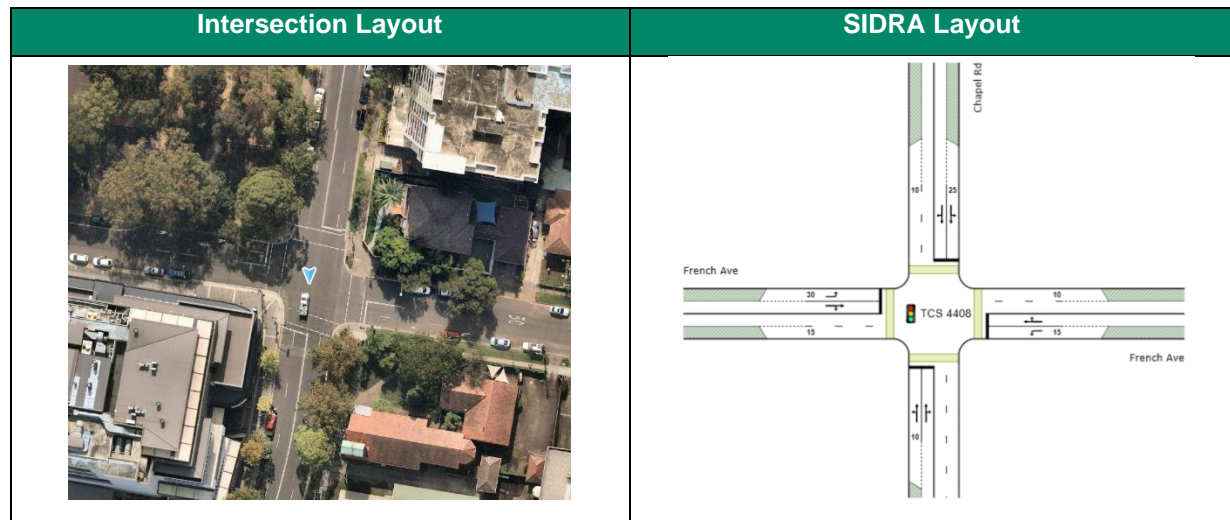


Table 81 provides a summary of the intersection performance assessment for this intersection.

Table 81 Chapel Road / French Avenue - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (9am to 10am)				
Scenario 1: July 2022 (Future base)	988	0.439	9.7	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	988	0.439	9.7	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1020	0.374	9.9	LOS A
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	1704	0.688	11.7	LOS A
Scenario 2: July 2022 (Future base + SM Construction traffic)	1704	0.688	11.7	LOS A
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1744	0.622	11.5	LOS A

The Chapel Road / French Avenue intersection is forecast to operate at LOS A during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and result in a similar intersection performance at LOS A during both AM and PM peak hours. LOS A would not cause noticeable delays for commuters in the peak hour.

3.10.3 TCS 1817 – Restwell Street / South Terrace [Category 2]

Table 82 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 82 TCS 1817 Restwell Street / South Terrace – intersection layout and SIDRA model layout

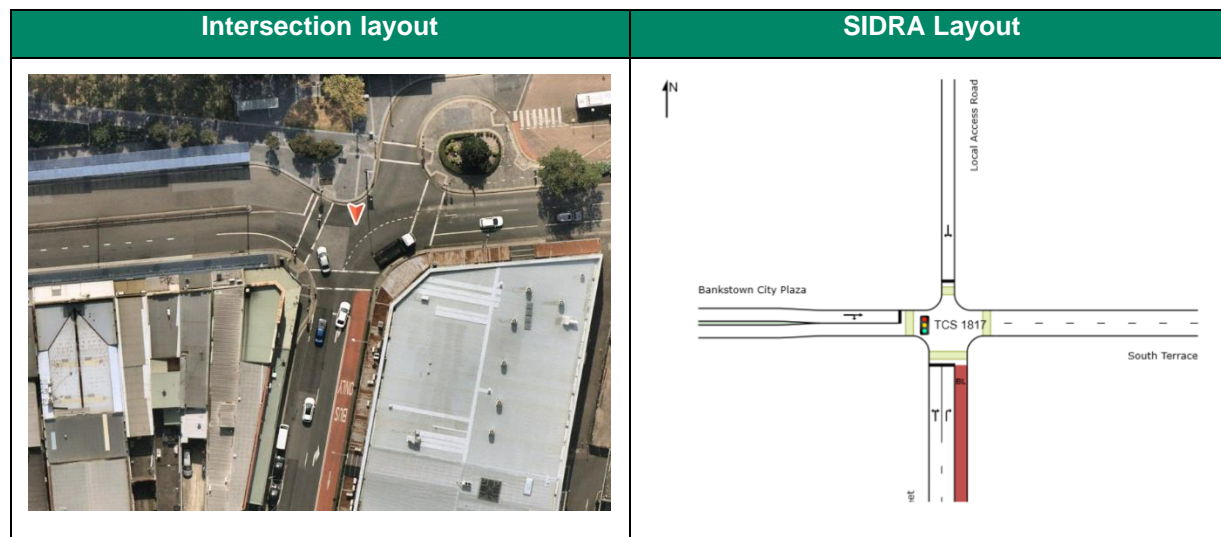


Table 83 provides a summary of the intersection performance assessment for this intersection.

Table 83 Restwell Street / South Terrace - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (9am to 10am)				
Scenario 1: July 2022 (Future base)	803	0.475	33.4	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	803	0.475	33.4	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	864	0.577	38.2	LOS C
PM Peak (4pm to 5pm)				
Scenario 1: July 2022 (Future base)	1097	0.573	28.3	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1097	0.573	28.3	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1158	0.662	32.5	LOS C

The Restwell Street / South Terrace intersection is forecast to operate at LOS C during in the AM and LOS B in the PM peak hours for future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and result in a similar intersection performance at LOS C during both AM and PM peak hours. LOS C would be generally considered acceptable during the peak periods.

3.10.4 TCS 4074 – Restwell Street / Raymond Street / Greenfield Parade [Category 2]

Table 84 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 84 TCS 4074 Restwell Street / Raymond Street / Greenfield Parade – intersection layout and SIDRA model layout

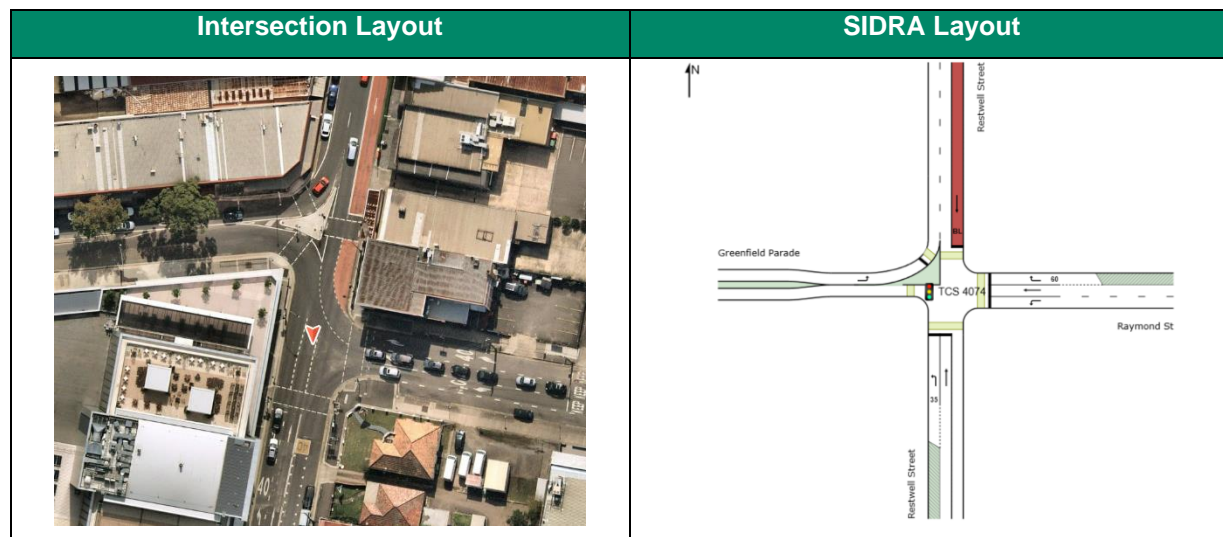


Table 85 provides a summary of the intersection performance assessment for this intersection.

Table 85 Restwell Street / Raymond Street / Greenfield Parade - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	1384	0.9	27.7	LOS B
Scenario 2: July 2022 (Future base + SM Construction traffic)	1393	0.9	27.7	LOS B
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1406	0.9	27.7	LOS B
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	1888	0.965	44.1	LOS D
Scenario 2: July 2022 (Future base + SM Construction traffic)	1897	0.965	44.1	LOS D
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	1962	0.965	44	LOS D

The Restwell Street / Raymond Street intersection is forecast to operate at LOS B during the AM and LOS D during the PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and result in a similar intersection performance during both AM and PM peak hours. LOS D in the PM peak indicate the intersection is likely to be operating at capacity.

3.11 Yagoona and Berala Stations

Two (2) Category 1 intersections were assessed in the area surrounding Yagoona and Berala Stations. These intersections are shown in Figure 22 with the category and description of each included in Table 86



Figure 22: Intersections assessed near Yagoona and Berala Stations

Table 86 Yagoona and Berala Stations assessed intersections

TCS	Site Description
Category 1	
TCS 61	Hume Highway / Chapel Road / Rookwood Road
TCS 2789	Joseph Street / Georges Avenue

3.11.1 TCS 61 – Hume Highway / Chapel Road / Rookwood Road [Category 1]

Table 87 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 87 TCS 61 Hume Highway / Chapel Road / Rookwood Road – intersection layout and SIDRA model layout


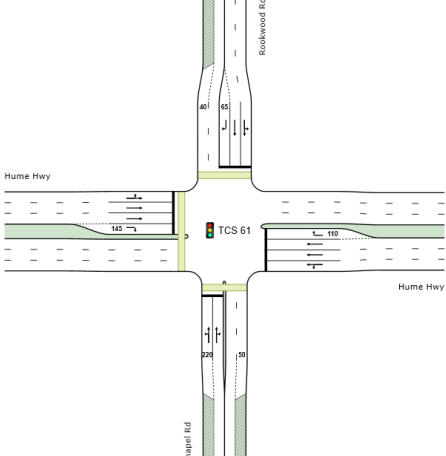
Intersection Layout	SIDRA Layout
	

Table 88 provides a summary of the intersection performance assessment for this intersection.

Table 88 Hume Highway / Chapel Road / Rookwood Road - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (7am to 8am)				
Scenario 1: July 2022 (Future base)	4151	0.802	30.6	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	4151	0.802	30.6	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	4182	0.816	31.9	LOS C
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	5516	1.068	80.4	LOS F
Scenario 2: July 2022 (Future base + SM Construction traffic)	5516	1.104	82.2	LOS F
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	5556	1.153	88	LOS F
Scenario 3 with proposed mitigation	5556	1.009	58.5	LOS E

The Hume Highway / Chapel Road / Rookwood Road intersection is forecast to operate at LOS C during the AM peak in the future base scenario (Scenario 1). The addition of bus replacement services (Scenario 3) is expected to have negligible effects to the delay and result in a similar intersection performance at LOS C during both periods. LOS C would generally be considered acceptable during the peak periods.

The Hume Highway / Chapel Road / Rookwood Road intersection is forecast to operate at LOS F during the PM peak in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is forecast to increase the average delay (by about 20 seconds) and is likely to result in a similar intersection performance at LOS F. It is evident from Scenario 1 and Scenario 2 that intersection operates at oversaturated conditions due to the background traffic volumes and existing capacity constraints, even during a July school holiday period, and therefore the impact of TTP buses is considered minor.

To improve the intersection performance during the PM peak, signal optimisation (in line with approved mitigation TC6) has been considered as shown in Table 89. By providing more phase times to Phase A (8 seconds), Phase E (5 seconds) and Phase F (3 seconds) as well as reducing phase time for Phase D (11 seconds), the intersection performance during the PM peak is forecast to improve from LOS F to LOS E as shown in Table 88. The existing phase times are based on average phase times observed at this intersection during a typical weekday in March 2022.

Table 89 TCS 61 Hume Highway / Chapel Road / Rookwood Road – Optimised signal phase time

Phase Time				
Phase	A	D	E	F
Phase Diagrams				
Existing Phase Times (sec)	62	28	33	24
Proposed Phase Times (sec)	70	17	38	27
Difference (Proposed – Existing, sec)	8	-11	5	3

3.11.2 TCS 2789 – Joseph Street / Georges Avenue [Category 1]

Table 90 presents the layout of the intersection as per the latest NearMap imagery and the modelled layout in SIDRA.

Table 90 TCS 2789 Joseph Street / Georges Avenue – intersection layout and SIDRA model layout

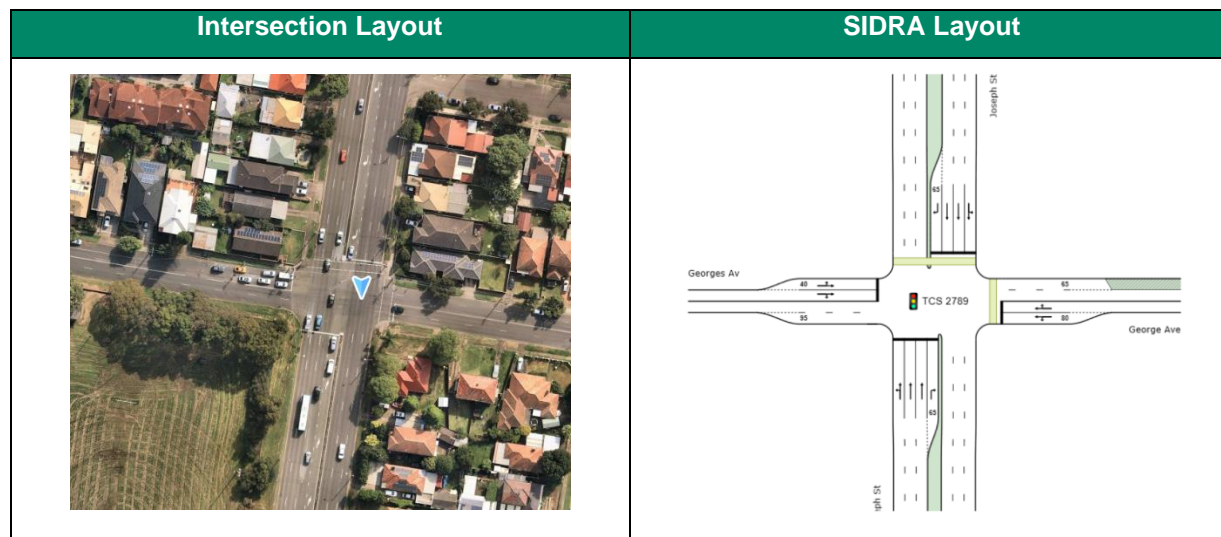


Table 91 provides a summary of the intersection performance assessment for this intersection.

Table 91 Joseph Street / Georges Avenue - intersection assessment summary

	Volume (veh/hr)	Degree of Saturation	Average delay (s/veh)	LOS
AM Peak (8am to 9am)				
Scenario 1: July 2022 (Future base)	4960	0.87	29.3	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	4960	0.87	29.3	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	4992	0.874	29.4	LOS C
PM Peak (5pm to 6pm)				
Scenario 1: July 2022 (Future base)	5058	0.862	31.2	LOS C
Scenario 2: July 2022 (Future base + SM Construction traffic)	5058	0.862	31.2	LOS C
Scenario 3: July 2022 (Future base + SM Construction traffic + TTP)	5098	0.875	32.7	LOS C

The Joseph Street / Georges Avenue intersection (Scenario 1) is modelled to operate at LOS C during both the AM and PM peak period. The addition of bus replacement services (Scenario 3) is expected to have negligible effects to the delay and result in a similar intersection performance at LOS C during both periods. LOS C would generally be considered acceptable during the peak periods.

The Joseph Street / Georges Avenue intersection is forecast to operate at LOS C during both the AM and PM peak hours in the future base scenario (Scenario 1). The addition of TTP buses (Scenario 3) is expected to have negligible effects to the average delay and is likely to result in a similar intersection performance at LOS C during both AM and PM peak hours. LOS C would generally be considered acceptable during the peak periods.

4.0 Mitigation measures

This section discusses:

- the revised environmental mitigation measures from the *Sydney Metro City and Southwest – Sydenham to Bankstown Upgrade – Submissions Report* (Sydney Metro, 2018)
- additional recommendations for this assessment.

4.1 Revised environmental mitigation measures

Table 92 provides the full list of approved revised environmental mitigation measures (that are relevant to transport) from the *Sydney Metro City and Southwest – Sydenham to Bankstown Upgrade – Submissions Report* (Sydney Metro, 2018). These measures relate to design / pre-construction, construction and operation stages of the project. The measures relevant for this consistency assessment are highlighted in grey, with a column at the end indicating if a specific measure is relevant for this Consistency Assessment.

Revised mitigation measure TC6 is most relevant to this assessment. This requires further consideration of the need for intersection modifications to be undertaken, to improve intersection performance at locations most affected by the addition of construction heavy vehicles and rail replacement buses. The specific recommendations arising from this assessment in accordance with TC6 to improve intersection performance are provided in Section 4.2.

The transport related revised environmental mitigation measures listed in Table 92, together with the additional recommendations arising from this assessment (see Section 4.2), are considered appropriate to manage the impacts associated with the proposed operation of bus replacement services during the July 2022 school holiday period. No changes to the transport related revised environmental mitigation measures are considered necessary.

The measures are broadly grouped according to the main stage of implementation. However, it is noted that the implementation of some measures may occur across several stages.

The location/s applicable to each mitigation measure are identified by using the unique identifiers as follows:

- All – Project as a whole
- BW – Bridge works
- AS – All Stations
- MA – Marrickville Station
- DU – Dulwich Hill Station
- HP – Hurlstone Park
- CB – Canterbury Station
- CP – Campsie Station
- BE – Belmore Station
- LA – Lakemba Station
- WP – Wiley Park Station
- PB – Punchbowl Station
- BA – Bankstown Station
- SS – Substations

Table 92 Revised environmental mitigation measures

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
Design / pre-construction				
TC 1	<i>Temporary transport arrangements</i>	<p>Guided by the Temporary Transport Strategy, detailed temporary transport plan/s would be developed prior to construction to manage the movement of people along the T3 Bankstown Line during possession periods. The plans would be developed in consultation with key Stakeholders (including Transport for NSW, Sydney Coordination Office (now Customer Journey Planning), Roads and Maritime Services (now Sydney Roads), Sydney Trains, local councils, emergency services, and bus operators), and would address the requirements specified by the Temporary Transport Strategy. The development of each plan would consider, as a minimum:</p> <ul style="list-style-type: none"> • A review of the road network constraints along any proposed rail replacement bus route • Further traffic analysis of key intersections used by rail replacement buses • Potential impacts to local road networks affected by rail passengers diverting to cars to reach their destinations • The design of temporary facilities at bus Stop locations in consultation with the relevant road authority • Expected changes to parking demand at other Stations, displacement of existing parking, and any upgrades that may be required. 	AS	Yes
TC 2		Sydney Metro would consult with Transport for NSW, Roads and Maritime Services, the State Transit Authority, the Inner West and Canterbury-Bankstown councils, and bus operators, to identify opportunities to minimise impacts to bus layovers and existing bus Stops during operation of rail replacement buses.	AS	Yes
TC 3		The impacts on the surrounding road network of lane closures resulting from bridge works across the rail corridor would be assessed in detail, to identify the suite of management measures to be implemented for each closure required. This would be undertaken in consultation	BW	

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
		<p>with Transport for NSW, Roads and Maritime Services, the Sydney Coordination Office, the Inner West and Canterbury-Bankstown councils, emergency services, and relevant bus operators.</p> <p>Planning for partial bridge closures would consider bus rerouting and timetabling, with the intention of minimising impacts to bus customers and bus operators.</p>		
TC 4		<p>Opportunities to reduce the loss of existing on- and off-street car parking (including the amount of spaces reduced and the time associated with this reduction) would be reviewed during detailed design and construction planning.</p>	AS	Yes
TC 5	<i>Parking impacts during construction</i>	<p>Where parking spaces are lost or access is impeded, particularly for extended periods, alternative parking would be provided wherever feasible and reasonable. This would include consideration of other privately owned (or vacant) land within close proximity to affected Stations.</p>	AS	
TC 6	<i>Impacts of intersection performance</i>	<p>Further consideration of the need for intersection modifications would be undertaken, to improve intersection performance at locations most affected by the addition of construction heavy vehicles and rail replacement buses. This would be undertaken in consultation with Transport for NSW, Roads and Maritime Services, the Sydney Coordination Office, and the relevant road authority. The improvements considered would include:</p> <ul style="list-style-type: none"> • Modification to the existing traffic signal phasing • Lane priority changes • Changing lane designations (line markings and signage) • Kerbside changes (such as removing on Street parking or implementing no Standing zones at peak times to increase lane capacity) • Physical geometric changes (such as minor kerb cut-backs to enable large vehicles to safely move through intersections) 	All	Yes

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
		<ul style="list-style-type: none"> Restricting turning movements where traffic demand is low. 		
TC 7	<i>Changes to cyclist facilities during construction</i>	Where existing cycle facilities (e.g. bike parking) would be temporarily unavailable at a Station, suitable replacement facilities would be provided while the facility is unavailable.	AS	
TO 1	<i>Parking impacts during operation</i>	Further consideration of car parking management at Stations would be undertaken in consultation with Roads and Maritime Services, the Sydney Coordination Office, and the Inner West and Canterbury-Bankstown councils, to minimise adverse impacts of operation on parking and other kerbside use in local Streets.	AS	
TO 2	<i>Consideration of cross corridor connections</i>	Sydney Metro, in consultation with Canterbury-Bankstown Council, would investigate the feasibility of the provision of a cross-corridor connection between Bankstown and Punchbowl Stations. Should a cross-corridor connection be deemed feasible, Sydney Metro would work with Canterbury-Bankstown Council and the Department of Planning and Environment to safeguard its future delivery.	All	

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
Construction				
TC 8	<i>Management of traffic transport and access</i>	<p>A construction traffic management plan would be prepared and implemented prior to construction. The plan would be prepared in accordance with the Construction Environmental Management Framework, and would detail, as a minimum:</p> <ul style="list-style-type: none"> • How traffic would be managed when construction works are being carried out • The activities proposed and their impact on the road network and on road users • How these impacts would be addressed. <p>The plan would be prepared in consultation with the Traffic and Transport Liaison Group and would be approved by the relevant authority before construction commences.</p>	All	Yes
TC 9		Modification of existing bus Stops, or implementation of new Stops and alterations to service patterns, would be carried out by Sydney Metro in consultation with Transport for NSW, Sydney Coordination Office, Roads and Maritime Services, the Inner West and Canterbury-Bankstown councils, and bus operators.	AS	Yes
TC 10	<i>Changes to public transport services and alternative transport arrangements</i>	<p>Sydney Metro would undertake an extensive community awareness and information campaign before changes to public transport services are implemented. This would include a range of communication activities such as:</p> <ul style="list-style-type: none"> • Information at Stations • Wayfinding signage • Clearly marked bus Stop locations • Letter box drops • Web based information and transport 'app' where changes to travel are found in a single place • Information via 131 500 • Advertising in local papers • Email information bulletins. 	AS	Yes

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
TC 11	<i>Impacts on special events</i>	Consideration of special events would be undertaken as part of construction work programming. For special events that require specific traffic and pedestrian management, measures would be developed and implemented in consultation with Transport for NSW, Sydney Coordination Office, Roads and Maritime Services, the Inner West and Canterbury-Bankstown councils, and the organisers of the event.	All	Yes
TC12	<i>Impacts of construction compounds and work sites</i>	Vehicle access to and from construction sites would be managed to ensure pedestrian, cyclist, and motorist safety. Depending on the location, this may require manual supervision, barrier placement, temporary traffic signals, modifications to existing traffic signals, or police assistance.	All	
TC13	<i>Construction vehicles</i>	Construction vehicles (including contractor staff vehicles) would be managed to: <ul style="list-style-type: none"> • Minimise parking or queuing on public roads • Minimise use of residential streets to gain access to work sites or compounds • Minimise vehicle movements near schools, particularly during school start and finish times. 	All	
TC14	<i>Signage</i>	Directional signage and line marking would be used to direct and guide drivers, pedestrians, and other road users past construction compounds and work sites, and on the surrounding road network. This may be supplemented by variable message signs to advise drivers of potential delays, traffic diversions, speed restrictions, or alternate routes.	All	
TC15	<i>Construction parking impacts</i>	Construction sites would be managed to minimise construction worker parking on surrounding Streets. A worker car parking Strategy would be developed in consultation with the relevant local council to identify measures to reduce the impact on the availability of on-street and off-street parking. The Strategy would identify potential mitigation measures including alternative parking locations. The Strategy would encourage contractor Staff to:	All	

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
TC16	<i>Traffic incidents</i>	In the event of a traffic related incident, co-ordination would be carried out with the Sydney Coordination Office and Transport Management Centre's Operations Manager.	All	
TC17	<i>Changes to road, pedestrian and cyclist networks</i>	The community would be notified in advance of proposed road and pedestrian network changes through appropriate forms of community notification.	All	
TC18	<i>Impacts on pedestrian or cyclist paths</i>	A condition survey would be undertaken to confirm changes to routes proposed to be used by pedestrians and/or cyclists are suitable (e.g., suitably paved and lit), with identified modification requirements discussed with the Inner West and/or Canterbury-Bankstown councils and implemented prior to use of the routes.	All	
TC19	<i>Pedestrian, cyclist and motorist safety</i>	Pedestrian, cyclist, and motorist safety in the vicinity of the construction sites would be addressed during construction planning and development of the construction traffic management plan. Measures that may be implemented to assist in multi modal traffic management include:	All	
TC 20	<i>Impacts to access</i>	Access for residents, businesses, and community infrastructure would be maintained. Where disruption to access cannot be avoided, consultation would be undertaken with the owners and occupants of affected properties, to confirm their access requirements and to discuss alternatives.	All	
TC 21		Access to Stations and surrounding properties for emergency vehicles would be provided at all times. Emergency service providers (i.e. police and ambulance) would be consulted throughout construction to ensure they are aware of Station closures, changes to access, including bridge lane closures, and changes to Station or rail corridor access.	All	

ID	Impact	Mitigation measure	Relevant location (s)	Relevant for this CA
TC 22	<i>Co-ordination of cumulative traffic effects</i>	The potential cumulative effects of construction traffic from multiple construction sites within the project would be further considered during development of the construction traffic management plan. Where there is potential for cumulative impacts across the project, these issues would be addressed with the assistance of the Traffic and Transport Liaison Group.	All	
Operation				
TO3	<i>Walking and cycling</i>	Sydney Metro would develop a Walking and Cycling Strategy in consultation with Inner West Council, Canterbury-Bankstown Council and other relevant Stakeholders, which would identify walking and cycling facilities to encourage active transport to the Station precincts.	AS	
TO4	<i>Bus</i>	Sydney Metro would work with Transport for NSW, Sydney Coordination Office, Roads and Maritime Services, the Inner West and Canterbury-Bankstown councils, and bus operators to identify improvements to bus Stops and services.	AS	
TO5	<i>Commuter parking</i>	Sydney Metro would monitor the demand for additional commuter car parking spaces and consider opportunities for, and implications of, meeting this demand between Bankstown and Marrickville Stations.	AS	

4.2 Recommendations for this assessment

As discussed throughout Chapter 3 (Construction assessment) and in Section 4.1, where there are more significant delays and oversaturated conditions in the future base scenario (Scenario 1) and/or impacts to the intersection performance as a result of addition of TTP buses, recommended signal phasing/timing changes shall be considered in accordance with the revised environmental mitigation measure TC6.

These intersections include:

TCS	Intersection description	Recommended signal phasing/timing changes (in line with TC 6)
TCS 41	Sydenham Road / Victoria Road (AM peak)	Reduce phase times for Phase A (-15 seconds), Phase B (-2 seconds) and Phase C (-8 seconds). For detailed information, please refer to Section 3.2.1.
TCS 61	Hume Highway / Chapel Rd / Rookwood Rd (PM Peak)	Provide more phase times to Phase A (8 seconds), Phase E (+5 seconds) and Phase F (+3 seconds) and less phase time to Phase D (-11 seconds). For detailed information, please refer to Section 3.11.1.
TCS 80	Canterbury Road / Kingsgrove Road / Sharp Street (AM peak)	Provide more phase times to Phase B (+16 seconds) and reduce phase times for Phase A (-24 seconds) and Phase D (-3 seconds). For detailed information, please refer to Section 3.8.3.

5.0 Summary and conclusions






- An updated TTP network and service frequencies are proposed by Sydney Metro over the July 2022 school holiday period – 4 July 2022 to 15 July 2022. During this period, a full line closure would be required for two weeks, and bus replacement services would be provided on five routes to enable construction.
- A preliminary sensitivity analysis was undertaken to identify intersections along the TTP routes that are likely to have potential impacts due to the addition of TTP buses and therefore requiring further detailed analysis. These intersections were categories under five categories, with Category 1 (13 intersections) and Category 2 (14 intersections) taken forward for detailed modelling assessments. Sensitivity tests were carried out for intersections in Category 4 (7 intersections).
- Based on sensitivity tests, it is evident that for the intersections in Category 4, the modelled volumes from the previous assessments are generally higher or similar compared to the forecast volumes for July 2022 during both AM and PM peak hours, except TCS 80 where there is a marginal increase. These intersections could therefore be reasonably expected to perform similar or better during a July 2022 scenario as a worse-case scenario had already been assessed.
- For modelling intersections in Category 1 and Category 2, as agreed with Sydney Metro, the future baseline traffic volumes for July 2022 (Scenario 1) were estimated based on recent traffic volume data (March 2022) by applying seasonal reduction factors.
- An assessment of traffic volumes and peak period traffic profiles during 2019 (pre-COVID lockdowns) and 2022 (post-COVID lockdowns) was undertaken at three sample intersections spread across the study area to determine if the impacts of COVID-19 are still prevalent. The assessment indicates that traffic volumes and peak period traffic profiles for March 2022 are observed to be similar or slightly lower in comparison to March 2019. Therefore, the use of March 2022 SCATS detector data to forecast July 2022 traffic volumes shall include changes in travel behaviour post COVID-19. As such, no adjustments to traffic data were required to be applied to consider the impacts of COVID-19.
- The assessments indicate the following:
 - Majority of the signalised intersections have only slight increases in delays (less than 20 seconds) and the overall intersection performance is maintained (LOS D or better) as a result of the additional construction traffic and TTP buses during the July 2022 possession period. As the impact on the public is likely to be minimal at this level of delay and the possessions being planned only for a short period (2 weeks) during the July 2022 school holiday period, it would not warrant specific mitigations.
 - Intersections with high existing background traffic volumes and forecast to operate at oversaturated conditions (LOS E or LOS F) in the future base scenario, the impacts of construction traffic and TTP buses were considered minor. These intersections include:
 - TCS 61 – Hume Highway / Chapel Road / Rookwood Road (during the PM peak)
 - TCS 80 – Canterbury Road / Kingsgrove Road
 - Where there are more significant delays and oversaturated conditions in the future base scenario (Scenario 1) and/or impacts to the intersection performance as a result of addition of TTP buses, recommended signal phasing/timing changes shall be considered in accordance with the revised environmental mitigation measure TC6 (the revised environmental mitigation measures form part of the conditions of approval for the project). Recommended changes for these intersections (TCS 41, TCS 61 and TCS 80) are included in Section 3.11.1.

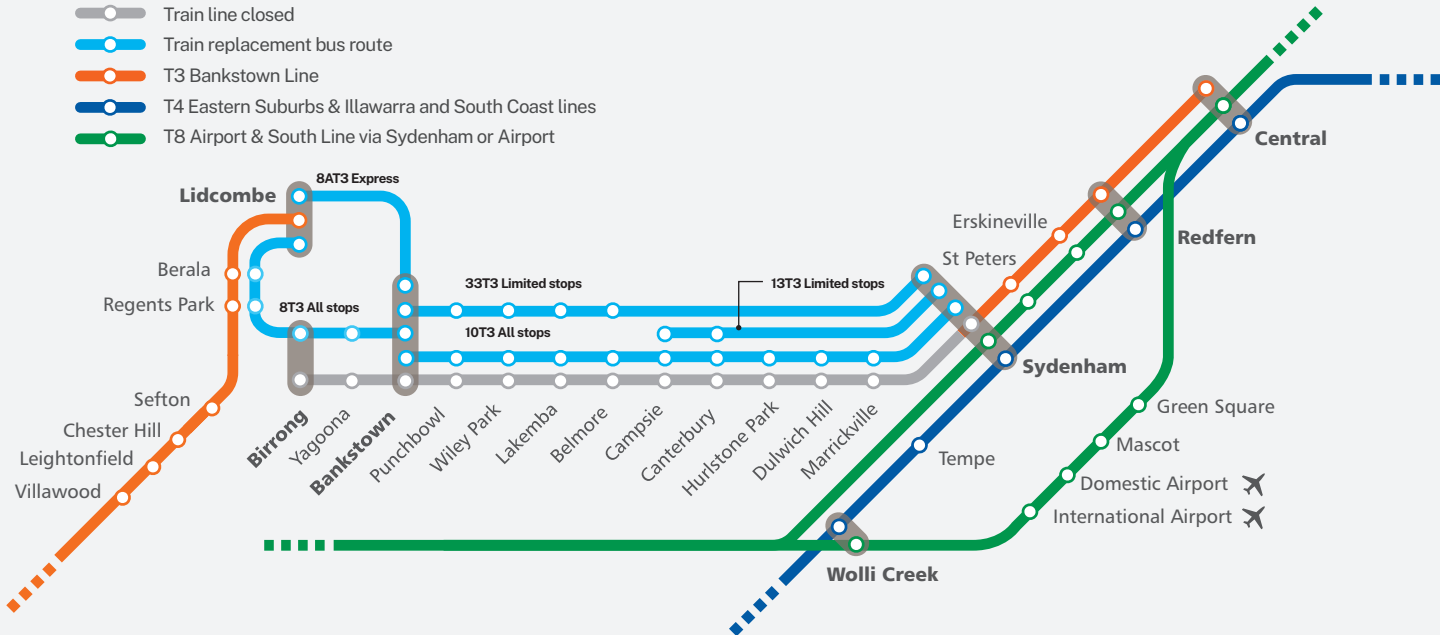
- The Temporary Transport Management Plans (TTMPs) that would be developed for the possession period, guided by the TTS, shall seek to minimise delays during construction and opportunities to reduce the impacts of construction and TTP shall be considered as part of detailed planning for these intersections in line with the mitigation measures (highlighted in grey) in Section 4.0.

Appendix A

TTP Bus Routes - Detailed Maps

Train replacement bus map

-  Train line closed
-  Train replacement bus route
-  T3 Bankstown Line
-  T4 Eastern Suburbs & Illawarra and South Coast lines
-  T8 Airport & South Line via Sydenham or Airport





ST Replacement Bus Service



33T3

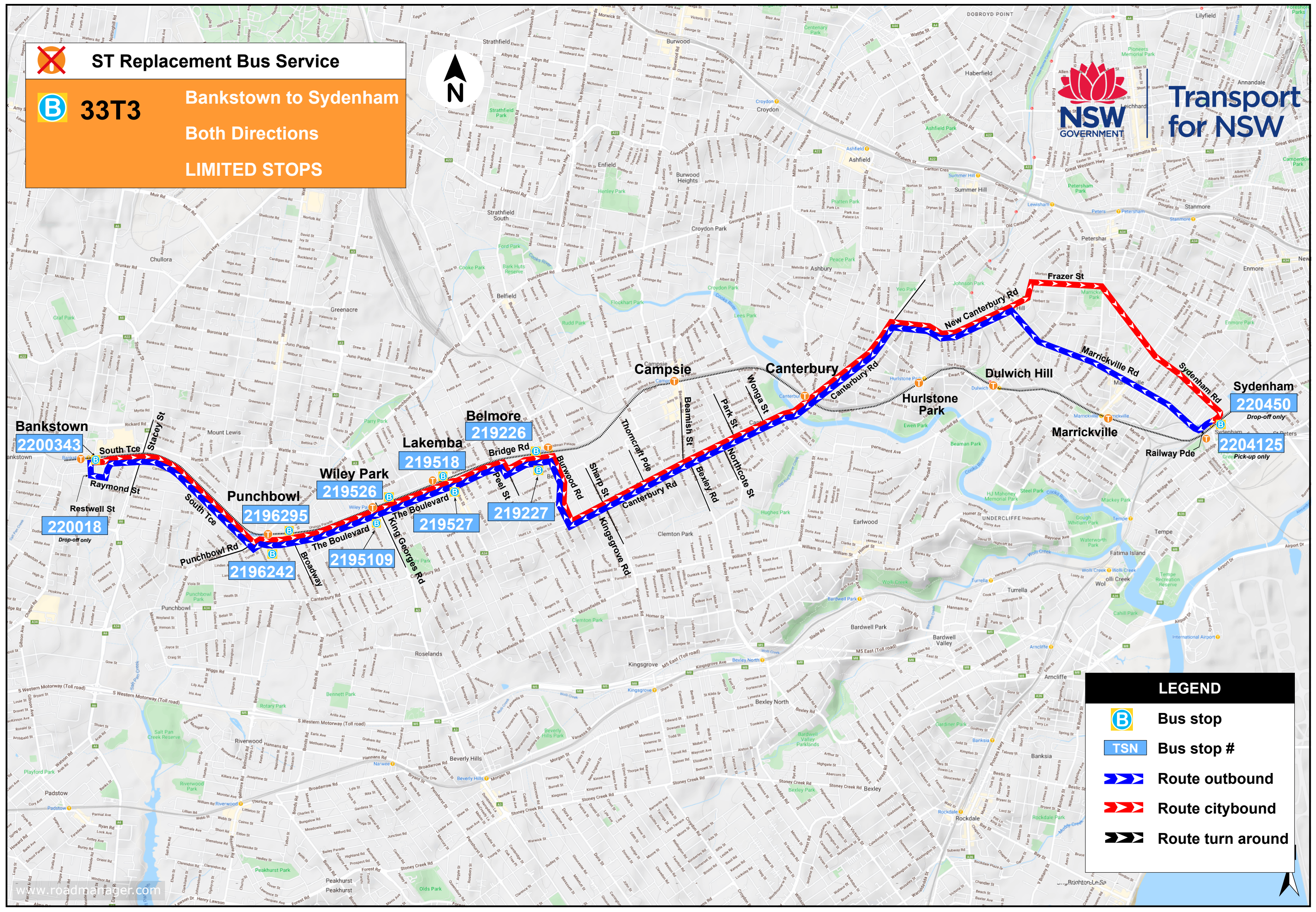
Bankstown to Sydenham

Both Directions

LIMITED STOPS



Transport for NSW



Bankstown
2200343

South Tce
220018
Drop-off only

Restwell St
220018

Punchbowl
2196295

The Boulevard
2195109

King Georges Rd
219527

Peel St
219227

Burwood Rd
219226

Belmore
219226

Lakemba
219518

Wiley Park
219526

Canterbury
219227

Canterbury
219227

Canterbury
219227

Canterbury
219227

Sydenham
2204125
Green Pick-up only

Sydenham
220450
Drop-off only

LEGEND

- Bus stop
- Bus stop #
- Route outbound
- Route citybound
- Route turn around



ST Replacement Bus Service



13T3

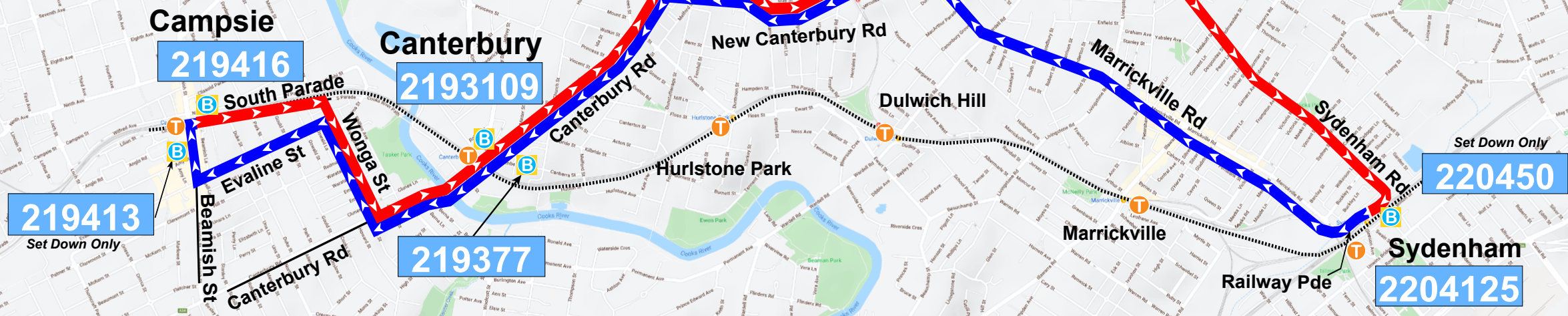
Campsie to Sydenham

Both Directions

EXPRESS



Transport for NSW

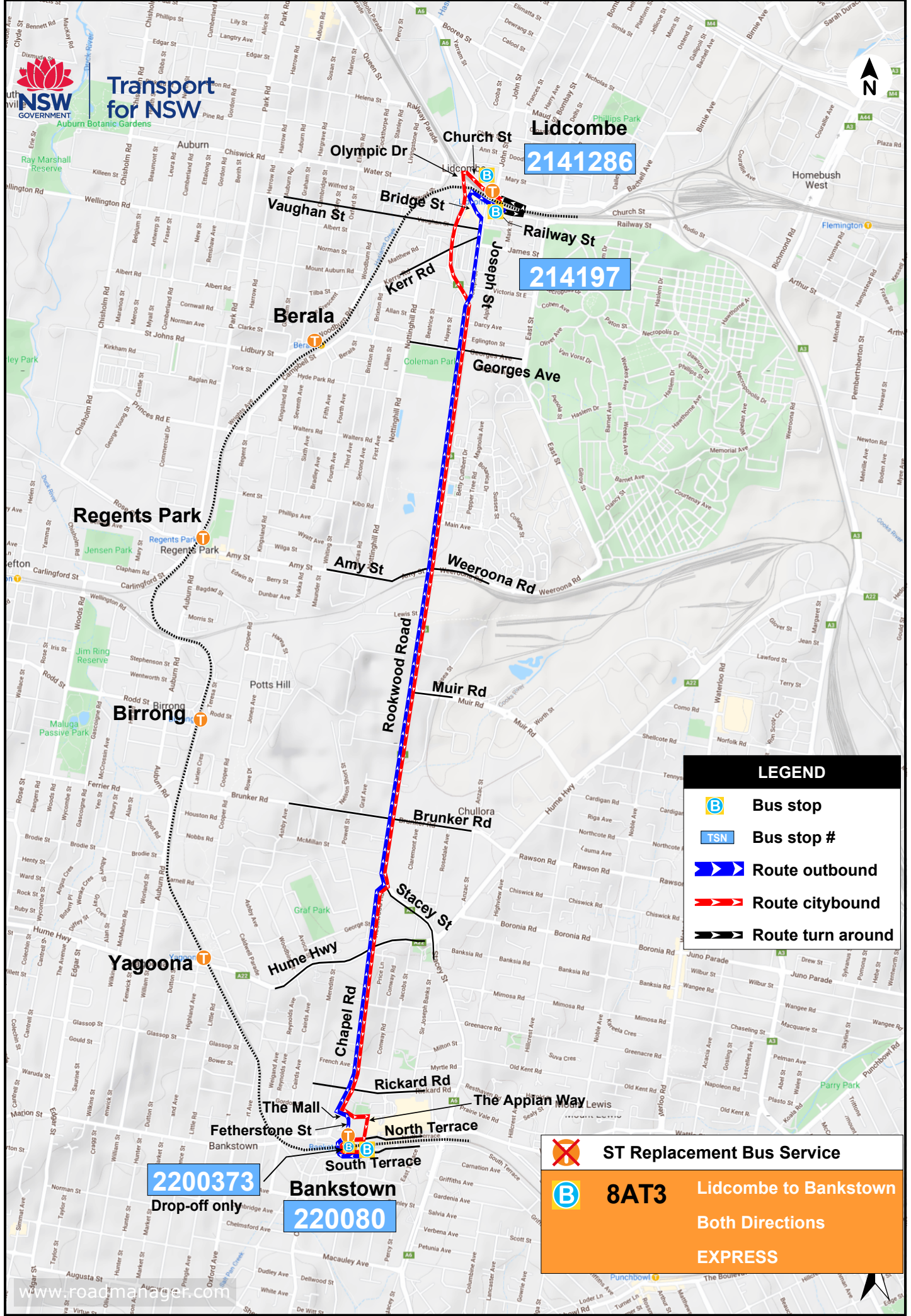


LEGEND

- Bus stop
- Bus stop #
- Route outbound
- Route citybound
- Route turn around



Transport for NSW



Lidcombe 2141286

St Leonards 214197

2200373 Drop-off only

Bankstown 220080

LEGEND

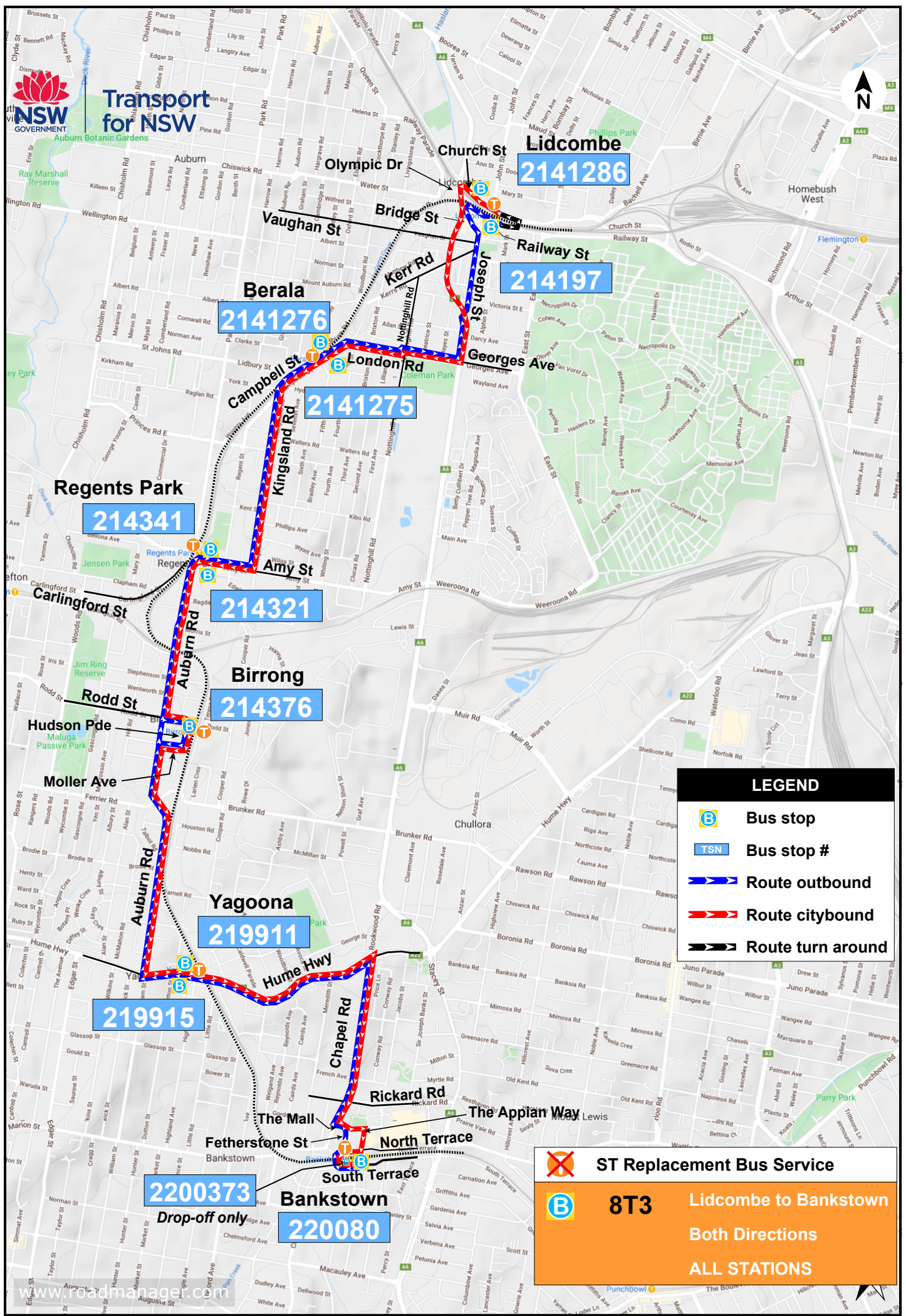
- Bus stop
- Bus stop #
- Route outbound
- Route citybound
- Route turn around

ST Replacement Bus Service

8AT3 Lidcombe to Bankstown Both Directions **EXPRESS**



Transport for NSW



LEGEND

- Bus stop
- Bus stop #
- Route outbound
- Route citybound
- Route turn around

ST Replacement Bus Service

8T3 Lidcombe to Bankstown
Both Directions
ALL STATIONS

Appendix B

Preliminary Sensitivity Analysis

Summary of Modelling Assessments

Site	Intersection	Bus_Vol_AM	Bus_Vol_PM	Model_Ref	AM_Model	Model_Category	PM_Model	Remarks
41	TCS 41-SYDENHAM RD/VICTORIA RD	57	15	New	Yes	1	No	AM modelling required.
42	TCS 42-WARDELL RD/FRAZER ST	57	15	New	Yes	1	No	AM modelling required.
61	TCS 61-HUME HWY/CHAPEL RD	30	38	New	Yes	1	Yes	Network may have sufficient capacity. Modelling may not be required. Background volumes to be reviewed first to progress with modelling.
66	TCS 66-MARRICKVILLE RD/WARDELL RD	8	50	H.37	No	3	No	Bus volumes are less than 15 per hour in the AM. No major impacts expected. EIS assessed a worst-case using bus volumes of 83 per hour in the PM peak
67	TCS 67-MARRICKVILLE RD/LIVINGSTONE RD	8	50	New	No	1	Yes	Bus volumes are less than 15 per hour in the AM. No major impacts expected. PM modelling required.
68	TCS 68-MARRICKVILLE RD/VICTORIA RD	55	96	B.18	No	3	No	EIS and PIR assessed a worst-case using bus volumes of 111/113.
78	TCS 78-NEW CANTERBURY RD/CANTERBURY RD	65	65	B.27	No	2	No	EIS Assessed 50 for the AM peak and 51 for PM. The increase is less than 15 buses per hour. A sensitivity analysis is sufficient.
79	TCS 79-CANTERBURY RD/BEXLEY RD	74	50	H.13	No	2	Yes	Jul 21 assessments used 20/15 for AM/PM. Increase in bus volumes are not high and impacts may not be significant. Sensitivity check may be sufficient.
80	TCS 80-CANTERBURY RD/KINGSGROVE RD	36	38	Yes	No	4	Yes	Jul 21 assessments used 21/14 for AM/PM. Increase in bus volumes are not high and impacts may not be significant. Sensitivity check may be sufficient.
81	TCS 81-FRAZER ST/LIVINGSTONE RD	57	15	New	Yes	1	No	AM modelling required. Bus volumes are less than or equal to 15 per hour in the PM. No major impacts expected.
86	TCS 86-NEW CANTERBURY RD/MARRICKVILLE RD	65	65	B.28	No	2	Yes	PIR assessed 51/50 for AM/PM. Bus volumes have increased by 15 buses per hour. Results are likely to be similar to PIR. A sensitivity analysis is sufficient.
96	TCS 96-SYDENHAM RD/ILLAWARRA RD	57	15	New	Yes	3	No	AM modelling required.
157	TCS 157-BURWOOD RD/LAKEMBA ST	47	46	H.20	Yes	4	Yes	EIS/PIR assessed 31 buses per hour. July 21 CA assessed 30/35 buses for AM/PM. Results are likely to be similar as the increase is less than 15 buses per hour. Sensitivity analysis is sufficient.
162	TCS 162-CANTERBURY RD/BURWOOD RD	36	38	H.33	No	2	Yes	July 21 CA assessment 21/14 for AM and PM. Sensitivity assessments maybe sufficient.
382	TCS 382-KING GEORGES RD/THE BOULEVARDE	83	84	B.06	No	2	Yes	PIR assessed 60/60 for AM/PM per hour. Only minor increase in bus volumes during both AM and PM. Sensitivity analysis maybe sufficient.
435	TCS 435-MARRICKVILLE RD/ILLAWARRA RD	55	96	B.17	No	3	No	EIS/PIR assessed over 100 buses per hour for both AM/PM. No modelling.
507	TCS 507-CANTERBURY RD/CHARLOTTE ST	36	38	New	Yes	1	Yes	
569	TCS 569-ILLAWARRA RD/PETERSHAM RD	47	46	H.19	Yes	4	Yes	EIS bus volumes 31/30 and Jul 21 30/35 - The increase in number of buses is about 15. The impacts are likely to be similar. Sensitivity analysis is sufficient.
602	TCS 602-CANTERBURY RD/FORE ST	112	111	New	Yes	1	Yes	AM and PM models required.
738	TCS 738-BEAMISH ST/EVALINE ST	51	68	Yes	Yes	4	Yes	Jul 21 bus volumes 38/53 for AM/PM peaks. The increase in number of buses during both peaks is about 15. Sensitivity analysis may be sufficient.
777	TCS 777-CANTERBURY RD/QUEEN ST	112	111	B.14	Yes	4	Yes	EIS assessed 80/81 for AM/PM.
855	TCS 855-CANTERBURY RD/JEFFREY ST	112	111	H.15	Yes	2	Yes	EIS assessed 81/82 for AM/PM.
902	TCS 902-NEW CANTERBURY RD/CONSTITUTION RD	65	65	J21CA	Yes	3	Yes	July 21 assessments used 50/42 for AM and PM. Sensitivity analysis may be sufficient.
996	TCS 996-BEAMISH ST/NINTH AV	47	46	B.10	Yes	4	Yes	EIS assessed 30/30 and Jul 21 assessed 30/35. Increase is only 15 buses. Results maybe similar. Can be excluded from modelling. Only a sensitivity check is sufficient
1153	TCS 1153-MARRICKVILLE RD/PETERSHAM RD	8	50	New	No	1	Yes	Bus volumes are less than 15 per hour in the AM. No major impacts expected. PM modelling required.

Summary of Modelling Assessments

Site	Intersection	Bus_Vol_AM	Bus_Vol_PM	Model_Ref	AM_Model	Model_Category	PM_Model	Remarks
1167	TCS 1167-CANTERBURY RD/WONGA ST	112	111	B.13	Yes	2	Yes	EIS assessed 80/80 for AM/PM. Impacts maybe similar. AM and PM modelling required.
1203	TCS 1203-CHAPEL RD/RICKARD RD	30	38	New	Yes	1	Yes	Network may have sufficient capacity. Modelling may not be required. Background volumes to be reviewed first to progress with modelling.
1299	TCS 1299-HALDON ST/THE BOULEVARDE	83	84	B.07	Yes	2	Yes	Jul 21 assessed 51/49 for AM/PM. AM and PM models required.
1303	TCS 1303-NEW CANTERBURY RD/DUNTRON ST	65	65	J21CA	Yes	2	Yes	Jul 21 assessed 50/42 for AM/PM. AM may not be required. PM modelling required. Sensitivity analysis may be sufficient.
1315	TCS 1315-ILLAWARRA RD/WARREN RD	47	46	B.16	Yes	4	Yes	EIS assessed 30/31 for AM/PM. Results maybe similar as increase less than 15 buses per hour. Sensitivity analysis is sufficient.
1329	TCS 1329-BURWOOD RD/LEYLANDS PDE	36	38	J21CA	No	2	Yes	Jul 21 assessments used 21/14 for AM/PM. Increase in bus volumes is about 15. PM model maybe required. Sensitivity analysis to check.
1363	TCS 1363-FIFTH AV/NINTH AV	47	46	New	Yes	1	Yes	AM and PM models required.
1413	TCS 1413-WARDELL RD/EWART ST	47	46	B.15	No	3	No	EIS Assessed a worst-case using bus volumes of 61 for the AM and PM peak. No modelling required.
1744	TCS 1744-PUNCHBOWL RD/THE BOULEVARDE	83	84	B.05	No	2	Yes	EIS assessed 60/60 for AM/PM. Results maybe similar. Modelling may not be required. Sensitivity analysis to be completed.
1817	TCS 1817-RESTWELL ST/SOUTH TCE	37	92	B.01	Yes	2	Yes	EIS assessed similar volumes. Impacts are likely to be similar.
2065	TCS 2065-SYDENHAM RD/FARR ST	32	10	New	Yes	3	No	The intersection is a minor intersection and bus movements are through the intersection (without turning). So the impacts are expected to be minor. Excluded from modelling.
2308	TCS 2308-THE BOULEVARDE/ARTHUR ST	83	84	H.22	No	3	Yes	EIS assessed 60/60 for AM/PM. The increase in bus volumes is not high to cause a significant impact. Modelling can be excluded considering the intersection is minor and bus movements are through (without turning).
2450	TCS 2450-SYDENHAM RD/PARK RD	57	15	New	Yes	3	No	Bus volumes are less than or equal to 15 per hour in the PM. No major impacts expected during PM peak. The intersection is a minor intersection and bus movements are through the intersection (without turning). So the impacts are expected to be minor. Excluded from modelling.
2789	TCS 2789-JOSEPH ST/GEORGES AV	30	38	New	Yes	1	Yes	Network may have sufficient capacity. Modelling may not be required. Background volumes to be reviewed first to progress with modelling.
2816	TCS 2816-BEAMISH ST/AMY ST	51	68	H.12	Yes	2	Yes	AM and PM models required.
2995	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	112	111	New	Yes	3	Yes	Although bus volumes are high (one bus every 1.5cycle), the intersection is a minor intersection and the buses go straight through this intersection. The impacts are therefore expected to be minimal. Therefore, excluded from modelling.
3320	TCS 3320-RAILWAY PDE/GLEESON AVE	17	84	H.23	No	3	No	EIS assessed a worst-case scenario with 112/114 for the AM/PM peaks. Impacts are expected to be similar. No modelling required.
3340	TCS 3340-NEW CANTERBURY RD/FRAZER ST	57	15	New	Yes	1	No	AM modelling required.
3431	TCS 3431-BEAMISH ST/SOUTH PDE	51	68	B.12	No	3	No	EIS assessed a worst-case with 81/80 for AM/PM peak. No modelling required.

Summary of Modelling Assessments

Site	Intersection	Bus_Vol_AM	Bus_Vol_PM	Model_Ref	AM_Model	Model_Category	PM_Model	Remarks
4052	TCS 4052-CANTERBURY RD/DUKE ST	74	50	New	No	3	Yes	The bus volumes are not very high and intersection is a minor intersection and bus movements are through the intersection (without turning). So the impacts are expected to be minor. Excluded from modelling.
4074	TCS 4074-RESTWELL ST/RAYMOND ST	13	62	B.02	Yes	2	Yes	AM and PM models required.
4136	TCS 4136-BEAMISH ST/CLISSOLD ST	47	46	B.11	No	3	No	EIS assessed a worst-case scenario with 82/82 for AM/PM peaks. No modelling required.
4297	TCS 4297-SYDENHAM RD/CENTENNIAL ST	57	15	New	No	3	No	Excluded - minor intersection with buses going straight; assumed minimal impacts
4408	TCS 4408-CHAPEL RD/FRENCH AV	30	38	New	Yes	1	Yes	Minor intersection with buses going straight; assumed minimal impacts - still check if need to be modelled

Routes Passing Through Each Intersection

Site	Street Names	Intersection	Model Category	Route	Movement	Bus Vol AM	Bus Vol PM
41	SYDENHAM RD/VICTORIA RD	TCS 41-SYDENHAM RD/VICTORIA RD	1	13T3_to_SYDH	Sydenham Rd (W) to Sydenham Rd (E)	25	5
41	SYDENHAM RD/VICTORIA RD	TCS 41-SYDENHAM RD/VICTORIA RD	1	33T3_to_SYDH	Sydenham Rd (W) to Sydenham Rd (E)	32	10
42	WARDELL RD/FRAZER ST	TCS 42-WARDELL RD/FRAZER ST	1	13T3_to_SYDH	Frazer St (W) to Frazer St (E)	25	5
42	WARDELL RD/FRAZER ST	TCS 42-WARDELL RD/FRAZER ST	1	33T3_to_SYDH	Frazer St (W) to Frazer St (E)	32	10
61	HUME HWY/CHAPEL RD	TCS 61-HUME HWY/CHAPEL RD	1	8T3_to_BTWN	Hume Hwy (W) to Chapel Rd	8	12
61	HUME HWY/CHAPEL RD	TCS 61-HUME HWY/CHAPEL RD	1	8T3_to_LDCB	Chapel Rd to Hume Hwy (W)	10	10
61	HUME HWY/CHAPEL RD	TCS 61-HUME HWY/CHAPEL RD	1	8AT3_to_BTWN	Rookwood Rd to Chapel Rd	6	8
61	HUME HWY/CHAPEL RD	TCS 61-HUME HWY/CHAPEL RD	1	8AT3_to_LDCB	Chapel Rd to Rookwood Rd	6	8
67	MARRICKVILLE RD/LIVINGSTONE RD	TCS 67-MARRICKVILLE RD/LIVINGSTONE RD	1	13T3_to_CAMP	Marrickville Rd (E) to Marrickville Rd (W)	4	22
67	MARRICKVILLE RD/LIVINGSTONE RD	TCS 67-MARRICKVILLE RD/LIVINGSTONE RD	1	33T3_to_BTWN	Marrickville Rd (E) to Marrickville Rd (W)	4	28
81	FRAZER ST/LIVINGSTONE RD	TCS 81-FRAZER ST/LIVINGSTONE RD	1	13T3_to_SYDH	Frazer St to Sydenham Rd	25	5
81	FRAZER ST/LIVINGSTONE RD	TCS 81-FRAZER ST/LIVINGSTONE RD	1	33T3_to_SYDH	Frazer St to Sydenham Rd	32	10
507	CANTERBURY RD/CHARLOTTE ST	TCS 507-CANTERBURY RD/CHARLOTTE ST	1	33T3_to_BTWN	Canterbury Rd (E) to Canterbury Rd (W)	4	28
507	CANTERBURY RD/CHARLOTTE ST	TCS 507-CANTERBURY RD/CHARLOTTE ST	1	33T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	32	10
602	CANTERBURY RD/FORE ST	TCS 602-CANTERBURY RD/FORE ST	1	10T3_to_BTWN	Canterbury Rd (E) to Canterbury Rd (W)	9	34
602	CANTERBURY RD/FORE ST	TCS 602-CANTERBURY RD/FORE ST	1	10T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	38	12
602	CANTERBURY RD/FORE ST	TCS 602-CANTERBURY RD/FORE ST	1	13T3_to_CAMP	Canterbury Rd (E) to Canterbury Rd (W)	4	22
602	CANTERBURY RD/FORE ST	TCS 602-CANTERBURY RD/FORE ST	1	13T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	25	5
602	CANTERBURY RD/FORE ST	TCS 602-CANTERBURY RD/FORE ST	1	33T3_to_BTWN	Canterbury Rd (E) to Canterbury Rd (W)	4	28
602	CANTERBURY RD/FORE ST	TCS 602-CANTERBURY RD/FORE ST	1	33T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	32	10
1153	MARRICKVILLE RD/PETERSHAM RD	TCS 1153-MARRICKVILLE RD/PETERSHAM RD	1	13T3_to_CAMP	Marrickville Rd (E) to Marrickville Rd (W)	4	22
1153	MARRICKVILLE RD/PETERSHAM RD	TCS 1153-MARRICKVILLE RD/PETERSHAM RD	1	33T3_to_BTWN	Marrickville Rd (E) to Marrickville Rd (W)	4	28
1203	CHAPEL RD/RICKARD RD	TCS 1203-CHAPEL RD/RICKARD RD	1	8AT3_to_BTWN	Chapel Rd (N) to Chapel Rd (S)	6	8
1203	CHAPEL RD/RICKARD RD	TCS 1203-CHAPEL RD/RICKARD RD	1	8AT3_to_LDCB	Chapel Rd (S) to Chapel Rd (N)	6	8
1203	CHAPEL RD/RICKARD RD	TCS 1203-CHAPEL RD/RICKARD RD	1	8T3_to_BTWN	Chapel Rd (N) to Chapel Rd (S)	8	12
1203	CHAPEL RD/RICKARD RD	TCS 1203-CHAPEL RD/RICKARD RD	1	8T3_to_LDCB	Chapel Rd (S) to Chapel Rd (N)	10	10
1363	FIFTH AV/NINTH AV	TCS 1363-FIFTH AV/NINTH AV	1	10T3_to_BTWN	Ninth Ave (E) to Ninth Ave (W)	9	34
1363	FIFTH AV/NINTH AV	TCS 1363-FIFTH AV/NINTH AV	1	10T3_to_SYDH	Ninth Ave (W) to Ninth Ave (E)	38	12
2789	JOSEPH ST/GEORGES AV	TCS 2789-JOSEPH ST/GEORGES AV	1	8T3_to_BTWN	Joseph St (N) to Georges Ave (W)	8	12
2789	JOSEPH ST/GEORGES AV	TCS 2789-JOSEPH ST/GEORGES AV	1	8T3_to_LDCB	Georges Ave (W) to Joseph St (N)	10	10
2789	JOSEPH ST/GEORGES AV	TCS 2789-JOSEPH ST/GEORGES AV	1	8AT3_to_BTWN	Joseph St (N) to Joseph St (S)	6	8
2789	JOSEPH ST/GEORGES AV	TCS 2789-JOSEPH ST/GEORGES AV	1	8AT3_to_LDCB	Joseph St (S) to Joseph St (N)	6	8
3340	NEW CANTERBURY RD/FRAZER ST	TCS 3340-NEW CANTERBURY RD/FRAZER ST	1	13T3_to_SYDH	New Canterbury Rd (S) to Frazer St	25	5
3340	NEW CANTERBURY RD/FRAZER ST	TCS 3340-NEW CANTERBURY RD/FRAZER ST	1	33T3_to_SYDH	New Canterbury Rd (S) to Frazer St	32	10
4408	CHAPEL RD/FRENCH AV	TCS 4408-CHAPEL RD/FRENCH AV	1	8T3_to_BTWN	Chapel Rd (N) to Chapel Rd (S)	8	12
4408	CHAPEL RD/FRENCH AV	TCS 4408-CHAPEL RD/FRENCH AV	1	8T3_to_LDCB	Chapel Rd (S) to Chapel Rd (N)	10	10
4408	CHAPEL RD/FRENCH AV	TCS 4408-CHAPEL RD/FRENCH AV	1	8AT3_to_BTWN	Chapel Rd (N) to Chapel Rd (S)	6	8
4408	CHAPEL RD/FRENCH AV	TCS 4408-CHAPEL RD/FRENCH AV	1	8AT3_to_LDCB	Chapel Rd (S) to Chapel Rd (N)	6	8
78	NEW CANTERBURY RD/CANTERBURY RD	TCS 78-NEW CANTERBURY RD/CANTERBURY RD	2	13T3_to_CAMP		4	22
78	NEW CANTERBURY RD/CANTERBURY RD	TCS 78-NEW CANTERBURY RD/CANTERBURY RD	2	13T3_to_SYDH		25	5
78	NEW CANTERBURY RD/CANTERBURY RD	TCS 78-NEW CANTERBURY RD/CANTERBURY RD	2	33T3_to_BTWN		4	28
78	NEW CANTERBURY RD/CANTERBURY RD	TCS 78-NEW CANTERBURY RD/CANTERBURY RD	2	33T3_to_SYDH		32	10
79	CANTERBURY RD/BEXLEY RD	TCS 79-CANTERBURY RD/BEXLEY RD	2	33T3_to_BTWN		4	28
79	CANTERBURY RD/BEXLEY RD	TCS 79-CANTERBURY RD/BEXLEY RD	2	33T3_to_SYDH		32	10
86	NEW CANTERBURY RD/MARRICKVILLE RD	TCS 86-NEW CANTERBURY RD/MARRICKVILLE RD	2	13T3_to_CAMP	Marrickville Rd to New Canterbury (W)	4	22
86	NEW CANTERBURY RD/MARRICKVILLE RD	TCS 86-NEW CANTERBURY RD/MARRICKVILLE RD	2	13T3_to_SYDH	New Canterbury (W) to New Canterbury (E)	25	5
86	NEW CANTERBURY RD/MARRICKVILLE RD	TCS 86-NEW CANTERBURY RD/MARRICKVILLE RD	2	33T3_to_BTWN	Marrickville Rd to New Canterbury (W)	4	28
86	NEW CANTERBURY RD/MARRICKVILLE RD	TCS 86-NEW CANTERBURY RD/MARRICKVILLE RD	2	33T3_to_SYDH	New Canterbury (W) to New Canterbury (E)	32	10
162	CANTERBURY RD/BURWOOD RD	TCS 162-CANTERBURY RD/BURWOOD RD	2	33T3_to_BTWN	Canterbury Rd (E) to Burwood Rd	4	28
162	CANTERBURY RD/BURWOOD RD	TCS 162-CANTERBURY RD/BURWOOD RD	2	33T3_to_SYDH	Burwood Rd to Canterbury Rd (E)	32	10
382	KING GEORGES RD/THE BOULEVARDE	TCS 382-KING GEORGES RD/THE BOULEVARDE	2	10T3_to_BTWN	The Boulevarde (E) to The Boulevarde (W)	9	34
382	KING GEORGES RD/THE BOULEVARDE	TCS 382-KING GEORGES RD/THE BOULEVARDE	2	10T3_to_SYDH	The Boulevarde (W) to The Boulevarde (E)	38	12
382	KING GEORGES RD/THE BOULEVARDE	TCS 382-KING GEORGES RD/THE BOULEVARDE	2	33T3_to_BTWN	The Boulevarde (E) to The Boulevarde (W)	4	28
382	KING GEORGES RD/THE BOULEVARDE	TCS 382-KING GEORGES RD/THE BOULEVARDE	2	33T3_to_SYDH	The Boulevarde (W) to The Boulevarde (E)	32	10
855	CANTERBURY RD/JEFFREY ST	TCS 855-CANTERBURY RD/JEFFREY ST	2	10T3_to_BTWN	Canterbury Rd (E) to Canterbury Rd (W)	9	34
855	CANTERBURY RD/JEFFREY ST	TCS 855-CANTERBURY RD/JEFFREY ST	2	10T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	38	12
855	CANTERBURY RD/JEFFREY ST	TCS 855-CANTERBURY RD/JEFFREY ST	2	13T3_to_CAMP	Canterbury Rd (E) to Canterbury Rd (W)	4	22

Routes Passing Through Each Intersection

855 CANTERBURY RD/JEFFREY ST	TCS 855-CANTERBURY RD/JEFFREY ST	2	13T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	25	5
855 CANTERBURY RD/JEFFREY ST	TCS 855-CANTERBURY RD/JEFFREY ST	2	33T3_to_BTWN	Canterbury Rd (E) to Canterbury Rd (W)	4	28
855 CANTERBURY RD/JEFFREY ST	TCS 855-CANTERBURY RD/JEFFREY ST	2	33T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	32	10
1167 CANTERBURY RD/WONGA ST	TCS 1167-CANTERBURY RD/WONGA ST	2	10T3_to_BTWN	Canterbury Rd (E) to Wonga St	9	34
1167 CANTERBURY RD/WONGA ST	TCS 1167-CANTERBURY RD/WONGA ST	2	10T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	38	12
1167 CANTERBURY RD/WONGA ST	TCS 1167-CANTERBURY RD/WONGA ST	2	13T3_to_CAMP	Canterbury Rd (E) to Wonga St	4	22
1167 CANTERBURY RD/WONGA ST	TCS 1167-CANTERBURY RD/WONGA ST	2	13T3_to_SYDH	Wonga St to Canterbury Rd (E)	25	5
1167 CANTERBURY RD/WONGA ST	TCS 1167-CANTERBURY RD/WONGA ST	2	33T3_to_BTWN	Canterbury Rd (E) to Canterbury Rd (W)	4	28
1167 CANTERBURY RD/WONGA ST	TCS 1167-CANTERBURY RD/WONGA ST	2	33T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	32	10
1299 HALDON ST/THE BOULEVARDE	TCS 1299-HALDON ST/THE BOULEVARDE	2	10T3_to_BTWN	The Boulevarde (E) to The Boulevarde (W)	9	34
1299 HALDON ST/THE BOULEVARDE	TCS 1299-HALDON ST/THE BOULEVARDE	2	10T3_to_SYDH	The Boulevarde (W) to The Boulevarde (E)	38	12
1299 HALDON ST/THE BOULEVARDE	TCS 1299-HALDON ST/THE BOULEVARDE	2	33T3_to_BTWN	The Boulevarde (E) to The Boulevarde (W)	4	28
1299 HALDON ST/THE BOULEVARDE	TCS 1299-HALDON ST/THE BOULEVARDE	2	33T3_to_SYDH	The Boulevarde (W) to The Boulevarde (E)	32	10
1303 NEW CANTERBURY RD/DUNTRON ST	TCS 1303-NEW CANTERBURY RD/DUNTRON ST	2	13T3_to_CAMP	New Canterbury (E) to New Canterbury (W)	4	22
1303 NEW CANTERBURY RD/DUNTRON ST	TCS 1303-NEW CANTERBURY RD/DUNTRON ST	2	13T3_to_SYDH	New Canterbury (W) to New Canterbury (E)	25	5
1303 NEW CANTERBURY RD/DUNTRON ST	TCS 1303-NEW CANTERBURY RD/DUNTRON ST	2	33T3_to_BTWN	New Canterbury (E) to New Canterbury (W)	4	28
1303 NEW CANTERBURY RD/DUNTRON ST	TCS 1303-NEW CANTERBURY RD/DUNTRON ST	2	33T3_to_SYDH	New Canterbury (W) to New Canterbury (E)	32	10
1329 BURWOOD RD/LEYLANDS PDE	TCS 1329-BURWOOD RD/LEYLANDS PDE	2	33T3_to_BTWN	Burwood Rd (S) to Burwood Rd (N)	4	28
1329 BURWOOD RD/LEYLANDS PDE	TCS 1329-BURWOOD RD/LEYLANDS PDE	2	33T3_to_SYDH	Burwood Rd (N) to Burwood Rd (S)	32	10
1744 PUNCHBOWL RD/THE BOULEVARDE	TCS 1744-PUNCHBOWL RD/THE BOULEVARDE	2	10T3_to_BTWN	The Boulevarde to Punchbowl (SW)	9	34
1744 PUNCHBOWL RD/THE BOULEVARDE	TCS 1744-PUNCHBOWL RD/THE BOULEVARDE	2	10T3_to_SYDH	Punchbowl (SW) to The Boulevarde	38	12
1744 PUNCHBOWL RD/THE BOULEVARDE	TCS 1744-PUNCHBOWL RD/THE BOULEVARDE	2	33T3_to_BTWN	The Boulevarde to Punchbowl (SW)	4	28
1744 PUNCHBOWL RD/THE BOULEVARDE	TCS 1744-PUNCHBOWL RD/THE BOULEVARDE	2	33T3_to_SYDH	Punchbowl (SW) to The Boulevarde	32	10
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	10T3_to_BTWN	Restwell St to South Terrace (E)	9	34
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	10T3_to_SYDH	Bus Depot (N) to South Terrace (E)	38	12
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	33T3_to_BTWN	Restwell St to South Terrace (E)	4	28
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	33T3_to_SYDH	Bus Depot (N) to South Terrace (E)	32	10
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	8T3_to_BTWN	South Terrace (W) to South Terrace (E)	8	12
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	8T3_to_LDCB	Bus Depot (N) to South Terrace (W)	10	10
1817 RESTWELL ST/SOUTH TCE	TCS 1817-RESTWELL ST/SOUTH TCE	2	8AT3_to_LDCB	Bus Depot (N) to South Terrace (W)	6	8
2816 BEAMISH ST/AMY ST	TCS 2816-BEAMISH ST/AMY ST	2	10T3_to_BTWN	Beamish St (S) to Beamish St (N)	9	34
2816 BEAMISH ST/AMY ST	TCS 2816-BEAMISH ST/AMY ST	2	10T3_to_SYDH	Beamish St (N) to Beamish St (S)	38	12
2816 BEAMISH ST/AMY ST	TCS 2816-BEAMISH ST/AMY ST	2	13T3_to_CAMP	Beamish St (S) to Beamish St (N)	4	22
4074 RESTWELL ST/RAYMOND ST	TCS 4074-RESTWELL ST/RAYMOND ST	2	10T3_to_BTWN	Raymond St to Restwell St (N)	9	34
4074 RESTWELL ST/RAYMOND ST	TCS 4074-RESTWELL ST/RAYMOND ST	2	33T3_to_BTWN	Raymond St to Restwell St (N)	4	28
66 MARRICKVILLE RD/WARDELL RD	TCS 66-MARRICKVILLE RD/WARDELL RD	3	13T3_to_CAMP		4	22
66 MARRICKVILLE RD/WARDELL RD	TCS 66-MARRICKVILLE RD/WARDELL RD	3	33T3_to_BTWN		4	28
68 MARRICKVILLE RD/VICTORIA RD	TCS 68-MARRICKVILLE RD/VICTORIA RD	3	10T3_to_BTWN		9	34
68 MARRICKVILLE RD/VICTORIA RD	TCS 68-MARRICKVILLE RD/VICTORIA RD	3	10T3_to_SYDH		38	12
68 MARRICKVILLE RD/VICTORIA RD	TCS 68-MARRICKVILLE RD/VICTORIA RD	3	13T3_to_CAMP		4	22
68 MARRICKVILLE RD/VICTORIA RD	TCS 68-MARRICKVILLE RD/VICTORIA RD	3	33T3_to_BTWN		4	28
96 SYDENHAM RD/ILLAWARRA RD	TCS 96-SYDENHAM RD/ILLAWARRA RD	3	13T3_to_SYDH		25	5
96 SYDENHAM RD/ILLAWARRA RD	TCS 96-SYDENHAM RD/ILLAWARRA RD	3	33T3_to_SYDH		32	10
435 MARRICKVILLE RD/ILLAWARRA RD	TCS 435-MARRICKVILLE RD/ILLAWARRA RD	3	10T3_to_BTWN		9	34
435 MARRICKVILLE RD/ILLAWARRA RD	TCS 435-MARRICKVILLE RD/ILLAWARRA RD	3	10T3_to_SYDH		38	12
435 MARRICKVILLE RD/ILLAWARRA RD	TCS 435-MARRICKVILLE RD/ILLAWARRA RD	3	13T3_to_CAMP		4	22
435 MARRICKVILLE RD/ILLAWARRA RD	TCS 435-MARRICKVILLE RD/ILLAWARRA RD	3	33T3_to_BTWN		4	28
902 NEW CANTERBURY RD/CONSTITUTION RD	TCS 902-NEW CANTERBURY RD/CONSTITUTION RD	3	13T3_to_CAMP		4	22
902 NEW CANTERBURY RD/CONSTITUTION RD	TCS 902-NEW CANTERBURY RD/CONSTITUTION RD	3	13T3_to_SYDH		25	5
902 NEW CANTERBURY RD/CONSTITUTION RD	TCS 902-NEW CANTERBURY RD/CONSTITUTION RD	3	33T3_to_BTWN		4	28
902 NEW CANTERBURY RD/CONSTITUTION RD	TCS 902-NEW CANTERBURY RD/CONSTITUTION RD	3	33T3_to_SYDH		32	10
1413 WARDELL RD/EWART ST	TCS 1413-WARDELL RD/EWART ST	3	10T3_to_BTWN		9	34
1413 WARDELL RD/EWART ST	TCS 1413-WARDELL RD/EWART ST	3	10T3_to_SYDH		38	12
2065 SYDENHAM RD/FARR ST	TCS 2065-SYDENHAM RD/FARR ST	3	13T3_to_SYDH		25	5
2065 SYDENHAM RD/FARR ST	TCS 2065-SYDENHAM RD/FARR ST	3	33T3_to_SYDH		32	10
2308 THE BOULEVARDE/ARTHUR ST	TCS 2308-THE BOULEVARDE/ARTHUR ST	3	10T3_to_BTWN		9	34
2308 THE BOULEVARDE/ARTHUR ST	TCS 2308-THE BOULEVARDE/ARTHUR ST	3	10T3_to_SYDH		38	12
2308 THE BOULEVARDE/ARTHUR ST	TCS 2308-THE BOULEVARDE/ARTHUR ST	3	33T3_to_BTWN		4	28

Routes Passing Through Each Intersection

2308 THE BOULEVARDE/ARTHUR ST	TCS 2308-THE BOULEVARDE/ARTHUR ST	3	33T3_to_SYDH		32	10
2450 SYDENHAM RD/PARK RD	TCS 2450-SYDENHAM RD/PARK RD	3	13T3_to_SYDH		25	5
2450 SYDENHAM RD/PARK RD	TCS 2450-SYDENHAM RD/PARK RD	3	33T3_to_SYDH		32	10
2995 CANTERBURY RD/MINTER ST (SW-)	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	3	10T3_to_BTWN		9	34
2995 CANTERBURY RD/MINTER ST (SW-)	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	3	10T3_to_SYDH		38	12
2995 CANTERBURY RD/MINTER ST (SW-)	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	3	13T3_to_CAMP		4	22
2995 CANTERBURY RD/MINTER ST (SW-)	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	3	13T3_to_SYDH		25	5
2995 CANTERBURY RD/MINTER ST (SW-)	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	3	33T3_to_BTWN		4	28
2995 CANTERBURY RD/MINTER ST (SW-)	TCS 2995-CANTERBURY RD/MINTER ST (SW-)	3	33T3_to_SYDH		32	10
3320 RAILWAY PDE/GLEESON AVE	TCS 3320-RAILWAY PDE/GLEESON AVE	3	10T3_to_BTWN		9	34
3320 RAILWAY PDE/GLEESON AVE	TCS 3320-RAILWAY PDE/GLEESON AVE	3	10T3_to_SYDH		38	12
3320 RAILWAY PDE/GLEESON AVE	TCS 3320-RAILWAY PDE/GLEESON AVE	3	13T3_to_CAMP		4	22
3320 RAILWAY PDE/GLEESON AVE	TCS 3320-RAILWAY PDE/GLEESON AVE	3	13T3_to_SYDH		25	5
3320 RAILWAY PDE/GLEESON AVE	TCS 3320-RAILWAY PDE/GLEESON AVE	3	33T3_to_BTWN		4	28
3320 RAILWAY PDE/GLEESON AVE	TCS 3320-RAILWAY PDE/GLEESON AVE	3	33T3_to_SYDH		32	10
3431 BEAMISH ST/SOUTH PDE	TCS 3431-BEAMISH ST/SOUTH PDE	3	10T3_to_BTWN		9	34
3431 BEAMISH ST/SOUTH PDE	TCS 3431-BEAMISH ST/SOUTH PDE	3	10T3_to_SYDH		38	12
3431 BEAMISH ST/SOUTH PDE	TCS 3431-BEAMISH ST/SOUTH PDE	3	13T3_to_CAMP		4	22
3431 BEAMISH ST/SOUTH PDE	TCS 3431-BEAMISH ST/SOUTH PDE	3	13T3_to_SYDH		25	5
4052 CANTERBURY RD/DUKE ST	TCS 4052-CANTERBURY RD/DUKE ST	3	33T3_to_BTWN		4	28
4052 CANTERBURY RD/DUKE ST	TCS 4052-CANTERBURY RD/DUKE ST	3	33T3_to_SYDH		32	10
4136 BEAMISH ST/CLISSOLD ST	TCS 4136-BEAMISH ST/CLISSOLD ST	3	10T3_to_BTWN		9	34
4136 BEAMISH ST/CLISSOLD ST	TCS 4136-BEAMISH ST/CLISSOLD ST	3	10T3_to_SYDH		38	12
80 CANTERBURY RD/KINGSGROVE RD	TCS 80-CANTERBURY RD/KINGSGROVE RD	4	33T3_to_BTWN		4	28
80 CANTERBURY RD/KINGSGROVE RD	TCS 80-CANTERBURY RD/KINGSGROVE RD	4	33T3_to_SYDH		32	10
157 BURWOOD RD/LAKEMBA ST	TCS 157-BURWOOD RD/LAKEMBA ST	4	10T3_to_BTWN		9	34
157 BURWOOD RD/LAKEMBA ST	TCS 157-BURWOOD RD/LAKEMBA ST	4	10T3_to_SYDH		38	12
569 ILLAWARRA RD/PETERSHAM RD	TCS 569-ILLAWARRA RD/PETERSHAM RD	4	10T3_to_BTWN		9	34
569 ILLAWARRA RD/PETERSHAM RD	TCS 569-ILLAWARRA RD/PETERSHAM RD	4	10T3_to_SYDH		38	12
738 BEAMISH ST/EVALINE ST	TCS 738-BEAMISH ST/EVALINE ST	4	10T3_to_BTWN		9	34
738 BEAMISH ST/EVALINE ST	TCS 738-BEAMISH ST/EVALINE ST	4	10T3_to_SYDH		38	12
738 BEAMISH ST/EVALINE ST	TCS 738-BEAMISH ST/EVALINE ST	4	13T3_to_CAMP		4	22
777 CANTERBURY RD/QUEEN ST	TCS 777-CANTERBURY RD/QUEEN ST	4	10T3_to_BTWN	Crinan St to Canterbury Rd (W)	9	34
777 CANTERBURY RD/QUEEN ST	TCS 777-CANTERBURY RD/QUEEN ST	4	10T3_to_SYDH	Canterbury Rd (W) to Crinan St	38	12
777 CANTERBURY RD/QUEEN ST	TCS 777-CANTERBURY RD/QUEEN ST	4	13T3_to_CAMP	Canterbury Rd (E) to Canterbury Rd (W)	4	22
777 CANTERBURY RD/QUEEN ST	TCS 777-CANTERBURY RD/QUEEN ST	4	13T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	25	5
777 CANTERBURY RD/QUEEN ST	TCS 777-CANTERBURY RD/QUEEN ST	4	33T3_to_BTWN	Canterbury Rd (E) to Canterbury Rd (W)	4	28
777 CANTERBURY RD/QUEEN ST	TCS 777-CANTERBURY RD/QUEEN ST	4	33T3_to_SYDH	Canterbury Rd (W) to Canterbury Rd (E)	32	10
996 BEAMISH ST/NINTH AV	TCS 996-BEAMISH ST/NINTH AV	4	10T3_to_BTWN		9	34
996 BEAMISH ST/NINTH AV	TCS 996-BEAMISH ST/NINTH AV	4	10T3_to_SYDH		38	12
1315 ILLAWARRA RD/WARREN RD	TCS 1315-ILLAWARRA RD/WARREN RD	4	10T3_to_BTWN		9	34
1315 ILLAWARRA RD/WARREN RD	TCS 1315-ILLAWARRA RD/WARREN RD	4	10T3_to_SYDH		38	12

Intersection-Route Matrix

Intersection-Route Matrix	Routes										Number of routes (both directions)	
	10T3 to BTWN	10T3 to SYDH	13T3 to CAMP	13T3 to SYDH	33T3 to BTWN	33T3 to SYDH	8AT3 to BTWN	8AT3 to LDCB	8T3 to BTWN	8T3 to LDCB		
TCS 1153-MARRICKVILLE RD/PETERSHAM RD			1		1							2
TCS 1167-CANTERBURY RD/WONGA ST	1	1	1	1	1	1						6
TCS 1203-CHAPEL RD/RICKARD RD							1	1	1	1		4
TCS 1299-HALDON ST/THE BOULEVARDE	1	1			1	1						4
TCS 1303-NEW CANTERBURY RD/DUNTRON ST			1	1	1	1						4
TCS 1315-ILLAWARRA RD/WARREN RD	1	1										2
TCS 1363-FIFTH AV/NINTH AV	1	1										2
TCS 1413-WARDELL RD/EWART ST	1	1										2
TCS 157-BURWOOD RD/LAKEMBA ST	1	1										2
TCS 162-CANTERBURY RD/BURWOOD RD					1	1						2
TCS 1744-PUNCHBOWL RD/THE BOULEVARDE	1	1			1	1						4
TCS 1817-RESTWELL ST/SOUTH TCE	1	1			1	1		1	1	1		7
TCS 2065-SYDENHAM RD/FARR ST				1		1						2
TCS 2308-THE BOULEVARDE/ARTHUR ST	1	1			1	1						4
TCS 2450-SYDENHAM RD/PARK RD				1		1						2
TCS 2789-JOSEPH ST/GEORGES AV							1	1	1	1		4
TCS 2816-BEAMISH ST/AMY ST	1	1	1									3
TCS 2995-CANTERBURY RD/MINTER ST (SW-)	1	1	1	1	1	1						6
TCS 3320-RAILWAY PDE/GLEESON AVE	1	1	1	1	1	1						6
TCS 3340-NEW CANTERBURY RD/FRAZER ST				1		1						2
TCS 3431-BEAMISH ST/SOUTH PDE	1	1	1	1								4
TCS 382-KING GEORGES RD/THE BOULEVARDE	1	1			1	1						4
TCS 4052-CANTERBURY RD/DUKE ST					1	1						2
TCS 4074-RESTWELL ST/RAYMOND ST	1				1							2
TCS 4136-BEAMISH ST/CLISSOLD ST	1	1										2
TCS 41-SYDENHAM RD/VICTORIA RD				1		1						2
TCS 42-WARDELL RD/FRAZER ST				1		1						2
TCS 435-MARRICKVILLE RD/ILLAWARRA RD	1	1	1		1							4
TCS 507-CANTERBURY RD/CHARLOTTE ST					1	1						2
TCS 569-ILLAWARRA RD/PETERSHAM RD	1	1										2
TCS 602-CANTERBURY RD/FORE ST	1	1	1	1	1	1						6
TCS 61-HUME HWY/CHAPEL RD							1	1	1	1		4
TCS 66-MARRICKVILLE RD/WARDELL RD			1		1							2
TCS 67-MARRICKVILLE RD/LIVINGSTONE RD			1		1							2
TCS 68-MARRICKVILLE RD/VICTORIA RD	1	1	1		1							4
TCS 738-BEAMISH ST/EVALINE ST	1	1	1									3
TCS 777-CANTERBURY RD/QUEEN ST	1	1	1	1	1	1						6
TCS 78-NEW CANTERBURY RD/CANTERBURY RD			1	1	1	1						4
TCS 79-CANTERBURY RD/BEXLEY RD					1	1						2
TCS 80-CANTERBURY RD/KINGSGROVE RD					1	1						2
TCS 81-FRAZER ST/LIVINGSTONE RD				1		1						2
TCS 855-CANTERBURY RD/JEFFREY ST	1	1	1	1	1	1						6
TCS 86-NEW CANTERBURY RD/MARRICKVILLE RD			1	1	1	1						4
TCS 902-NEW CANTERBURY RD/CONSTITUTION RD			1	1	1	1						4
TCS 96-SYDENHAM RD/ILLAWARRA RD				1		1						2
TCS 996-BEAMISH ST/NINTH AV	1	1										2
TCS 1329-BURWOOD RD/LEYLANDS PDE					1	1						2
TCS 4408-CHAPEL RD/FRENCH AV							1	1	1	1		4

TTP Bus Frequency at Each Intersection - AM Peak

TTP Bus Frequency (AM Peak)	Routes										TTP Bus Volume - AM Peak
Intersection	10T3_to_BTWN	10T3_to_SYDH	13T3_to_CAMP	13T3_to_SYDH	33T3_to_BTWN	33T3_to_SYDH	8AT3_to_BTWN	8AT3_to_LDCB	8T3_to_BTWN	8T3_to_LDCB	
41				25		32					57
42				25		32					57
61							6	6	8	10	30
66			4		4						8
67			4		4						8
68	9	38	4		4						55
78			4	25	4	32					65
79		38			4	32					74
80					4	32					36
81				25		32					57
86			4	25	4	32					65
96				25		32					57
157	9	38									47
162					4	32					36
225							6	6			12
382	9	38			4	32					83
435	9	38	4		4						55
436								8	10		18
507					4	32					36
569	9	38									47
602	9	38	4	25	4	32					112
738	9	38	4								51
777	9	38	4	25	4	32					112
855	9	38	4	25	4	32					112
902			4	25	4	32					65
935							6	6	8	10	30
996	9	38									47
1135								8	10		18
1153			4		4						8
1159							6	6			12
1167	9	38	4	25	4	32					112
1203							6	6	8	10	30
1299	9	38			4	32					83
1303			4	25	4	32					65
1315	9	38									47
1329					4	32					36
1363	9	38									47
1413	9	38									47
1451							6	6			12

TTP Bus Frequency at Each Intersection - AM Peak

Intersection	10T3_to_BTWN	10T3_to_SYDH	13T3_to_CAMP	13T3_to_SYDH	33T3_to_BTWN	33T3_to_SYDH	8AT3_to_BTWN	8AT3_to_LDCB	8T3_to_BTWN	8T3_to_LDCB	TTP Bus Volume - AM Peak
1542									8	10	18
1545									8	10	18
1725							6	6			12
1744	9	38			4	32					83
1771									8	10	18
1817	9				4			6	8	10	37
2192									8	10	18
2206							6	6	8	10	30
2308	9	38			4	32					83
2450				25		32					57
2468							6		8		14
2789							6	6	8	10	30
2800								6		10	16
2816	9	38	4								51
2995	9	38	4	25	4	32					112
3222							6		8		14
3320	9		4		4						17
3340				25		32					57
3431	9	38	4								51
3492							6	6			12
3509								6			6
4052		38			4	32					74
4074	9				4						13
4127							6	6	8	10	30
4136	9	38									47
4276							6	6			12
4297				25		32					57
4325							6	6			12
4408							6	6	8	10	30
2065						32					32

TTP Bus Frequency at Each Intersection - AM Peak

Intersection	10T3_to_BTWN	10T3_to_SYDH	13T3_to_CAMP	13T3_to_SYDH	33T3_to_BTWN	33T3_to_SYDH	8AT3_to_BTWN	8AT3_to_LDCB	8T3_to_BTWN	8T3_to_LDCB	TTP Bus Volume - PM Peak
1451							8	8			16
1542									12	10	22
1545									12	10	22
1725							8	8			16
1744	34	12			28	10					84
1771									12	10	22
1817	34				28			8	12	10	92
2192									12	10	22
2206							8	8	12	10	38
2308	34	12			28	10					84
2450				5		10					15
2468							8		12		20
2789							8	8	12	10	38
2800								8		10	18
2816	34	12	22								68
2995	34	12	22	5	28	10					111
3222							8		12		20
3320	34		22		28						84
3340				5		10					15
3431	34	12	22								68
3492							8	8			16
3509								8			8
4052		12			28	10					50
4074	34				28						62
4127							8	8	12	10	38
4136	34	12									46
4276							8	8			16
4297				5		10					15
4325							8	8			16
4408							8	8	12	10	38
2065						10					10

Appendix C

Intersection Assessment Volumes

Table 1 TCS 41 Sydenham Road / Victoria Road

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	353	45	17	695	173	100	193	66	38	506	28
Heavies	0	32	3	3	36	10	7	19	14	6	43	6
Construction Forecast	0	0	0	0	14	0	0	0	0	0	14	0
TTP Buses	0	0	0	0	57	0	0	0	0	0	0	0
Total	0	385	48	20	802	183	107	212	80	44	563	34

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	268	77	20	610	102	215	398	74	68	710	45
Heavies	0	22	0	2	11	0	6	26	0	0	20	0
Construction Forecast	0	0	0	0	14	0	0	0	0	0	14	0
TTP Buses	0	0	0	0	15	0	0	0	0	0	0	0
Total	0	290	77	22	650	102	221	424	74	68	744	45

Table 2 TCS 42 – Wardell Road / Frazer Street

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	118	276	34	31	379	4	2	117	41	43	139	52
Heavies	4	2	2	1	8	0	0	3	4	1	8	1
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	57	0	0	0	0	0	0	0
Total	122	278	36	32	444	4	2	120	45	44	147	53

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	64	168	25	36	279	8	11	305	45	106	400	171
Heavies	0	0	0	0	4	0	0	2	0	1	2	1
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	15	0	0	0	0	0	0	0
Total	64	168	25	36	298	8	11	307	45	107	402	172

Table 3 TCS 61 – Hume Highway / Chapel Road / Rookwood Road

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	146	115	98	1779	161	51	179	32	29	1007	78
Heavies	6	5	5	9	132	18	3	12	2	1	67	8
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	6	10	8	0	0	0	6	0	0	0	0
Total	6	157	130	115	1911	179	54	197	34	30	1074	86

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	322	234	194	1580	191	107	477	20	52	1750	103
Heavies	11	9	10	9	30	22	5	10	0	0	92	12
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	8	10	12	0	0	0	8	0	0	0	0
Total	11	339	254	215	1610	213	112	495	20	52	1842	115

Table 4 TCS 67 – Marrickville Road / Livingstone Road

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	46	272	18	41	504	50	18	106	60	120	228	72
Heavies	1	7	0	2	20	2	2	4	1	2	15	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	0	0	0	0	0	0	8	0
Total	47	279	18	43	524	52	20	110	61	122	251	72
PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	48	161	42	20	353	53	50	257	106	107	551	149
Heavies	0	3	0	0	10	0	0	3	0	2	17	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	0	0	0	0	0	0	50	0
Total	48	164	42	20	363	53	50	260	106	109	618	149

Table 5 TCS 78 – New Canterbury Road / Canterbury Road

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	820	656	30	9	318	14	0	384	24	17	258	371
Heavies	65	28	1	1	3	2	0	20	2	2	5	50
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	65	0	0	0	0	0	0	0	0	0	0	65
Total	950	684	31	10	321	16	0	404	26	19	263	486
PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	473	547	23	20	264	9	0	649	37	30	468	672
Heavies	18	11	0	0	3	0	0	10	0	2	7	31
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	65	0	0	0	0	0	0	0	0	0	0	65
Total	556	558	23	20	267	9	0	659	37	32	475	768

Table 6 TCS 79 – Canterbury Road / Bexley Road

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	378	556	76	203	1081	53	76	358	46	0	597	225
Heavies	13	26	8	14	69	10	13	38	1	0	49	15
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	32	0	0	0	38	0	4	0
Total	391	582	84	217	1182	63	89	396	85	0	650	240
PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	358	386	85	186	975	88	128	321	40	0	969	168
Heavies	5	15	0	6	14	7	10	14	5	0	46	4
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	10	0	0	0	12	0	28	0
Total	363	401	85	192	999	95	138	335	57	0	1043	172

Table 7 TCS 81 – Livingstone Road / Sydenham Road / Frazer Street

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	28	471	22	0	209	124	59	202	323	271	148	16
Heavies	0	10	2	0	4	4	0	7	37	31	7	1
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	57	0	0	0	0	0	0	0
Total	28	481	24	0	270	128	59	209	360	302	155	17

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	34	221	59	0	165	87	184	411	311	299	479	50
Heavies	2	5	1	0	2	1	2	18	16	19	3	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	15	0	0	0	0	0	0	0
Total	36	226	60	0	182	88	186	429	327	318	482	50

Table 8 TCS 86 – New Canterbury Road / Marrickville Road / Dulwich Street

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	39	39	111	357	910	13	2	56	21	0	353	73
Heavies	1	0	15	11	49	0	1	4	4	0	31	5
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	8	0	57	0	0	0	0	0	0	0
Total	40	39	134	368	1016	13	3	60	25	0	384	78

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	54	64	322	206	582	5	3	53	17	0	921	75
Heavies	0	0	14	5	13	1	0	7	0	0	22	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	50	0	15	0	0	0	0	0	0	0
Total	54	64	386	211	610	6	3	60	17	0	943	75

Table 9 TCS 162 – Canterbury Road / Burwood Road

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	0	0	0	1329	66	56	0	111	187	660	0
Heavies	0	0	0	0	91	4	9	0	23	16	52	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	0	0	0	0	32	4	0	0
Total	0	0	0	0	1420	70	65	0	166	207	712	0

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	0	0	0	1231	64	149	0	82	201	1164	0
Heavies	0	0	0	0	25	0	4	0	9	12	65	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	0	0	0	0	10	28	0	0
Total	0	0	0	0	1256	64	153	0	101	241	1229	0

Table 10 TCS 382 – King Georges Road / The Boulevard

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	2298	17	0	134	127	37	2057	104	113	99	8
Heavies	0	202	2	0	2	3	1	232	2	1	1	1
Construction Forecast	0	8	8	0	0	8	0	0	0	0	0	2
TTP Buses	0	0	0	0	70	0	0	0	0	0	13	0
Total	0	2508	27	0	206	138	38	2289	106	114	113	11
PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	2248	30	0	144	183	92	2421	164	199	337	27
Heavies	0	159	0	0	1	0	1	92	1	1	4	0
Construction Forecast	0	8	8	0	0	8	0	0	0	0	0	2
TTP Buses	0	0	0	0	22	0	0	0	0	0	62	0
Total	0	2415	38	0	167	191	93	2513	165	200	403	29

Table 11 TCS 507 – Canterbury Road / Charlotte Street / Thorncraft Parade

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	33	239	15	0	1222	151	48	236	62	135	748	25
Heavies	2	6	1	0	77	2	1	2	0	0	43	1
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	32	0	0	0	0	0	4	0
Total	35	245	16	0	1331	153	49	238	62	135	795	26
PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	56	239	28	0	1062	140	121	364	96	179	1211	67
Heavies	1	3	1	0	25	0	5	7	1	1	31	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	10	0	0	0	0	0	28	0
Total	57	242	29	0	1097	140	126	371	97	180	1270	67

Table 12 TCS 602 – Canterbury Road / Fore Street

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	265	0	200	163	1564	0	0	0	0	0	1030	95
Heavies	15	0	9	4	68	0	0	0	0	0	41	8
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	95	0	0	0	0	0	17	0
Total	280	0	209	167	1727	0	0	0	0	0	1088	103
PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	183	0	242	158	1247	0	0	0	0	0	1542	172
Heavies	3	0	1	2	14	0	0	0	0	0	32	6
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	27	0	0	0	0	0	84	0
Total	186	0	243	160	1288	0	0	0	0	0	1658	178

Table 13 TCS 855 Canterbury Road / Jeffery Street

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	1575	247	29	77	18	0	0	167	19	0	3	852
Heavies	67	18	0	3	7	0	0	6	3	0	10	49
Construction Forecast	2	0	11	0	10	0	0	0	0	0	0	16
TTP Buses	95	0	0	0	0	0	0	0	0	0	0	17
Total	1739	265	40	80	35	0	0	173	22	0	13	934

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	1010	249	21	83	18	0	0	314	28	0	14	1569
Heavies	19	6	0	3	3	0	0	5	0	0	5	32
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0

Table 14 TCS 1153 – Marrickville Road / Petersham Road

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	10	25	34	133	650	0	23	88	21	7	312	16
Heavies	1	0	1	1	30	0	0	0	0	1	17	3
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	0	0	0	0	0	0	8	0
Total	11	25	35	134	680	0	23	88	21	8	337	19

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	18	28	56	167	411	0	31	95	34	4	643	26
Heavies	0	0	1	1	13	0	2	0	0	0	17	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	0	0	0	0	0	0	50	0
Total	18	28	57	168	424	0	33	95	34	4	710	26

Table 15 TCS 1167 - Canterbury Road and Wonga Street

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	1623	15	63	0	171	185	1068	0	0	0	0
Heavies	0	118	0	4	0	5	8	47	0	0	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	70	0	0	0	25	13	4	0	0	0	0
Total	0	1811	15	67	0	201	206	1119	0	0	0	0

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	1198	63	154	0	193	326	1719	0	0	0	0
Heavies	0	21	2	0	0	5	2	56	0	0	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	22	0	0	0	5	56	28	0	0	0	0
Total	0	1241	65	154	0	203	384	1803	0	0	0	0

Table 16 TCS 1203 – Chapel Road / Rickard Road

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	183	89	129	449	66	33	222	93	68	228	77
Heavies	0	3	0	0	9	1	1	9	25	25	13	3
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	10
TTP Buses	0	16	0	0	0	0	0	14	0	0	0	0
Total	0	202	89	129	458	67	34	245	118	93	241	90

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	292	194	122	425	87	33	359	172	206	603	151
Heavies	0	2	1	0	12	0	1	8	27	32	6	6
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	10
TTP Buses	0	18	0	0	0	0	0	20	0	0	0	0
Total	0	312	195	122	437	87	34	387	199	238	609	167

Table 17 TCS 1299 - Haldon Street / The Boulevard

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	240	39	37	160	157	158	225	101	202	77	20
Heavies	0	21	8	6	31	3	1	18	3	14	12	0
Construction Forecast	0	8	7	5	0	0	0	8	0	0	0	0
TTP Buses	0	0	0	0	70	0	0	0	0	0	13	0
Total	0	269	54	48	261	160	159	251	104	216	102	20

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	261	91	36	128	190	158	221	100	232	142	25
Heavies	0	14	9	5	20	4	4	13	3	2	23	2
Construction Forecast	0	8	7	5	0	0	0	8	0	0	0	0
TTP Buses	0	0	0	0	22	0	0	0	0	0	62	0
Total	0	283	107	46	170	194	162	242	103	234	227	27

Table 18 TCS 1303 - New Canterbury Road / Duntroon Street

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	78	0	6	54	990	0	0	0	0	0	509	16
Heavies	1	0	0	1	82	0	0	0	0	0	38	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	57	0	0	0	0	0	8	0
Total	79	0	6	55	1129	0	0	0	0	0	555	16

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	33	0	29	59	686	0	0	0	0	0	1128	100
Heavies	0	0	0	1	23	0	0	0	0	0	49	1
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	15	0	0	0	0	0	50	0
Total	33	0	29	60	724	0	0	0	0	0	1227	101

Table 19 TCS 1329 - Burwood Road / Leylands Parade

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	25	313	31	0	114	127	50	239	37	167	163	51
Heavies	1	35	0	0	2	2	1	33	1	4	3	2
Construction Forecast	0	17	0	0	0	0	0	17	0	0	0	0
TTP Buses	0	4	0	0	0	0	0	32	0	0	0	0
Total	26	369	31	0	116	129	51	321	38	171	166	53

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	44	453	64	0	126	191	61	289	47	201	197	34
Heavies	2	59	0	0	3	4	1	25	1	4	4	1
Construction Forecast	0	17	0	0	0	0	0	17	0	0	0	0
TTP Buses	0	28	0	0	0	0	0	10	0	0	0	0
Total	46	557	64	0	129	195	62	341	48	205	201	35

Table 20 TCS 1363 - Fifth Avenue / Ninth Avenue

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	0	0	0	287	97	123	0	180	223	130	0
Heavies	0	0	0	0	2	2	5	0	5	8	3	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	38	0	0	0	0	0	9	0
Total	0	0	0	0	327	99	128	0	185	231	142	0

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	0	0	0	261	127	177	0	221	245	292	0
Heavies	0	0	0	0	0	0	6	0	5	0	4	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	0	0	0	12	0	0	0	0	0	34	0
Total	0	0	0	0	273	127	183	0	226	245	330	0

Table 21 TCS 1744 - Punchbowl Road / The Boulevarde

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	399	494	0	0	0	0	0	617	83	121	0	242
Heavies	0	39	0	0	0	0	0	41	0	4	0	7
Construction Forecast	0	3	0	0	0	0	0	3	3	3	0	0
TTP Buses	70	0	0	0	0	0	0	0	0	0	0	13
Total	469	536	0	0	0	0	0	661	86	128	0	262

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	400	591	0	0	0	0	0	756	86	231	0	447
Heavies	0	18	0	0	0	0	0	30	0	4	0	9
Construction Forecast	0	3	0	0	0	0	0	3	3	3	0	0
TTP Buses	22	0	0	0	0	0	0	0	0	0	0	62
Total	422	612	0	0	0	0	0	789	89	238	0	518

Table 22 TCS 1744 – Punchbowl Road / South Terrace

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	543	214	74	0	350	272	587	0	0	0	0
Heavies	0	17	0	0	0	0	0	21	0	0	0	0
Construction Forecast	0	0	0	0	0	3	3	0	0	0	0	0
TTP Buses	0	70	0	0	0	0	0	13	0	0	0	0
Total	0	630	214	74	0	353	275	621	0	0	0	0

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	397	202	122	0	594	429	774	0	0	0	0
Heavies	0	12	0	0	0	0	0	27	0	0	0	0
Construction Forecast	0	0	0	0	0	3	3	0	0	0	0	0
TTP Buses	0	22	0	0	0	0	0	62	0	0	0	0
Total	0	431	202	122	0	597	432	863	0	0	0	0

Table 23 TCS 1817 - Restwell Street / South Terrace

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	547	0	60	0	0	0	0	0	1	0	0	0
Heavies	11	0	25	43	24	0	31	0	0	0	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	4	0	0	0	38	0	16	0	0	0	0	0
Total	1120	0	170	86	86	0	78	0	2	0	0	0

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	792	0	93	0	3	0	0	0	6	0	0	0
Heavies	6	0	43	42	28	0	29	0	0	0	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	22	0	0	0	18	0	18	0	0	0	0	0
Total	1618	0	272	84	80	0	76	0	12	0	0	0

Table 24 TCS 2789 - Joseph Street / Georges Avenue

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	165	2173	24	48	154	88	70	1363	28	7	200	70
Heavies	8	166	2	1	3	3	2	122	0	1	8	6
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	6	0	0	0	10	8	6	0	0	0	0
Total	173	2345	26	49	157	101	80	1491	28	8	208	76

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	92	1681	61	27	167	83	124	1931	30	20	256	179
Heavies	2	72	0	1	2	0	1	67	1	0	3	5
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	8	0	0	0	10	12	8	0	0	0	0
Total	94	1761	61	28	169	93	137	2006	31	20	259	184

Table 25 TCS 2816 – Beamish Street / Amy Street

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	436	71	0	0	34	3	466	0	0	0	0
Heavies	0	45	1	0	0	0	0	45	0	0	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	13	0	0	0	0	0	38	0	0	0	0
Total	0	494	72	0	0	34	3	549	0	0	0	0

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	473	104	0	0	142	6	521	0	0	0	0
Heavies	0	32	1	0	0	0	0	33	0	0	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	56	0	0	0	0	0	12	0	0	0	0
Total	0	561	105	0	0	142	6	566	0	0	0	0

Table 26 TCS 3340 – New Canterbury Road / Frazer Street

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	300	802	0	0	0	0	0	340	127	67	0	74
Heavies	6	44	0	0	0	0	0	24	2	1	0	8
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	57	0	0	0	0	0	0	0	0	0	0	0
Total	363	846	0	0	0	0	0	364	129	68	0	82

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	182	522	0	0	0	0	0	800	98	142	0	205
Heavies	1	14	0	0	0	0	0	21	3	1	0	2
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	15	0	0	0	0	0	0	0	0	0	0	0
Total	198	536	0	0	0	0	0	821	101	143	0	207

Table 27 TCS 4074 – Restwell Street / Raymond Street / Greenfield Parade

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	301	194	0	0	373	0	0	0	59	210	101
Heavies	0	32	0	0	0	0	0	39	0	4	0	2
Construction Forecast	0	0	0	0	0	0	0	0	0	8	0	0
TTP Buses	0	0	0	0	0	0	0	0	0	13	0	0
Total	0	333	194	0	0	373	0	39	0	84	210	103

PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	0	226	186	0	0	535	0	0	0	109	408	259
Heavies	0	26	0	0	0	0	0	36	0	7	0	2
Construction Forecast	0	0	0	0	0	0	0	0	0	8	0	0
TTP Buses	0	0	0	0	0	0	0	0	0	62	0	0
Total	0	252	186	0	0	535	0	36	0	186	408	261

Table 28 TCS 4408 – Chapel Road / French Avenue

AM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	41	235	16	11	67	29	50	282	15	37	55	37
Heavies	1	23	0	0	1	1	1	33	0	0	2	2
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	16	0	0	0	0	0	14	0	0	0	0
Total	42	274	16	11	68	30	51	329	15	37	57	39
PM Model Volume Inputs												
Hour	South Leg			West Leg			North Leg			East Leg		
	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Light	76	436	89	36	60	53	109	493	44	40	64	48
Heavies	0	36	0	0	0	0	0	34	0	1	0	0
Construction Forecast	0	0	0	0	0	0	0	0	0	0	0	0
TTP Buses	0	18	0	0	0	0	0	20	0	0	0	0
Total	76	490	89	36	60	53	109	547	44	41	64	48

Appendix D

Intersection Movement Summaries

MOVEMENT SUMMARY

Site: TCS 41 [Sydenham Rd / Victoria Rd - Base Future (Site Folder: AM)]

Sydenham Rd / Victoria Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 75 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Victoria Rd														
1	L2	48	3	51	6.3	* 0.878	49.9	LOS D	9.7	72.3	1.00	1.05	1.47	22.5
2	T1	385	32	405	8.3	0.878	44.1	LOS D	10.1	75.9	1.00	1.05	1.47	28.5
Approach		433	35	456	8.1	0.878	44.7	LOS D	10.1	75.9	1.00	1.05	1.47	27.9
East: Sydenham Rd														
4	L2	34	6	36	17.6	0.257	16.5	LOS B	4.8	36.4	0.59	0.53	0.59	46.0
5	T1	549	43	578	7.8	0.963	42.8	LOS D	22.8	171.4	0.86	1.03	1.32	27.0
6	R2	44	6	46	13.6	0.963	65.1	LOS E	22.8	171.4	1.00	1.29	1.71	25.7
Approach		627	55	660	8.8	0.963	42.9	LOS D	22.8	171.4	0.85	1.02	1.30	27.7
North: Victoria Rd														
7	L2	80	14	84	17.5	0.262	27.2	LOS B	3.7	29.2	0.79	0.72	0.79	37.8
8	T1	212	19	223	9.0	0.856	36.9	LOS C	11.3	84.9	0.96	1.03	1.24	30.4
9	R2	107	7	113	6.5	* 0.856	46.6	LOS D	11.3	84.9	1.00	1.12	1.36	23.3
Approach		399	40	420	10.0	0.856	37.5	LOS C	11.3	84.9	0.94	0.99	1.18	30.0
West: Sydenham Rd														
10	L2	183	10	193	5.5	0.238	13.1	LOS A	4.3	31.3	0.50	0.65	0.50	40.7
11	T1	731	36	769	4.9	* 0.952	46.8	LOS D	38.8	284.0	0.96	1.23	1.43	25.6
12	R2	20	3	21	15.0	0.952	55.8	LOS D	38.8	284.0	1.00	1.28	1.50	21.1
Approach		934	49	983	5.2	0.952	40.4	LOS C	38.8	284.0	0.87	1.12	1.24	27.2
All Vehicles		2393	179	2519	7.5	0.963	41.4	LOS C	38.8	284.0	0.90	1.06	1.29	27.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Victoria Rd												
P1	Full	50	53	31.8	LOS D	0.1	0.1	0.92	0.92	211.1	215.2	1.02
East: Sydenham Rd												
P2	Full	50	53	31.8	LOS D	0.1	0.1	0.92	0.92	211.1	215.2	1.02
North: Victoria Rd												

MOVEMENT SUMMARY

Site: TCS 41 [Sydenham Rd / Victoria Rd - Construction (Site Folder: AM)]

Sydenham Rd / Victoria Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Victoria Rd														
1	L2	48	3	51	6.3	0.903	50.5	LOS D	9.5	70.7	1.00	1.10	1.60	22.3
2	T1	385	32	405	8.3	* 0.903	44.6	LOS D	9.9	74.4	1.00	1.10	1.59	28.3
Approach		433	35	456	8.1	0.903	45.3	LOS D	9.9	74.4	1.00	1.10	1.59	27.7
East: Sydenham Rd														
4	L2	34	6	36	17.6	0.266	16.1	LOS B	4.6	35.4	0.60	0.54	0.60	46.3
5	T1	563	57	593	10.1	* 0.996	51.3	LOS D	25.5	194.5	0.86	1.12	1.49	24.4
6	R2	44	6	46	13.6	0.996	77.8	LOS F	25.5	194.5	1.00	1.43	1.96	23.0
Approach		641	69	675	10.8	0.996	51.3	LOS D	25.5	194.5	0.86	1.11	1.47	25.0
North: Victoria Rd														
7	L2	80	14	84	17.5	0.267	26.3	LOS B	3.5	27.5	0.80	0.72	0.80	38.3
8	T1	212	19	223	9.0	0.872	36.2	LOS C	11.0	82.2	0.96	1.05	1.30	30.7
9	R2	107	7	113	6.5	* 0.872	45.9	LOS D	11.0	82.2	1.00	1.14	1.43	23.6
Approach		399	40	420	10.0	0.872	36.8	LOS C	11.0	82.2	0.94	1.01	1.23	30.3
West: Sydenham Rd														
10	L2	183	10	193	5.5	0.246	12.7	LOS A	4.1	30.1	0.50	0.65	0.50	41.1
11	T1	745	50	784	6.7	0.983	57.1	LOS E	42.4	314.5	0.96	1.36	1.62	22.8
12	R2	20	3	21	15.0	0.983	67.2	LOS E	42.4	314.5	1.00	1.42	1.72	18.5
Approach		948	63	998	6.6	0.983	48.7	LOS D	42.4	314.5	0.87	1.22	1.41	24.5
All Vehicles		2421	207	2548	8.6	0.996	46.8	LOS D	42.4	314.5	0.90	1.14	1.43	26.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Victoria Rd												
P1	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	208.7	215.2	1.03
East: Sydenham Rd												
P2	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	208.7	215.2	1.03
North: Victoria Rd												

MOVEMENT SUMMARY

Site: TCS 41 [Sydenham Rd / Victoria Rd - TTP (Site Folder: AM)]

Sydenham Rd / Victoria Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 75 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Victoria Rd														
1	L2	48	3	51	6.3	0.967	67.8	LOS E	11.7	87.2	1.00	1.23	1.89	18.2
2	T1	385	32	405	8.3	* 0.967	61.9	LOS E	12.2	91.8	1.00	1.23	1.88	23.5
Approach		433	35	456	8.1	0.967	62.5	LOS E	12.2	91.8	1.00	1.23	1.88	23.0
East: Sydenham Rd														
4	L2	34	6	36	17.6	0.284	16.1	LOS B	5.3	41.0	0.59	0.53	0.59	46.4
5	T1	563	57	593	10.1	1.063	75.2	LOS F	31.7	241.8	0.84	1.22	1.69	18.9
6	R2	44	6	46	13.6	1.063	121.2	LOS F	31.7	241.8	1.00	1.66	2.39	16.8
Approach		641	69	675	10.8	1.063	75.2	LOS F	31.7	241.8	0.84	1.22	1.68	19.5
North: Victoria Rd														
7	L2	80	14	84	17.5	0.256	28.0	LOS B	3.5	27.5	0.80	0.73	0.80	37.3
8	T1	212	19	223	9.0	0.837	35.8	LOS C	11.4	85.4	0.97	1.03	1.21	30.8
9	R2	107	7	113	6.5	* 0.837	44.0	LOS D	11.4	85.4	1.00	1.09	1.30	24.2
Approach		399	40	420	10.0	0.837	36.4	LOS C	11.4	85.4	0.94	0.99	1.15	30.4
West: Sydenham Rd														
10	L2	183	10	193	5.5	0.266	13.3	LOS A	4.8	35.7	0.51	0.64	0.51	40.8
11	T1	802	107	844	13.3	* 1.064	104.0	LOS F	63.8	497.6	0.95	1.74	2.09	15.0
12	R2	20	3	21	15.0	1.064	120.2	LOS F	63.8	497.6	1.00	1.86	2.26	11.7
Approach		1005	120	1058	11.9	1.064	87.8	LOS F	63.8	497.6	0.87	1.54	1.81	16.5
All Vehicles		2478	264	2608	10.7	1.064	71.8	LOS F	63.8	497.6	0.90	1.31	1.68	19.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Victoria Rd												
P1	Full	50	53	31.8	LOS D	0.1	0.1	0.92	0.92	211.1	215.2	1.02
East: Sydenham Rd												
P2	Full	50	53	31.8	LOS D	0.1	0.1	0.92	0.92	211.1	215.2	1.02
North: Victoria Rd												

MOVEMENT SUMMARY

Site: TCS 41 [Sydenham Rd / Victoria Rd - TTP - Mitigated (Site Folder: AM)]

Sydenham Rd / Victoria Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 73 seconds (Site User-Given Phase Times)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Victoria Rd														
1	L2	48	3	51	6.3	* 0.782	42.0	LOS C	8.6	63.9	1.00	0.94	1.23	25.1
2	T1	385	32	405	8.3	0.782	36.3	LOS C	8.9	66.9	1.00	0.94	1.23	31.3
Approach		433	35	456	8.1	0.782	36.9	LOS C	8.9	66.9	1.00	0.94	1.23	30.7
East: Sydenham Rd														
4	L2	34	6	36	17.6	0.279	15.8	LOS B	5.1	39.1	0.58	0.53	0.58	46.6
5	T1	563	57	593	10.1	* 1.044	67.3	LOS E	29.6	225.5	0.84	1.19	1.63	20.4
6	R2	44	6	46	13.6	1.044	107.5	LOS F	29.6	225.5	1.00	1.60	2.28	18.4
Approach		641	69	675	10.8	1.044	67.3	LOS E	29.6	225.5	0.84	1.18	1.62	21.0
North: Victoria Rd														
7	L2	80	14	84	17.5	0.265	27.8	LOS B	3.5	27.4	0.81	0.73	0.81	37.4
8	T1	212	19	223	9.0	0.866	37.5	LOS C	11.8	88.2	0.97	1.05	1.28	30.2
9	R2	107	7	113	6.5	* 0.866	46.3	LOS D	11.8	88.2	1.00	1.12	1.39	23.4
Approach		399	40	420	10.0	0.866	37.9	LOS C	11.8	88.2	0.94	1.00	1.22	29.9
West: Sydenham Rd														
10	L2	183	10	193	5.5	0.306	13.7	LOS A	5.5	41.4	0.54	0.63	0.54	40.8
11	T1	802	107	844	13.3	1.020	73.7	LOS F	51.7	403.3	0.94	1.48	1.76	19.2
12	R2	20	3	21	15.0	1.020	89.9	LOS F	51.7	403.3	1.00	1.62	1.96	14.8
Approach		1005	120	1058	11.9	1.020	63.1	LOS E	51.7	403.3	0.86	1.33	1.54	20.8
All Vehicles		2478	264	2608	10.7	1.044	55.6	LOS D	51.7	403.3	0.89	1.17	1.46	23.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Victoria Rd												
P1	Full	50	53	30.8	LOS D	0.1	0.1	0.92	0.92	210.1	215.2	1.02
East: Sydenham Rd												
P2	Full	50	53	30.8	LOS D	0.1	0.1	0.92	0.92	210.1	215.2	1.02
North: Victoria Rd												
P3	Full	50	53	30.8	LOS D	0.1	0.1	0.92	0.92	210.1	215.2	1.02

MOVEMENT SUMMARY

Site: TCS 42 [Wardell Rd / Frazer St - Future Base (Site Folder: AM)]

Wardell Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Wardell Rd														
1	L2	36	2	38	5.6	0.156	13.4	LOS A	1.0	7.1	0.77	0.65	0.77	44.2
2	T1	278	2	293	0.7	0.768	13.1	LOS A	6.1	43.5	0.93	0.93	1.21	41.2
3	R2	122	4	128	3.3	* 0.768	18.5	LOS B	6.1	43.5	0.96	0.98	1.29	41.8
Approach		436	8	459	1.8	0.768	14.7	LOS B	6.1	43.5	0.93	0.92	1.19	41.6
East: Frazer St														
4	L2	53	1	56	1.9	0.102	14.1	LOS A	0.6	4.4	0.75	0.71	0.75	43.3
5	T1	147	8	155	5.4	0.457	10.7	LOS A	2.7	19.4	0.88	0.73	0.88	47.5
6	R2	44	1	46	2.3	0.457	16.3	LOS B	2.7	19.4	0.88	0.73	0.88	44.1
Approach		244	10	257	4.1	0.457	12.5	LOS A	2.7	19.4	0.85	0.73	0.85	45.8
North: Wardell Rd														
7	L2	45	4	47	8.9	0.092	13.2	LOS A	0.5	4.0	0.75	0.69	0.75	42.5
8	T1	120	3	126	2.5	0.228	9.0	LOS A	1.5	10.7	0.79	0.62	0.79	44.2
9	R2	2	0	2	0.0	0.228	13.6	LOS A	1.5	10.7	0.79	0.62	0.79	45.1
Approach		167	7	176	4.2	0.228	10.2	LOS A	1.5	10.7	0.78	0.64	0.78	43.8
West: Frazer St														
10	L2	4	0	4	0.0	0.147	14.3	LOS A	0.9	6.8	0.76	0.60	0.76	46.0
11	T1	387	8	407	2.1	0.679	11.4	LOS A	5.3	37.9	0.90	0.80	1.02	47.9
12	R2	32	1	34	3.1	* 0.679	17.3	LOS B	5.3	37.9	0.93	0.86	1.08	44.1
Approach		423	9	445	2.1	0.679	11.8	LOS A	5.3	37.9	0.90	0.81	1.02	47.5
All Vehicles		1270	34	1337	2.7	0.768	12.7	LOS A	6.1	43.5	0.88	0.81	1.02	44.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Wardell Rd												
P1	Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23
East: Frazer St												
P2	Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23

MOVEMENT SUMMARY

Site: TCS 42 [Wardell Rd / Frazer St - Construction (Site Folder: AM)]

Wardell Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Wardell Rd														
1	L2	36	2	38	5.6	0.156	13.4	LOS A	1.0	7.1	0.77	0.65	0.77	44.2
2	T1	278	2	293	0.7	0.768	13.1	LOS A	6.1	43.5	0.93	0.93	1.21	41.2
3	R2	122	4	128	3.3	* 0.768	18.5	LOS B	6.1	43.5	0.96	0.98	1.29	41.8
Approach		436	8	459	1.8	0.768	14.7	LOS B	6.1	43.5	0.93	0.92	1.19	41.6
East: Frazer St														
4	L2	53	1	56	1.9	0.102	14.1	LOS A	0.6	4.4	0.75	0.71	0.75	43.3
5	T1	147	8	155	5.4	0.457	10.7	LOS A	2.7	19.4	0.88	0.73	0.88	47.5
6	R2	44	1	46	2.3	0.457	16.3	LOS B	2.7	19.4	0.88	0.73	0.88	44.1
Approach		244	10	257	4.1	0.457	12.5	LOS A	2.7	19.4	0.85	0.73	0.85	45.8
North: Wardell Rd														
7	L2	45	4	47	8.9	0.092	13.2	LOS A	0.5	4.0	0.75	0.69	0.75	42.5
8	T1	120	3	126	2.5	0.228	9.0	LOS A	1.5	10.7	0.79	0.62	0.79	44.2
9	R2	2	0	2	0.0	0.228	13.6	LOS A	1.5	10.7	0.79	0.62	0.79	45.1
Approach		167	7	176	4.2	0.228	10.2	LOS A	1.5	10.7	0.78	0.64	0.78	43.8
West: Frazer St														
10	L2	4	0	4	0.0	0.147	14.3	LOS A	0.9	6.8	0.76	0.60	0.76	46.0
11	T1	387	8	407	2.1	0.679	11.4	LOS A	5.3	37.9	0.90	0.80	1.02	47.9
12	R2	32	1	34	3.1	* 0.679	17.3	LOS B	5.3	37.9	0.93	0.86	1.08	44.1
Approach		423	9	445	2.1	0.679	11.8	LOS A	5.3	37.9	0.90	0.81	1.02	47.5
All Vehicles		1270	34	1337	2.7	0.768	12.7	LOS A	6.1	43.5	0.88	0.81	1.02	44.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Wardell Rd												
P1	Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23
East: Frazer St												
P2	Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23

MOVEMENT SUMMARY

Site: TCS 42 [Wardell Rd / Frazer St - TTP (Site Folder: AM)]

Wardell Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Wardell Rd														
1	L2	36	2	38	5.6	0.146	15.3	LOS B	1.3	9.1	0.74	0.64	0.74	43.1
2	T1	278	2	293	0.7	0.722	14.7	LOS B	7.3	52.1	0.90	0.86	1.04	40.4
3	R2	122	4	128	3.3	* 0.722	20.1	LOS B	7.3	52.1	0.94	0.91	1.11	41.0
Approach		436	8	459	1.8	0.722	16.3	LOS B	7.3	52.1	0.90	0.86	1.04	40.8
East: Frazer St														
4	L2	53	1	56	1.9	0.082	14.5	LOS A	0.7	5.2	0.67	0.70	0.67	43.1
5	T1	147	8	155	5.4	0.406	12.7	LOS A	3.3	24.0	0.84	0.71	0.84	46.0
6	R2	44	1	46	2.3	0.406	18.3	LOS B	3.3	24.0	0.84	0.71	0.84	42.9
Approach		244	10	257	4.1	0.406	14.1	LOS A	3.3	24.0	0.80	0.71	0.80	44.7
North: Wardell Rd														
7	L2	45	4	47	8.9	0.085	15.1	LOS B	0.7	5.0	0.72	0.69	0.72	41.4
8	T1	120	3	126	2.5	0.211	10.9	LOS A	1.9	13.5	0.76	0.61	0.76	43.1
9	R2	2	0	2	0.0	0.211	15.5	LOS B	1.9	13.5	0.76	0.61	0.76	43.8
Approach		167	7	176	4.2	0.211	12.1	LOS A	1.9	13.5	0.75	0.63	0.75	42.7
West: Frazer St														
10	L2	4	0	4	0.0	0.149	14.7	LOS B	1.3	10.0	0.69	0.55	0.69	45.7
11	T1	444	65	467	14.6	0.691	12.7	LOS A	7.6	59.1	0.86	0.78	0.94	46.9
12	R2	32	1	34	3.1	* 0.691	18.8	LOS B	7.6	59.1	0.90	0.84	1.01	43.2
Approach		480	66	505	13.8	0.691	13.1	LOS A	7.6	59.1	0.86	0.78	0.95	46.6
All Vehicles		1327	91	1397	6.9	0.722	14.2	LOS A	7.6	59.1	0.85	0.77	0.93	43.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Wardell Rd												
P1	Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20
East: Frazer St												
P2	Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20
North: Wardell Rd												

MOVEMENT SUMMARY

Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd Future Base (Site Folder: AM)]

Hume Hwy / Chapel Rd / Rookwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	120	5	126	4.2	0.242	43.1	LOS D	6.1	44.0	0.80	0.77	0.80	30.0
2	T1	151	5	159	3.3	* 0.569	55.2	LOS D	9.9	73.2	0.97	0.80	0.97	24.7
3	R2	6	6	6	100.0	0.569	61.8	LOS E	9.9	73.2	0.97	0.80	0.97	26.4
Approach		277	16	292	5.8	0.569	50.1	LOS D	9.9	73.2	0.90	0.78	0.90	27.0
East: Hume Hwy														
4	L2	86	8	91	9.3	0.434	27.1	LOS B	15.6	115.5	0.68	0.64	0.68	38.9
5	T1	1074	67	1131	6.2	0.434	21.0	LOS B	16.1	118.7	0.67	0.61	0.67	35.2
6	R2	30	1	32	3.3	0.207	67.4	LOS E	1.9	13.9	0.97	0.72	0.97	15.1
Approach		1190	76	1253	6.4	0.434	22.6	LOS B	16.1	118.7	0.68	0.61	0.68	34.7
North: Rookwood Rd														
7	L2	34	2	36	5.9	0.131	42.5	LOS C	3.1	22.6	0.78	0.68	0.78	21.2
8	T1	191	12	201	6.3	0.355	41.4	LOS C	8.8	65.1	0.85	0.71	0.85	28.9
9	R2	54	3	57	5.6	* 0.699	78.1	LOS F	3.9	28.6	1.00	0.81	1.18	13.4
Approach		279	17	294	6.1	0.699	48.6	LOS D	8.8	65.1	0.87	0.72	0.90	24.4
West: Hume Hwy														
10	L2	179	18	188	10.1	0.802	33.7	LOS C	37.8	281.8	0.89	0.84	0.89	25.2
11	T1	1911	132	2012	6.9	* 0.802	27.3	LOS B	39.3	291.2	0.88	0.81	0.88	31.3
12	R2	107	9	113	8.4	* 0.775	74.7	LOS F	7.6	57.2	1.00	0.88	1.20	22.4
Approach		2197	159	2313	7.2	0.802	30.1	LOS C	39.3	291.2	0.89	0.82	0.90	30.0
All Vehicles		3943	268	4151	6.8	0.802	30.6	LOS C	39.3	291.2	0.83	0.75	0.83	30.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	225.4	216.0	0.96
North: Rookwood Rd												
P3	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	227.3	218.5	0.96

MOVEMENT SUMMARY

Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd Construction (Site Folder: AM)]

Hume Hwy / Chapel Rd / Rookwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	120	5	126	4.2	0.242	43.1	LOS D	6.1	44.0	0.80	0.77	0.80	30.0
2	T1	151	5	159	3.3	* 0.569	55.2	LOS D	9.9	73.2	0.97	0.80	0.97	24.7
3	R2	6	6	6	100.0	0.569	61.8	LOS E	9.9	73.2	0.97	0.80	0.97	26.4
Approach		277	16	292	5.8	0.569	50.1	LOS D	9.9	73.2	0.90	0.78	0.90	27.0
East: Hume Hwy														
4	L2	86	8	91	9.3	0.434	27.1	LOS B	15.6	115.5	0.68	0.64	0.68	38.9
5	T1	1074	67	1131	6.2	0.434	21.0	LOS B	16.1	118.7	0.67	0.61	0.67	35.2
6	R2	30	1	32	3.3	0.207	67.4	LOS E	1.9	13.9	0.97	0.72	0.97	15.1
Approach		1190	76	1253	6.4	0.434	22.6	LOS B	16.1	118.7	0.68	0.61	0.68	34.7
North: Rookwood Rd														
7	L2	34	2	36	5.9	0.131	42.5	LOS C	3.1	22.6	0.78	0.68	0.78	21.2
8	T1	191	12	201	6.3	0.355	41.4	LOS C	8.8	65.1	0.85	0.71	0.85	28.9
9	R2	54	3	57	5.6	* 0.699	78.1	LOS F	3.9	28.6	1.00	0.81	1.18	13.4
Approach		279	17	294	6.1	0.699	48.6	LOS D	8.8	65.1	0.87	0.72	0.90	24.4
West: Hume Hwy														
10	L2	179	18	188	10.1	0.802	33.7	LOS C	37.8	281.8	0.89	0.84	0.89	25.2
11	T1	1911	132	2012	6.9	* 0.802	27.3	LOS B	39.3	291.2	0.88	0.81	0.88	31.3
12	R2	107	9	113	8.4	* 0.775	74.7	LOS F	7.6	57.2	1.00	0.88	1.20	22.4
Approach		2197	159	2313	7.2	0.802	30.1	LOS C	39.3	291.2	0.89	0.82	0.90	30.0
All Vehicles		3943	268	4151	6.8	0.802	30.6	LOS C	39.3	291.2	0.83	0.75	0.83	30.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	225.4	216.0	0.96
North: Rookwood Rd												
P3	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	227.3	218.5	0.96

MOVEMENT SUMMARY

Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd TTP (Site Folder: AM)]

Hume Hwy / Chapel Rd / Rookwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	130	15	137	11.5	0.275	42.9	LOS D	6.6	50.8	0.81	0.77	0.81	30.2
2	T1	157	11	165	7.0	* 0.610	55.7	LOS D	10.3	78.9	0.98	0.81	0.98	24.5
3	R2	6	6	6	100.0	0.610	62.3	LOS E	10.3	78.9	0.98	0.81	0.98	26.4
Approach		293	32	308	10.9	0.610	50.2	LOS D	10.3	78.9	0.90	0.79	0.90	27.0
East: Hume Hwy														
4	L2	86	8	91	9.3	0.441	27.8	LOS B	15.8	117.3	0.69	0.65	0.69	38.5
5	T1	1074	67	1131	6.2	0.441	21.7	LOS B	16.4	120.6	0.68	0.61	0.68	34.8
6	R2	30	1	32	3.3	0.190	66.1	LOS E	1.9	13.7	0.96	0.72	0.96	15.3
Approach		1190	76	1253	6.4	0.441	23.2	LOS B	16.4	120.6	0.69	0.62	0.69	34.3
North: Rookwood Rd														
7	L2	34	2	36	5.9	0.137	42.6	LOS D	3.2	23.7	0.78	0.68	0.78	21.2
8	T1	197	18	207	9.1	0.373	41.6	LOS C	9.1	68.7	0.85	0.71	0.85	28.8
9	R2	54	3	57	5.6	* 0.699	78.1	LOS F	3.9	28.6	1.00	0.81	1.18	13.4
Approach		285	23	300	8.1	0.699	48.6	LOS D	9.1	68.7	0.87	0.73	0.91	24.5
West: Hume Hwy														
10	L2	179	18	188	10.1	0.816	35.6	LOS C	39.2	292.4	0.91	0.86	0.92	24.3
11	T1	1911	132	2012	6.9	* 0.816	29.1	LOS C	40.4	299.9	0.90	0.83	0.91	30.4
12	R2	115	17	121	14.8	* 0.813	76.0	LOS F	8.3	65.7	1.00	0.91	1.26	22.2
Approach		2205	167	2321	7.6	0.816	32.0	LOS C	40.4	299.9	0.90	0.84	0.93	29.1
All Vehicles		3973	298	4182	7.5	0.816	31.9	LOS C	40.4	299.9	0.84	0.76	0.85	29.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	225.4	216.0	0.96
North: Rookwood Rd												
P3	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	227.3	218.5	0.96

MOVEMENT SUMMARY

Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd Future Base (Site Folder: PM)]

Hume Hwy / Chapel Rd / Rookwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 147 seconds (Site User-Given Phase Times)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	244	10	257	4.1	0.534	53.3	LOS D	16.2	117.5	0.90	0.83	0.90	27.0
2	T1	331	9	348	2.7	* 1.068	151.0	LOS F	40.7	299.6	1.00	1.40	1.77	12.0
3	R2	11	11	12	100.0	1.068	160.9	LOS F	40.7	299.6	1.00	1.42	1.80	13.3
Approach		586	30	617	5.1	1.068	110.5	LOS F	40.7	299.6	0.96	1.16	1.41	16.1
East: Hume Hwy														
4	L2	115	12	121	10.4	0.992	101.4	LOS F	66.6	490.4	1.00	1.19	1.39	19.0
5	T1	1842	92	1939	5.0	0.992	94.8	LOS F	69.4	506.5	1.00	1.21	1.39	14.5
6	R2	52	0	55	0.0	0.241	69.3	LOS E	3.6	25.2	0.94	0.75	0.94	14.8
Approach		2009	104	2115	5.2	0.992	94.5	LOS F	69.4	506.5	1.00	1.20	1.38	14.8
North: Rookwood Rd														
7	L2	20	0	21	0.0	0.271	38.8	LOS C	9.4	67.2	0.73	0.63	0.73	23.8
8	T1	487	10	513	2.1	0.541	36.4	LOS C	18.3	130.3	0.79	0.68	0.79	31.1
9	R2	112	5	118	4.5	0.464	68.9	LOS E	7.9	57.4	0.97	0.79	0.97	14.7
Approach		619	15	652	2.4	0.541	42.4	LOS C	18.3	130.3	0.82	0.70	0.82	27.3
West: Hume Hwy														
10	L2	213	22	224	10.3	* 0.924	70.9	LOS F	51.2	373.7	1.00	1.03	1.19	14.8
11	T1	1610	30	1695	1.9	0.924	63.9	LOS E	54.4	387.2	0.99	1.04	1.18	19.2
12	R2	203	9	214	4.4	* 0.980	111.6	LOS F	19.9	144.7	1.00	1.07	1.55	17.2
Approach		2026	61	2133	3.0	0.980	69.4	LOS E	54.4	387.2	1.00	1.04	1.22	18.5
All Vehicles		5240	210	5516	4.0	1.068	80.4	LOS F	69.4	506.5	0.97	1.07	1.25	17.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	67.8	LOS F	0.2	0.2	0.96	0.96	233.9	216.0	0.92
North: Rookwood Rd												
P3	Full	50	53	67.8	LOS F	0.2	0.2	0.96	0.96	235.8	218.5	0.93
West: Hume Hwy												

MOVEMENT SUMMARY

Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd Construction (Site Folder: PM)]

Hume Hwy / Chapel Rd / Rookwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 147 seconds (Site User-Given Phase Times)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	244	10	257	4.1	0.460	48.9	LOS D	14.7	106.4	0.85	0.81	0.85	28.2
2	T1	331	9	348	2.7	* 1.104	180.8	LOS F	45.6	335.4	1.00	1.52	1.94	10.3
3	R2	11	11	12	100.0	1.104	187.4	LOS F	45.6	335.4	1.00	1.52	1.94	11.7
Approach		586	30	617	5.1	1.104	126.0	LOS F	45.6	335.4	0.94	1.22	1.49	14.5
East: Hume Hwy														
4	L2	115	12	121	10.4	0.992	101.4	LOS F	66.6	490.4	1.00	1.19	1.39	19.0
5	T1	1842	92	1939	5.0	0.992	94.8	LOS F	69.4	506.5	1.00	1.21	1.39	14.5
6	R2	52	0	55	0.0	0.241	69.3	LOS E	3.6	25.2	0.94	0.75	0.94	14.8
Approach		2009	104	2115	5.2	0.992	94.5	LOS F	69.4	506.5	1.00	1.20	1.38	14.8
North: Rookwood Rd														
7	L2	20	0	21	0.0	0.226	38.1	LOS C	7.7	54.9	0.72	0.62	0.72	24.0
8	T1	487	10	513	2.1	0.612	37.0	LOS C	20.5	145.7	0.80	0.69	0.80	30.8
9	R2	112	5	118	4.5	0.464	68.9	LOS E	7.9	57.4	0.97	0.79	0.97	14.7
Approach		619	15	652	2.4	0.612	42.8	LOS D	20.5	145.7	0.83	0.71	0.83	27.2
West: Hume Hwy														
10	L2	213	22	224	10.3	* 0.924	70.9	LOS F	51.2	373.7	1.00	1.03	1.19	14.8
11	T1	1610	30	1695	1.9	0.924	63.9	LOS E	54.4	387.2	0.99	1.04	1.18	19.2
12	R2	203	9	214	4.4	* 0.980	111.6	LOS F	19.9	144.7	1.00	1.07	1.55	17.2
Approach		2026	61	2133	3.0	0.980	69.4	LOS E	54.4	387.2	1.00	1.04	1.22	18.5
All Vehicles		5240	210	5516	4.0	1.104	82.2	LOS F	69.4	506.5	0.97	1.08	1.26	17.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	67.8	LOS F	0.2	0.2	0.96	0.96	233.9	216.0	0.92
North: Rookwood Rd												
P3	Full	50	53	67.8	LOS F	0.2	0.2	0.96	0.96	235.8	218.5	0.93
West: Hume Hwy												

MOVEMENT SUMMARY

Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd TTP (Site Folder: PM)]

Hume Hwy / Chapel Rd / Rookwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 147 seconds (Site User-Given Phase Times)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	254	20	267	7.9	0.497	49.6	LOS D	15.5	116.0	0.87	0.82	0.87	28.1
2	T1	339	17	357	5.0	* 1.153	218.5	LOS F	51.6	386.2	1.00	1.65	2.12	8.7
3	R2	11	11	12	100.0	1.153	225.1	LOS F	51.6	386.2	1.00	1.65	2.12	10.0
Approach		604	48	636	7.9	1.153	147.6	LOS F	51.6	386.2	0.94	1.30	1.60	12.8
East: Hume Hwy														
4	L2	115	12	121	10.4	0.992	101.4	LOS F	66.6	490.4	1.00	1.19	1.39	19.0
5	T1	1842	92	1939	5.0	0.992	94.8	LOS F	69.4	506.5	1.00	1.21	1.39	14.5
6	R2	52	0	55	0.0	0.241	69.3	LOS E	3.6	25.2	0.94	0.75	0.94	14.8
Approach		2009	104	2115	5.2	0.992	94.5	LOS F	69.4	506.5	1.00	1.20	1.38	14.8
North: Rookwood Rd														
7	L2	20	0	21	0.0	0.233	38.3	LOS C	7.9	56.8	0.72	0.62	0.72	24.0
8	T1	495	18	521	3.6	0.633	37.3	LOS C	20.9	150.9	0.81	0.70	0.81	30.7
9	R2	112	5	118	4.5	0.464	68.9	LOS E	7.9	57.4	0.97	0.79	0.97	14.7
Approach		627	23	660	3.7	0.633	42.9	LOS D	20.9	150.9	0.83	0.71	0.83	27.1
West: Hume Hwy														
10	L2	213	22	224	10.3	* 0.926	71.6	LOS F	51.7	377.0	1.00	1.04	1.20	14.7
11	T1	1610	30	1695	1.9	0.926	64.6	LOS E	54.9	390.6	0.99	1.04	1.19	19.0
12	R2	215	21	226	9.8	* 1.095	182.0	LOS F	27.8	211.1	1.00	1.25	1.97	11.6
Approach		2038	73	2145	3.6	1.095	77.7	LOS F	54.9	390.6	0.99	1.07	1.27	17.0
All Vehicles		5278	248	5556	4.7	1.153	88.0	LOS F	69.4	506.5	0.97	1.10	1.30	16.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	67.8	LOS F	0.2	0.2	0.96	0.96	233.9	216.0	0.92
North: Rookwood Rd												
P3	Full	50	53	67.8	LOS F	0.2	0.2	0.96	0.96	235.8	218.5	0.93
West: Hume Hwy												

MOVEMENT SUMMARY

Site: TCS 61 [Hume Hwy / Chapel Rd / Rookwood Rd TTP - Mitigation (Site Folder: PM)]

Hume Hwy / Chapel Rd / Rookwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 152 seconds (Site User-Given Phase Times)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	254	20	267	7.9	0.438	45.5	LOS D	15.0	112.0	0.81	0.81	0.81	29.4
2	T1	339	17	357	5.0	* 1.009	119.7	LOS F	38.6	288.9	1.00	1.28	1.55	14.6
3	R2	11	11	12	100.0	1.009	126.3	LOS F	38.6	288.9	1.00	1.28	1.55	16.3
Approach		604	48	636	7.9	1.009	88.6	LOS F	38.6	288.9	0.92	1.08	1.24	19.0
East: Hume Hwy														
4	L2	115	12	121	10.4	* 0.898	61.2	LOS E	52.5	386.0	1.00	0.99	1.11	26.3
5	T1	1842	92	1939	5.0	0.898	54.5	LOS D	54.2	395.6	0.99	0.99	1.11	21.4
6	R2	52	0	55	0.0	0.213	68.7	LOS E	3.6	25.4	0.93	0.75	0.93	14.9
Approach		2009	104	2115	5.2	0.898	55.3	LOS D	54.2	395.6	0.99	0.98	1.10	21.5
North: Rookwood Rd														
7	L2	20	0	21	0.0	0.272	45.5	LOS D	8.9	64.3	0.78	0.67	0.78	21.4
8	T1	495	18	521	3.6	0.738	45.2	LOS D	23.4	169.0	0.87	0.75	0.87	27.8
9	R2	112	5	118	4.5	* 1.007	128.1	LOS F	11.7	85.3	1.00	1.11	1.72	9.0
Approach		627	23	660	3.7	1.007	60.0	LOS E	23.4	169.0	0.89	0.81	1.02	22.3
West: Hume Hwy														
10	L2	213	22	224	10.3	0.845	51.4	LOS D	44.0	320.7	0.97	0.91	1.01	18.8
11	T1	1610	30	1695	1.9	0.845	44.6	LOS D	46.5	331.0	0.95	0.89	0.99	24.1
12	R2	215	21	226	9.8	* 0.971	110.4	LOS F	21.4	162.7	1.00	1.05	1.50	17.3
Approach		2038	73	2145	3.6	0.971	52.3	LOS D	46.5	331.0	0.96	0.91	1.05	22.3
All Vehicles		5278	248	5556	4.7	1.009	58.5	LOS E	54.2	395.6	0.96	0.95	1.09	21.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	70.3	LOS F	0.2	0.2	0.96	0.96	236.4	216.0	0.91
North: Rookwood Rd												
P3	Full	50	53	70.3	LOS F	0.2	0.2	0.96	0.96	238.3	218.5	0.92
West: Hume Hwy												

MOVEMENT SUMMARY

Site: TCS 67 [Marrickville Rd / Livingstone Rd - Future Base (Site Folder: PM)]

Marrickville Rd / Livingstone Rd - TCS 67

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 42 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Livingstone Rd														
1	L2	42	0	44	0.0	0.107	17.6	LOS B	0.9	6.2	0.74	0.67	0.74	43.6
2	T1	164	3	173	1.8	0.462	13.9	LOS A	3.7	26.5	0.86	0.73	0.86	41.4
3	R2	48	0	51	0.0	0.462	18.7	LOS B	3.7	26.5	0.87	0.73	0.87	38.7
Approach		254	3	267	1.2	0.462	15.4	LOS B	3.7	26.5	0.84	0.72	0.84	41.4
East: Marrickville Rd														
4	L2	149	0	157	0.0	* 0.653	17.8	LOS B	8.6	61.5	0.86	0.79	0.89	40.5
5	T1	568	17	598	3.0	0.653	12.2	LOS A	8.6	61.5	0.87	0.80	0.91	45.1
6	R2	109	2	115	1.8	0.653	18.4	LOS B	7.0	49.9	0.88	0.81	0.94	39.8
Approach		826	19	869	2.3	0.653	14.0	LOS A	8.6	61.5	0.87	0.80	0.91	43.4
North: Livingstone Rd														
7	L2	106	0	112	0.0	0.211	17.4	LOS B	1.8	12.7	0.80	0.74	0.80	37.5
8	T1	260	3	274	1.2	* 0.640	14.8	LOS B	6.3	44.6	0.91	0.82	0.97	41.2
9	R2	53	0	56	0.0	0.640	19.3	LOS B	6.3	44.6	0.91	0.82	0.97	43.3
Approach		419	3	441	0.7	0.640	16.0	LOS B	6.3	44.6	0.88	0.80	0.93	40.7
West: Marrickville Rd														
10	L2	53	0	56	0.0	0.330	15.1	LOS B	3.6	25.9	0.73	0.64	0.73	46.6
11	T1	363	10	382	2.8	0.330	9.9	LOS A	3.6	25.9	0.74	0.64	0.74	47.7
12	R2	20	0	21	0.0	0.330	15.8	LOS B	3.2	22.5	0.75	0.63	0.75	46.5
Approach		436	10	459	2.3	0.330	10.8	LOS A	3.6	25.9	0.74	0.64	0.74	47.5
All Vehicles		1935	35	2037	1.8	0.653	13.9	LOS A	8.6	61.5	0.84	0.75	0.87	43.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Livingstone Rd												
P1	Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	180.7	214.8	1.19
East: Marrickville Rd												
P2	Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	181.0	215.2	1.19

MOVEMENT SUMMARY

**Site: TCS 67 [Marrickville Rd / Livingstone Rd - Construction
(Site Folder: PM)]**

Marrickville Rd / Livingstone Rd - TCS 67

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 42 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Livingstone Rd														
1	L2	42	0	44	0.0	0.107	17.6	LOS B	0.9	6.2	0.74	0.67	0.74	43.6
2	T1	164	3	173	1.8	0.462	13.9	LOS A	3.7	26.5	0.86	0.73	0.86	41.4
3	R2	48	0	51	0.0	0.462	18.7	LOS B	3.7	26.5	0.87	0.73	0.87	38.7
Approach		254	3	267	1.2	0.462	15.4	LOS B	3.7	26.5	0.84	0.72	0.84	41.4
East: Marrickville Rd														
4	L2	149	0	157	0.0	* 0.653	17.8	LOS B	8.6	61.5	0.86	0.79	0.89	40.5
5	T1	568	17	598	3.0	0.653	12.2	LOS A	8.6	61.5	0.87	0.80	0.91	45.1
6	R2	109	2	115	1.8	0.653	18.4	LOS B	7.0	49.9	0.88	0.81	0.94	39.8
Approach		826	19	869	2.3	0.653	14.0	LOS A	8.6	61.5	0.87	0.80	0.91	43.4
North: Livingstone Rd														
7	L2	106	0	112	0.0	0.211	17.4	LOS B	1.8	12.7	0.80	0.74	0.80	37.5
8	T1	260	3	274	1.2	* 0.640	14.8	LOS B	6.3	44.6	0.91	0.82	0.97	41.2
9	R2	53	0	56	0.0	0.640	19.3	LOS B	6.3	44.6	0.91	0.82	0.97	43.3
Approach		419	3	441	0.7	0.640	16.0	LOS B	6.3	44.6	0.88	0.80	0.93	40.7
West: Marrickville Rd														
10	L2	53	0	56	0.0	0.330	15.1	LOS B	3.6	25.9	0.73	0.64	0.73	46.6
11	T1	363	10	382	2.8	0.330	9.9	LOS A	3.6	25.9	0.74	0.64	0.74	47.7
12	R2	20	0	21	0.0	0.330	15.8	LOS B	3.2	22.5	0.75	0.63	0.75	46.5
Approach		436	10	459	2.3	0.330	10.8	LOS A	3.6	25.9	0.74	0.64	0.74	47.5
All Vehicles		1935	35	2037	1.8	0.653	13.9	LOS A	8.6	61.5	0.84	0.75	0.87	43.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Livingstone Rd												
P1	Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	180.7	214.8	1.19
East: Marrickville Rd												
P2	Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	181.0	215.2	1.19

MOVEMENT SUMMARY

Site: TCS 67 [Marrickville Rd / Livingstone Rd - TTP (Site Folder: PM)]

Marrickville Rd / Livingstone Rd - TCS 67

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 42 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Livingstone Rd														
1	L2	42	0	44	0.0	0.118	18.7	LOS B	0.9	6.5	0.77	0.68	0.77	43.2
2	T1	164	3	173	1.8	0.508	15.0	LOS B	3.9	27.5	0.89	0.75	0.89	40.9
3	R2	48	0	51	0.0	0.508	19.7	LOS B	3.9	27.5	0.90	0.75	0.90	38.1
Approach		254	3	267	1.2	0.508	16.5	LOS B	3.9	27.5	0.87	0.74	0.87	40.9
East: Marrickville Rd														
4	L2	149	0	157	0.0	* 0.689	17.9	LOS B	9.4	70.3	0.87	0.82	0.93	40.5
5	T1	618	67	651	10.8	0.689	12.3	LOS A	9.4	70.3	0.87	0.83	0.95	44.9
6	R2	109	2	115	1.8	0.689	18.6	LOS B	7.6	57.0	0.88	0.84	0.98	39.7
Approach		876	69	922	7.9	0.689	14.0	LOS A	9.4	70.3	0.87	0.83	0.95	43.4
North: Livingstone Rd														
7	L2	106	0	112	0.0	0.231	18.3	LOS B	1.9	13.2	0.82	0.74	0.82	37.0
8	T1	260	3	274	1.2	* 0.698	16.7	LOS B	6.8	47.9	0.95	0.88	1.09	40.4
9	R2	53	0	56	0.0	0.698	21.2	LOS B	6.8	47.9	0.95	0.88	1.09	42.4
Approach		419	3	441	0.7	0.698	17.7	LOS B	6.8	47.9	0.91	0.85	1.02	39.9
West: Marrickville Rd														
10	L2	53	0	56	0.0	0.317	14.3	LOS A	3.5	25.3	0.70	0.62	0.70	47.1
11	T1	363	10	382	2.8	0.317	9.5	LOS A	3.5	25.3	0.72	0.63	0.72	48.1
12	R2	20	0	21	0.0	0.317	15.8	LOS B	3.1	21.9	0.74	0.63	0.74	46.6
Approach		436	10	459	2.3	0.317	10.4	LOS A	3.5	25.3	0.72	0.63	0.72	47.8
All Vehicles		1985	85	2089	4.3	0.698	14.3	LOS A	9.4	70.3	0.85	0.78	0.90	42.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Livingstone Rd												
P1	Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	180.7	214.8	1.19
East: Marrickville Rd												
P2	Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	181.0	215.2	1.19

MOVEMENT SUMMARY

Site: TCS 78 [Old Canterbury Road / New Canterbury Road - Future Base (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canterbury Rd														
30	L2	31	1	33	3.2	0.573	6.1	LOS A	1.5	10.8	0.05	0.25	0.05	49.3
31	T1	684	28	720	4.1	0.573	1.7	LOS A	1.5	10.8	0.05	0.25	0.05	50.9
32	R2	885	65	932	7.3	* 0.820	14.6	LOS B	17.8	132.1	0.49	0.74	0.52	39.7
Approach		1600	94	1684	5.9	0.820	8.9	LOS A	17.8	132.1	0.29	0.52	0.31	43.2
East: New Canterbury Rd														
21	L2	309	37	325	12.0	0.267	8.9	LOS A	4.7	36.0	0.36	0.65	0.36	41.2
22	T1	194	4	204	2.1	0.675	39.7	LOS C	8.8	62.7	0.98	0.84	1.04	25.4
23	R2	19	2	20	10.5	0.226	53.2	LOS D	0.9	7.0	0.99	0.69	0.99	24.1
Approach		522	43	549	8.2	0.675	22.0	LOS B	8.8	62.7	0.61	0.72	0.63	33.0
North: Old Canterbury Rd														
24	L2	26	2	27	7.7	0.918	66.4	LOS E	12.2	89.5	1.00	1.14	1.54	23.2
25	T1	404	20	425	5.0	* 0.918	57.2	LOS E	12.2	89.5	1.00	1.14	1.54	19.2
Approach		430	22	453	5.1	0.918	57.7	LOS E	12.2	89.5	1.00	1.14	1.54	19.5
West: Griffiths St														
27	L2	16	2	17	12.5	0.346	50.9	LOS D	4.3	30.9	0.93	0.76	0.93	6.2
28	T1	321	3	338	0.9	* 0.866	47.0	LOS D	12.9	91.3	0.98	0.97	1.23	23.5
29	R2	10	1	11	10.0	0.866	53.7	LOS D	12.9	91.3	1.00	1.05	1.35	16.3
Approach		347	6	365	1.7	0.866	47.3	LOS D	12.9	91.3	0.98	0.96	1.22	21.3
All Vehicles		2899	165	3052	5.7	0.918	23.1	LOS B	17.8	132.1	0.54	0.70	0.66	32.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Canterbury Rd												
P8	Full	7	7	39.2	LOS D	0.0	0.0	0.93	0.93	65.1	33.7	0.52
East: New Canterbury Rd												
P5	Full	12	13	39.2	LOS D	0.0	0.0	0.93	0.93	66.2	35.1	0.53
North: Old Canterbury Rd												

MOVEMENT SUMMARY

Site: TCS 78 [Old Canterbury Road / New Canterbury Road - Construction (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canterbury Rd														
30	L2	31	1	33	3.2	0.598	6.1	LOS A	1.6	11.9	0.05	0.25	0.05	49.2
31	T1	701	45	738	6.4	0.598	1.8	LOS A	1.6	11.9	0.05	0.25	0.05	50.9
32	R2	885	65	932	7.3	* 0.839	16.2	LOS B	20.1	149.5	0.54	0.76	0.58	38.6
Approach		1617	111	1702	6.9	0.839	9.7	LOS A	20.1	149.5	0.32	0.53	0.34	42.5
East: New Canterbury Rd														
21	L2	421	50	443	11.9	0.369	9.7	LOS A	7.3	56.2	0.41	0.67	0.41	40.6
22	T1	263	5	277	1.9	* 0.898	52.3	LOS D	14.4	102.4	1.00	1.11	1.43	22.0
23	R2	19	2	20	10.5	0.251	54.5	LOS D	0.9	7.1	1.00	0.68	1.00	23.8
Approach		703	57	740	8.1	0.898	26.9	LOS B	14.4	102.4	0.64	0.84	0.80	30.7
North: Old Canterbury Rd														
24	L2	26	2	27	7.7	0.908	64.5	LOS E	12.6	94.6	1.00	1.13	1.50	23.6
25	T1	421	37	443	8.8	* 0.908	55.4	LOS D	12.6	94.6	1.00	1.13	1.50	19.6
Approach		447	39	471	8.7	0.908	55.9	LOS D	12.6	94.6	1.00	1.13	1.50	19.9
West: Griffiths St														
27	L2	16	2	17	12.5	0.358	51.0	LOS D	4.5	32.0	0.93	0.76	0.93	6.2
28	T1	321	3	338	0.9	0.894	49.5	LOS D	13.2	93.5	0.98	1.00	1.29	22.8
29	R2	10	1	11	10.0	0.894	57.4	LOS E	13.2	93.5	1.00	1.10	1.43	15.6
Approach		347	6	365	1.7	0.894	49.8	LOS D	13.2	93.5	0.98	0.99	1.28	20.7
All Vehicles		3114	213	3278	6.8	0.908	24.7	LOS B	20.1	149.5	0.56	0.74	0.72	31.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Canterbury Rd												
P8	Full	7	7	39.2	LOS D	0.0	0.0	0.93	0.93	65.1	33.7	0.52
East: New Canterbury Rd												
P5	Full	12	13	39.2	LOS D	0.0	0.0	0.93	0.93	66.2	35.1	0.53
North: Old Canterbury Rd												

MOVEMENT SUMMARY

Site: TCS 78 [Old Canterbury Road / New Canterbury Road - TTP (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canterbury Rd														
30	L2	31	1	33	3.2	0.581	6.1	LOS A	1.7	12.7	0.05	0.25	0.05	49.2
31	T1	701	45	738	6.4	0.581	1.8	LOS A	1.7	12.7	0.05	0.25	0.05	50.9
32	R2	950	130	1000	13.7	* 0.901	19.1	LOS B	27.4	214.4	0.55	0.79	0.63	36.9
Approach		1682	176	1771	10.5	0.901	11.6	LOS A	27.4	214.4	0.33	0.55	0.38	41.0
East: New Canterbury Rd														
21	L2	486	115	512	23.7	0.463	10.2	LOS A	9.8	82.2	0.43	0.69	0.43	39.3
22	T1	263	5	277	1.9	0.928	62.8	LOS E	16.7	118.6	1.00	1.16	1.49	19.7
23	R2	19	2	20	10.5	0.315	61.7	LOS E	1.1	8.1	1.00	0.67	1.00	22.3
Approach		768	122	808	15.9	0.928	29.5	LOS C	16.7	118.6	0.64	0.85	0.81	29.3
North: Old Canterbury Rd														
24	L2	26	2	27	7.7	0.937	76.7	LOS F	14.5	109.4	1.00	1.18	1.56	21.4
25	T1	421	37	443	8.8	* 0.937	66.4	LOS E	14.5	109.4	1.00	1.18	1.56	17.4
Approach		447	39	471	8.7	0.937	67.0	LOS E	14.5	109.4	1.00	1.18	1.56	17.7
West: Griffiths St														
27	L2	16	2	17	12.5	0.389	55.8	LOS D	5.2	37.6	0.94	0.77	0.94	6.1
28	T1	321	3	338	0.9	* 0.974	68.4	LOS E	16.6	117.6	0.98	1.11	1.48	18.9
29	R2	10	1	11	10.0	0.974	82.0	LOS F	16.6	117.6	1.00	1.26	1.70	11.8
Approach		347	6	365	1.7	0.974	68.2	LOS E	16.6	117.6	0.98	1.10	1.46	17.5
All Vehicles		3244	343	3415	10.6	0.974	29.6	LOS C	27.4	214.4	0.57	0.77	0.76	29.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Canterbury Rd												
P8	Full	7	7	43.3	LOS E	0.0	0.0	0.93	0.93	69.2	33.7	0.49
East: New Canterbury Rd												
P5	Full	12	13	44.2	LOS E	0.0	0.0	0.94	0.94	71.2	35.1	0.49
North: Old Canterbury Rd												

MOVEMENT SUMMARY

Site: TCS 78 [Old Canterbury Road / New Canterbury Road - Future Base (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canterbury Rd														
30	L2	23	0	24	0.0	0.553	6.6	LOS A	2.1	15.0	0.09	0.27	0.09	48.5
31	T1	558	11	587	2.0	0.553	2.4	LOS A	2.1	15.0	0.09	0.27	0.09	50.0
32	R2	491	18	517	3.7	* 0.733	27.6	LOS B	14.1	102.0	0.78	0.80	0.80	31.9
Approach		1072	29	1128	2.7	0.733	14.1	LOS A	14.1	102.0	0.40	0.51	0.41	38.4
East: New Canterbury Rd														
21	L2	652	28	686	4.3	0.587	13.9	LOS A	16.7	121.5	0.61	0.76	0.61	38.2
22	T1	441	6	464	1.4	* 0.900	46.6	LOS D	23.9	169.1	1.00	1.13	1.33	23.4
23	R2	32	2	34	6.3	0.200	44.9	LOS D	1.4	10.3	0.93	0.73	0.93	26.2
Approach		1125	36	1184	3.2	0.900	27.6	LOS B	23.9	169.1	0.77	0.90	0.90	30.6
North: Old Canterbury Rd														
24	L2	37	0	39	0.0	0.908	56.5	LOS E	19.6	138.6	1.00	1.14	1.40	24.4
25	T1	659	10	694	1.5	* 0.908	52.0	LOS D	19.6	138.6	1.00	1.14	1.40	20.4
Approach		696	10	733	1.4	0.908	52.2	LOS D	19.6	138.6	1.00	1.14	1.40	20.7
West: Griffiths St														
27	L2	9	0	9	0.0	0.222	40.2	LOS C	4.1	29.1	0.80	0.68	0.80	6.5
28	T1	267	3	281	1.1	0.554	33.1	LOS C	7.7	54.6	0.89	0.74	0.89	27.6
29	R2	20	0	21	0.0	0.554	41.2	LOS C	7.7	54.6	0.96	0.79	0.96	19.9
Approach		296	3	312	1.0	0.554	33.9	LOS C	7.7	54.6	0.89	0.74	0.89	25.3
All Vehicles		3189	78	3357	2.4	0.908	29.0	LOS C	23.9	169.1	0.71	0.81	0.85	29.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Canterbury Rd												
P8	Full	7	7	29.6	LOS C	0.0	0.0	0.81	0.81	55.5	33.7	0.61
East: New Canterbury Rd												
P5	Full	12	13	36.5	LOS D	0.0	0.0	0.90	0.90	63.5	35.1	0.55
North: Old Canterbury Rd												

MOVEMENT SUMMARY

Site: TCS 78 [Old Canterbury Road / New Canterbury Road - Construction (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canterbury Rd														
30	L2	23	0	24	0.0	0.607	7.9	LOS A	4.6	33.8	0.18	0.34	0.18	46.1
31	T1	575	28	605	4.9	0.607	3.7	LOS A	4.6	33.8	0.18	0.34	0.18	48.2
32	R2	491	18	517	3.7	* 0.825	32.9	LOS C	16.4	118.3	0.87	0.85	0.94	29.7
Approach		1089	46	1146	4.2	0.825	16.9	LOS B	16.4	118.3	0.49	0.57	0.52	36.3
East: New Canterbury Rd														
21	L2	703	31	740	4.4	0.645	15.0	LOS B	19.6	142.6	0.66	0.78	0.66	37.5
22	T1	475	7	500	1.5	* 0.898	44.9	LOS D	25.5	180.8	1.00	1.11	1.30	23.9
23	R2	32	2	34	6.3	0.184	43.7	LOS D	1.4	10.2	0.92	0.73	0.92	26.5
Approach		1210	40	1274	3.3	0.898	27.5	LOS B	25.5	180.8	0.80	0.91	0.92	30.6
North: Old Canterbury Rd														
24	L2	37	0	39	0.0	0.902	55.2	LOS D	19.9	143.4	1.00	1.13	1.38	24.7
25	T1	676	27	712	4.0	* 0.902	50.7	LOS D	19.9	143.4	1.00	1.13	1.38	20.7
Approach		713	27	751	3.8	0.902	50.9	LOS D	19.9	143.4	1.00	1.13	1.38	21.0
West: Griffiths St														
27	L2	9	0	9	0.0	0.209	38.6	LOS C	4.0	28.5	0.78	0.67	0.78	6.6
28	T1	267	3	281	1.1	0.521	31.7	LOS C	7.5	53.2	0.87	0.73	0.87	28.1
29	R2	20	0	21	0.0	0.521	40.1	LOS C	7.5	53.2	0.94	0.78	0.94	20.3
Approach		296	3	312	1.0	0.521	32.5	LOS C	7.5	53.2	0.88	0.73	0.88	25.8
All Vehicles		3308	116	3482	3.5	0.902	29.5	LOS C	25.5	180.8	0.75	0.83	0.88	29.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Canterbury Rd												
P8	Full	7	7	28.0	LOS C	0.0	0.0	0.79	0.79	53.9	33.7	0.62
East: New Canterbury Rd												
P5	Full	12	13	35.6	LOS D	0.0	0.0	0.89	0.89	62.6	35.1	0.56
North: Old Canterbury Rd												

MOVEMENT SUMMARY

Site: TCS 78 [Old Canterbury Road / New Canterbury Road - TTP (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Canterbury Rd														
30	L2	23	0	24	0.0	0.581	6.7	LOS A	2.3	16.8	0.08	0.27	0.08	48.5
31	T1	575	28	605	4.9	0.581	2.4	LOS A	2.3	16.8	0.08	0.27	0.08	50.0
32	R2	556	83	585	14.9	* 0.928	40.5	LOS C	24.3	192.2	0.91	0.92	1.09	27.0
Approach		1154	111	1215	9.6	0.928	20.9	LOS B	24.3	192.2	0.48	0.58	0.57	33.9
East: New Canterbury Rd														
21	L2	768	96	808	12.5	0.746	16.8	LOS B	26.2	203.0	0.73	0.81	0.73	35.9
22	T1	475	7	500	1.5	* 0.930	56.4	LOS D	30.2	213.7	1.00	1.18	1.38	21.0
23	R2	32	2	34	6.3	0.215	50.5	LOS D	1.6	11.6	0.95	0.73	0.95	24.7
Approach		1275	105	1342	8.2	0.930	32.4	LOS C	30.2	213.7	0.83	0.95	0.97	28.5
North: Old Canterbury Rd														
24	L2	37	0	39	0.0	0.912	61.3	LOS E	22.1	159.8	1.00	1.14	1.37	23.3
25	T1	676	27	712	4.0	* 0.912	56.8	LOS E	22.1	159.8	1.00	1.14	1.37	19.3
Approach		713	27	751	3.8	0.912	57.0	LOS E	22.1	159.8	1.00	1.14	1.37	19.5
West: Griffiths St														
27	L2	9	0	9	0.0	0.228	42.3	LOS C	4.8	34.1	0.79	0.68	0.79	6.5
28	T1	267	3	281	1.1	0.571	36.6	LOS C	8.3	58.3	0.89	0.74	0.89	26.4
29	R2	20	0	21	0.0	0.571	46.1	LOS D	8.3	58.3	0.96	0.79	0.96	18.4
Approach		296	3	312	1.0	0.571	37.4	LOS C	8.3	58.3	0.89	0.74	0.89	24.3
All Vehicles		3438	246	3619	7.2	0.930	34.1	LOS C	30.2	213.7	0.75	0.85	0.91	27.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Canterbury Rd												
P8	Full	7	7	31.2	LOS D	0.0	0.0	0.79	0.79	57.1	33.7	0.59
East: New Canterbury Rd												
P5	Full	12	13	38.7	LOS D	0.0	0.0	0.88	0.88	65.7	35.1	0.53
North: Old Canterbury Rd												

MOVEMENT SUMMARY

Site: TCS 79 [H.13 Canterbury Road / Beamish Street - Future Base (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 55 seconds (Site Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Bexley Rd														
1	L2	84	8	88	9.5	* 0.535	26.2	LOS B	6.6	48.9	0.94	0.82	0.94	42.4
2	T1	582	26	613	4.5	* 0.713	22.9	LOS B	10.7	77.6	0.97	0.86	1.02	43.5
3	R2	391	13	412	3.3	0.763	30.5	LOS C	11.4	82.0	1.00	0.90	1.15	39.2
Approach		1057	47	1113	4.4	0.763	26.0	LOS B	11.4	82.0	0.98	0.87	1.06	41.7
East: Canterbury Rd														
4	L2	240	15	253	6.3	0.711	25.8	LOS B	11.4	84.4	0.94	0.82	0.97	42.4
5	T1	646	49	680	7.6	* 0.711	20.1	LOS B	11.6	86.7	0.94	0.81	0.97	44.2
Approach		886	64	933	7.2	0.711	21.7	LOS B	11.6	86.7	0.94	0.81	0.97	43.7
North: Beamish St														
7	L2	47	1	49	2.1	0.696	28.0	LOS B	5.8	43.1	0.99	0.91	1.12	42.8
8	T1	396	38	417	9.6	0.773	25.4	LOS B	6.4	48.4	1.00	0.92	1.20	42.1
9	R2	89	13	94	14.6	* 0.440	32.4	LOS C	2.5	20.0	0.98	0.76	0.98	37.8
Approach		532	52	560	9.8	0.773	26.8	LOS B	6.4	48.4	0.99	0.89	1.16	41.4
West: Canterbury Rd														
10	L2	63	10	66	15.9	0.369	16.1	LOS B	8.0	59.3	0.57	0.52	0.57	49.4
11	T1	1150	69	1211	6.0	0.462	10.3	LOS A	11.4	83.6	0.61	0.54	0.61	50.9
12	R2	217	14	228	6.5	0.428	30.1	LOS C	5.8	42.9	0.97	0.78	0.97	38.9
Approach		1430	93	1505	6.5	0.462	13.5	LOS A	11.4	83.6	0.66	0.57	0.66	48.6
All Vehicles		3905	256	4111	6.6	0.773	20.6	LOS B	11.6	86.7	0.86	0.75	0.91	44.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Bexley Rd												
P1	Full	1	1	21.8	LOS C	0.0	0.0	0.89	0.89	49.5	36.0	0.73
East: Canterbury Rd												
P2	Full	21	22	21.8	LOS C	0.0	0.0	0.89	0.89	49.5	36.0	0.73

MOVEMENT SUMMARY

Site: TCS 79 [H.13 Canterbury Road / Beamish Street - Construction (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 55 seconds (Site Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Bexley Rd														
1	L2	84	8	88	9.5	* 0.535	26.2	LOS B	6.6	48.9	0.94	0.82	0.94	42.4
2	T1	582	26	613	4.5	* 0.713	22.9	LOS B	10.7	77.6	0.97	0.86	1.02	43.5
3	R2	391	13	412	3.3	0.763	30.5	LOS C	11.4	82.0	1.00	0.90	1.15	39.2
Approach		1057	47	1113	4.4	0.763	26.0	LOS B	11.4	82.0	0.98	0.87	1.06	41.7
East: Canterbury Rd														
4	L2	240	15	253	6.3	0.711	25.8	LOS B	11.4	84.4	0.94	0.82	0.97	42.4
5	T1	646	49	680	7.6	* 0.711	20.1	LOS B	11.6	86.7	0.94	0.81	0.97	44.2
Approach		886	64	933	7.2	0.711	21.7	LOS B	11.6	86.7	0.94	0.81	0.97	43.7
North: Beamish St														
7	L2	47	1	49	2.1	0.696	28.0	LOS B	5.8	43.1	0.99	0.91	1.12	42.8
8	T1	396	38	417	9.6	0.773	25.4	LOS B	6.4	48.4	1.00	0.92	1.20	42.1
9	R2	89	13	94	14.6	* 0.440	32.4	LOS C	2.5	20.0	0.98	0.76	0.98	37.8
Approach		532	52	560	9.8	0.773	26.8	LOS B	6.4	48.4	0.99	0.89	1.16	41.4
West: Canterbury Rd														
10	L2	63	10	66	15.9	0.369	16.1	LOS B	8.0	59.3	0.57	0.52	0.57	49.4
11	T1	1150	69	1211	6.0	0.462	10.3	LOS A	11.4	83.6	0.61	0.54	0.61	50.9
12	R2	217	14	228	6.5	0.428	30.1	LOS C	5.8	42.9	0.97	0.78	0.97	38.9
Approach		1430	93	1505	6.5	0.462	13.5	LOS A	11.4	83.6	0.66	0.57	0.66	48.6
All Vehicles		3905	256	4111	6.6	0.773	20.6	LOS B	11.6	86.7	0.86	0.75	0.91	44.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Bexley Rd												
P1	Full	1	1	21.8	LOS C	0.0	0.0	0.89	0.89	49.5	36.0	0.73
East: Canterbury Rd												
P2	Full	21	22	21.8	LOS C	0.0	0.0	0.89	0.89	49.5	36.0	0.73

MOVEMENT SUMMARY

**Site: TCS 79 [H.13 Canterbury Road / Beamish Street - TTP
(Site Folder: AM)]**

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Bexley Rd														
1	L2	84	8	88	9.5	* 0.593	25.1	LOS B	6.2	45.9	0.96	0.83	0.96	43.0
2	T1	582	26	613	4.5	* 0.790	22.9	LOS B	10.4	75.9	0.99	0.91	1.13	43.5
3	R2	391	13	412	3.3	0.847	32.3	LOS C	11.4	82.3	1.00	0.98	1.35	38.5
Approach		1057	47	1113	4.4	0.847	26.6	LOS B	11.4	82.3	0.99	0.93	1.20	41.5
East: Canterbury Rd														
4	L2	240	15	253	6.3	0.814	26.6	LOS B	11.4	84.7	0.99	0.89	1.11	42.1
5	T1	650	53	684	8.2	* 0.814	20.9	LOS B	11.6	87.0	0.99	0.89	1.11	43.7
Approach		890	68	937	7.6	0.814	22.4	LOS B	11.6	87.0	0.99	0.89	1.11	43.2
North: Beamish St														
7	L2	85	39	89	45.9	0.685	21.9	LOS B	4.5	37.2	0.98	0.91	1.10	45.1
8	T1	396	38	417	9.6	0.761	21.1	LOS B	6.3	47.8	0.99	0.92	1.19	44.3
9	R2	89	13	94	14.6	* 0.400	29.4	LOS C	2.3	18.0	0.96	0.76	0.96	39.1
Approach		570	90	600	15.8	0.761	22.5	LOS B	6.3	47.8	0.98	0.89	1.14	43.6
West: Canterbury Rd														
10	L2	63	10	66	15.9	0.405	16.2	LOS B	8.0	60.7	0.61	0.55	0.61	49.4
11	T1	1182	101	1244	8.5	0.507	10.3	LOS A	11.4	85.8	0.65	0.57	0.65	50.9
12	R2	217	14	228	6.5	0.454	28.4	LOS B	5.4	39.6	0.97	0.78	0.97	39.7
Approach		1462	125	1539	8.5	0.507	13.3	LOS A	11.4	85.8	0.70	0.60	0.70	48.8
All Vehicles		3979	330	4188	8.3	0.847	20.2	LOS B	11.6	87.0	0.88	0.80	0.99	44.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Bexley Rd												
P1	Full	1	1	19.4	LOS B	0.0	0.0	0.88	0.88	47.1	36.0	0.77
East: Canterbury Rd												
P2	Full	21	22	19.4	LOS B	0.0	0.0	0.88	0.88	47.1	36.0	0.76

MOVEMENT SUMMARY

Site: TCS 79 [H.13 Canterbury Road / Beamish Street - Future Base (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Bexley Rd														
1	L2	85	0	89	0.0	* 0.328	22.2	LOS B	4.2	30.3	0.86	0.76	0.86	44.4
2	T1	401	15	422	3.7	0.437	20.2	LOS B	7.4	53.1	0.89	0.75	0.89	44.8
3	R2	363	5	382	1.4	* 0.834	24.8	LOS B	8.6	61.2	1.00	0.93	1.28	41.8
Approach		849	20	894	2.4	0.834	22.3	LOS B	8.6	61.2	0.93	0.83	1.05	43.4
East: Canterbury Rd														
4	L2	172	4	181	2.3	0.837	28.2	LOS B	17.9	129.5	0.98	0.90	1.08	42.1
5	T1	1015	46	1068	4.5	* 0.837	22.6	LOS B	18.1	131.3	0.98	0.90	1.08	43.0
Approach		1187	50	1249	4.2	0.837	23.4	LOS B	18.1	131.3	0.98	0.90	1.08	42.8
North: Beamish St														
7	L2	45	5	47	11.1	0.705	29.0	LOS C	5.2	38.3	1.00	0.90	1.15	42.2
8	T1	335	14	353	4.2	* 0.783	27.9	LOS B	6.1	43.9	1.00	0.91	1.23	41.0
9	R2	138	10	145	7.2	0.598	34.9	LOS C	4.4	32.4	0.99	0.81	1.05	36.9
Approach		518	29	545	5.6	0.783	29.8	LOS C	6.1	43.9	1.00	0.88	1.17	40.0
West: Canterbury Rd														
10	L2	95	7	100	7.4	0.332	17.3	LOS B	7.9	56.7	0.58	0.54	0.58	48.3
11	T1	989	14	1041	1.4	0.415	11.9	LOSA	11.1	78.8	0.62	0.55	0.62	49.6
12	R2	192	6	202	3.1	0.467	33.9	LOS C	5.8	41.4	0.99	0.78	0.99	37.4
Approach		1276	27	1343	2.1	0.467	15.6	LOS B	11.1	78.8	0.67	0.58	0.67	47.2
All Vehicles		3830	126	4032	3.3	0.837	21.4	LOS B	18.1	131.3	0.87	0.78	0.95	43.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Bexley Rd												
P1	Full	1	1	24.3	LOS C	0.0	0.0	0.90	0.90	52.0	36.0	0.69
East: Canterbury Rd												
P2	Full	21	22	24.3	LOS C	0.0	0.0	0.90	0.90	52.0	36.0	0.69

MOVEMENT SUMMARY

Site: TCS 79 [H.13 Canterbury Road / Beamish Street - Construction (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Bexley Rd														
1	L2	85	0	89	0.0	* 0.328	22.2	LOS B	4.2	30.3	0.86	0.76	0.86	44.4
2	T1	401	15	422	3.7	0.437	20.2	LOS B	7.4	53.1	0.89	0.75	0.89	44.8
3	R2	363	5	382	1.4	* 0.834	24.8	LOS B	8.6	61.2	1.00	0.93	1.28	41.8
Approach		849	20	894	2.4	0.834	22.3	LOS B	8.6	61.2	0.93	0.83	1.05	43.4
East: Canterbury Rd														
4	L2	172	4	181	2.3	0.837	28.2	LOS B	17.9	129.5	0.98	0.90	1.08	42.1
5	T1	1015	46	1068	4.5	* 0.837	22.6	LOS B	18.1	131.3	0.98	0.90	1.08	43.0
Approach		1187	50	1249	4.2	0.837	23.4	LOS B	18.1	131.3	0.98	0.90	1.08	42.8
North: Beamish St														
7	L2	45	5	47	11.1	0.705	29.0	LOS C	5.2	38.3	1.00	0.90	1.15	42.2
8	T1	335	14	353	4.2	* 0.783	27.9	LOS B	6.1	43.9	1.00	0.91	1.23	41.0
9	R2	138	10	145	7.2	0.598	34.9	LOS C	4.4	32.4	0.99	0.81	1.05	36.9
Approach		518	29	545	5.6	0.783	29.8	LOS C	6.1	43.9	1.00	0.88	1.17	40.0
West: Canterbury Rd														
10	L2	95	7	100	7.4	0.332	17.3	LOS B	7.9	56.7	0.58	0.54	0.58	48.3
11	T1	989	14	1041	1.4	0.415	11.9	LOS A	11.1	78.8	0.62	0.55	0.62	49.6
12	R2	192	6	202	3.1	0.467	33.9	LOS C	5.8	41.4	0.99	0.78	0.99	37.4
Approach		1276	27	1343	2.1	0.467	15.6	LOS B	11.1	78.8	0.67	0.58	0.67	47.2
All Vehicles		3830	126	4032	3.3	0.837	21.4	LOS B	18.1	131.3	0.87	0.78	0.95	43.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Bexley Rd												
P1	Full	1	1	24.3	LOS C	0.0	0.0	0.90	0.90	52.0	36.0	0.69
East: Canterbury Rd												
P2	Full	21	22	24.3	LOS C	0.0	0.0	0.90	0.90	52.0	36.0	0.69

MOVEMENT SUMMARY

**Site: TCS 79 [H.13 Canterbury Road / Beamish Street - TTP
(Site Folder: PM)]**

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 55 seconds (Site Optimum Cycle Time - Minimum Delay)

Variable Sequence Analysis applied. The results are given for the selected output sequence.

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Bexley Rd														
1	L2	85	0	89	0.0	* 0.521	25.4	LOS B	4.6	32.9	0.96	0.82	0.96	42.7
2	T1	401	15	422	3.7	* 0.694	24.2	LOS B	7.8	56.5	0.99	0.85	1.05	42.7
3	R2	363	5	382	1.4	0.849	35.1	LOS C	11.6	82.1	1.00	0.97	1.34	37.4
Approach		849	20	894	2.4	0.849	29.0	LOS C	11.6	82.1	0.99	0.90	1.17	40.3
East: Canterbury Rd														
4	L2	172	4	181	2.3	0.741	22.8	LOS B	15.1	111.0	0.91	0.81	0.94	44.8
5	T1	1043	74	1098	7.1	* 0.741	17.2	LOS B	15.1	112.4	0.91	0.80	0.94	46.0
Approach		1215	78	1279	6.4	0.741	18.0	LOS B	15.1	112.4	0.91	0.80	0.94	45.8
North: Beamish St														
7	L2	57	17	60	29.8	0.655	22.8	LOS B	4.1	31.9	0.99	0.87	1.09	45.0
8	T1	335	14	353	4.2	0.728	23.0	LOS B	5.7	41.2	1.00	0.88	1.15	43.3
9	R2	138	10	145	7.2	* 0.640	33.5	LOS C	4.1	30.5	1.00	0.83	1.12	37.5
Approach		530	41	558	7.7	0.728	25.7	LOS B	5.7	41.2	1.00	0.87	1.14	41.8
West: Canterbury Rd														
10	L2	95	7	100	7.4	0.286	13.1	LOS A	5.7	41.1	0.45	0.45	0.45	51.2
11	T1	999	24	1052	2.4	0.358	7.5	LOS A	8.2	58.3	0.49	0.44	0.49	52.9
12	R2	192	6	202	3.1	0.367	29.8	LOS C	5.1	36.5	0.96	0.77	0.96	39.1
Approach		1286	37	1354	2.9	0.367	11.2	LOS A	8.2	58.3	0.56	0.49	0.56	50.1
All Vehicles		3880	176	4084	4.5	0.849	19.2	LOS B	15.1	112.4	0.82	0.73	0.89	45.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Bexley Rd												
P1	Full	1	1	21.8	LOS C	0.0	0.0	0.89	0.89	49.5	36.0	0.73
East: Canterbury Rd												
P2	Full	21	22	21.8	LOS C	0.0	0.0	0.89	0.89	49.5	36.0	0.73

MOVEMENT SUMMARY

Site: TCS 81 [Livingstone Rd / Sydenham Rd / Frazer St - Future Base (Site Folder: AM)]

Livingstone Rd / Sydenham Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Livingstone Rd														
1a	L1	24	2	25	8.3	0.580	24.2	LOS B	8.1	58.0	0.91	0.77	0.91	38.8
2	T1	481	10	506	2.1	0.580	21.2	LOS B	8.1	58.0	0.92	0.77	0.92	36.6
3b	R3	28	0	29	0.0	0.580	27.5	LOS B	6.7	47.4	0.93	0.78	0.93	35.4
Approach		533	12	561	2.3	0.580	21.7	LOS B	8.1	58.0	0.92	0.77	0.92	36.7
SouthEast: Sydenham Rd														
21b	L3	17	1	18	5.9	0.205	16.2	LOS B	3.1	22.3	0.61	0.53	0.61	43.7
22	T1	155	7	163	4.5	0.205	9.8	LOS A	3.1	22.3	0.61	0.53	0.61	47.0
23a	R1	302	31	318	10.3	*0.773	30.8	LOS C	9.9	75.1	0.98	0.95	1.19	26.8
Approach		474	39	499	8.2	0.773	23.4	LOS B	9.9	75.1	0.85	0.80	0.98	33.1
North: Livingstone Rd														
7a	L1	360	37	379	10.3	0.327	9.3	LOS A	4.7	36.1	0.46	0.70	0.46	40.7
8	T1	209	7	220	3.3	*0.753	28.0	LOS B	8.7	62.1	0.99	0.93	1.17	33.0
9b	R3	59	0	62	0.0	0.753	33.2	LOS C	8.7	62.1	0.99	0.93	1.17	32.1
Approach		628	44	661	7.0	0.753	17.8	LOS B	8.7	62.1	0.68	0.80	0.76	36.0
NorthWest: Frazer St														
27b	L3	128	4	135	3.1	0.577	18.1	LOS B	4.3	30.9	0.90	0.78	0.90	42.2
28	T1	213	4	224	1.9	*0.577	20.7	LOS B	4.3	30.9	0.95	0.79	0.98	37.5
Approach		341	8	359	2.3	0.577	19.7	LOS B	4.3	30.9	0.93	0.79	0.95	39.1
All Vehicles		1976	103	2080	5.2	0.773	20.5	LOS B	9.9	75.1	0.83	0.79	0.89	36.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Livingstone Rd												
P1	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	189.9	215.2	1.13
SouthEast: Sydenham Rd												
P5	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	189.9	215.2	1.13
North: Livingstone Rd												

MOVEMENT SUMMARY

Site: TCS 81 [Livingstone Rd / Sydenham Rd / Frazer St - Construction (Site Folder: AM)]

Livingstone Rd / Sydenham Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Livingstone Rd														
1a	L1	24	2	25	8.3	0.580	24.2	LOS B	8.1	58.0	0.91	0.77	0.91	38.8
2	T1	481	10	506	2.1	0.580	21.2	LOS B	8.1	58.0	0.92	0.77	0.92	36.6
3b	R3	28	0	29	0.0	0.580	27.5	LOS B	6.7	47.4	0.93	0.78	0.93	35.4
Approach		533	12	561	2.3	0.580	21.7	LOS B	8.1	58.0	0.92	0.77	0.92	36.7
SouthEast: Sydenham Rd														
21b	L3	17	1	18	5.9	0.205	16.2	LOS B	3.1	22.3	0.61	0.53	0.61	43.7
22	T1	155	7	163	4.5	0.205	9.8	LOS A	3.1	22.3	0.61	0.53	0.61	47.0
23a	R1	302	31	318	10.3	* 0.773	30.8	LOS C	9.9	75.1	0.98	0.95	1.19	26.8
Approach		474	39	499	8.2	0.773	23.4	LOS B	9.9	75.1	0.85	0.80	0.98	33.1
North: Livingstone Rd														
7a	L1	360	37	379	10.3	0.327	9.3	LOS A	4.7	36.1	0.46	0.70	0.46	40.7
8	T1	209	7	220	3.3	* 0.753	28.0	LOS B	8.7	62.1	0.99	0.93	1.17	33.0
9b	R3	59	0	62	0.0	0.753	33.2	LOS C	8.7	62.1	0.99	0.93	1.17	32.1
Approach		628	44	661	7.0	0.753	17.8	LOS B	8.7	62.1	0.68	0.80	0.76	36.0
NorthWest: Frazer St														
27b	L3	128	4	135	3.1	0.577	18.1	LOS B	4.3	30.9	0.90	0.78	0.90	42.2
28	T1	213	4	224	1.9	* 0.577	20.7	LOS B	4.3	30.9	0.95	0.79	0.98	37.5
Approach		341	8	359	2.3	0.577	19.7	LOS B	4.3	30.9	0.93	0.79	0.95	39.1
All Vehicles		1976	103	2080	5.2	0.773	20.5	LOS B	9.9	75.1	0.83	0.79	0.89	36.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Livingstone Rd												
P1	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	189.9	215.2	1.13
SouthEast: Sydenham Rd												
P5	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	189.9	215.2	1.13
North: Livingstone Rd												

MOVEMENT SUMMARY

**Site: TCS 81 [Livingstone Rd / Sydenham Rd / Frazer St - TTP
(Site Folder: AM)]**

Livingstone Rd / Sydenham Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Livingstone Rd														
1a	L1	24	2	25	8.3	0.676	24.1	LOS B	7.4	53.0	0.96	0.86	1.05	38.9
2	T1	481	10	506	2.1	0.676	20.8	LOS B	7.4	53.0	0.96	0.86	1.06	36.8
3b	R3	28	0	29	0.0	0.676	26.8	LOS B	6.2	44.3	0.97	0.87	1.08	35.7
Approach		533	12	561	2.3	0.676	21.3	LOS B	7.4	53.0	0.96	0.86	1.06	36.8
SouthEast: Sydenham Rd														
21b	L3	17	1	18	5.9	0.207	14.7	LOS B	2.6	18.8	0.61	0.53	0.61	44.7
22	T1	155	7	163	4.5	0.207	8.3	LOS A	2.6	18.8	0.61	0.53	0.61	48.5
23a	R1	302	31	318	10.3	* 0.879	35.0	LOS C	9.8	74.9	1.00	1.11	1.56	25.0
Approach		474	39	499	8.2	0.879	25.6	LOS B	9.8	74.9	0.86	0.90	1.22	31.9
North: Livingstone Rd														
7a	L1	360	37	379	10.3	0.363	10.3	LOS A	4.8	36.5	0.55	0.73	0.55	39.6
8	T1	209	7	220	3.3	* 0.883	32.7	LOS C	8.8	63.1	1.00	1.10	1.62	31.1
9b	R3	59	0	62	0.0	0.883	37.9	LOS C	8.8	63.1	1.00	1.10	1.62	30.0
Approach		628	44	661	7.0	0.883	20.3	LOS B	8.8	63.1	0.74	0.89	1.00	34.4
NorthWest: Frazer St														
27b	L3	128	4	135	3.1	0.703	19.1	LOS B	5.0	39.1	0.96	0.87	1.10	41.6
28	T1	270	61	284	22.6	* 0.703	19.1	LOS B	5.0	39.1	0.98	0.87	1.17	38.5
Approach		398	65	419	16.3	0.703	19.1	LOS B	5.0	39.1	0.97	0.87	1.15	39.4
All Vehicles		2033	160	2140	7.9	0.883	21.6	LOS B	9.8	74.9	0.87	0.88	1.10	35.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Livingstone Rd												
P1	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	184.9	215.2	1.16
SouthEast: Sydenham Rd												
P5	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	184.9	215.2	1.16
North: Livingstone Rd												

MOVEMENT SUMMARY

Site: TCS 86 [New Canterbury Road / Marrickville Road - Future Base (Site Folder: PM)]

New Canterbury Road / Marrickville Road

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: New Canterbury Rd														
10	L2	6	1	6	16.7	0.461	6.7	LOS A	2.2	15.6	0.08	0.08	0.08	48.8
11	T1	595	13	626	2.2	0.461	1.0	LOS A	2.2	15.6	0.08	0.08	0.08	56.0
12	R2	211	5	222	2.4	* 0.612	45.7	LOS D	9.7	69.5	0.93	0.81	0.93	22.5
Approach		812	19	855	2.3	0.612	12.7	LOS A	9.7	69.5	0.30	0.27	0.30	33.5
East: Marrickville Rd														
1	L2	336	14	354	4.2	0.609	26.0	LOS B	12.5	90.4	0.77	0.77	0.77	27.4
2	T1	64	0	67	0.0	0.595	46.5	LOS D	6.0	42.1	0.99	0.81	1.01	24.0
3	R2	54	0	57	0.0	* 0.595	49.9	LOS D	6.0	42.1	0.99	0.81	1.01	21.5
Approach		454	14	478	3.1	0.609	31.7	LOS C	12.5	90.4	0.83	0.78	0.83	26.0
North: New Canterbury Rd														
4	L2	75	0	79	0.0	* 0.637	41.2	LOS C	24.3	172.8	1.00	0.89	1.00	25.1
5	T1	943	22	993	2.3	0.637	35.4	LOS C	24.8	177.3	1.00	0.89	1.00	17.9
6	R2	1	1	1	100.0	0.637	41.8	LOS C	24.8	177.3	1.00	0.89	1.00	21.4
Approach		1019	23	1073	2.3	0.637	35.8	LOS C	24.8	177.3	1.00	0.89	1.00	18.8
West: Dulwich St														
7	L2	17	0	18	0.0	0.088	48.8	LOS D	0.8	5.6	0.93	0.69	0.93	17.9
8	T1	60	7	63	11.7	0.264	43.0	LOS D	3.0	22.6	0.92	0.73	0.92	25.0
9	R2	3	0	3	0.0	0.264	46.3	LOS D	3.0	22.6	0.92	0.73	0.92	18.9
Approach		80	7	84	8.8	0.264	44.4	LOS D	3.0	22.6	0.93	0.72	0.93	23.7
All Vehicles		2365	63	2489	2.7	0.637	27.4	LOS B	24.8	177.3	0.72	0.65	0.72	24.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: New Canterbury Rd												
P4	Full	20	21	40.5	LOS E	0.1	0.1	0.90	0.90	66.3	33.5	0.51
East: Marrickville Rd												
P1	Full	18	19	18.0	LOS B	0.0	0.0	0.60	0.60	44.2	34.0	0.77

MOVEMENT SUMMARY

Site: TCS 86 [New Canterbury Road / Marrickville Road - Construction (Site Folder: PM)]

New Canterbury Road / Marrickville Road

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: New Canterbury Rd														
10	L2	6	1	6	16.7	0.461	6.7	LOS A	2.2	15.6	0.08	0.08	0.08	48.8
11	T1	595	13	626	2.2	0.461	1.0	LOS A	2.2	15.6	0.08	0.08	0.08	56.0
12	R2	211	5	222	2.4	* 0.612	45.7	LOS D	9.7	69.5	0.93	0.81	0.93	22.5
Approach		812	19	855	2.3	0.612	12.7	LOS A	9.7	69.5	0.30	0.27	0.30	33.5
East: Marrickville Rd														
1	L2	336	14	354	4.2	0.609	26.0	LOS B	12.5	90.4	0.77	0.77	0.77	27.4
2	T1	64	0	67	0.0	0.595	46.5	LOS D	6.0	42.1	0.99	0.81	1.01	24.0
3	R2	54	0	57	0.0	* 0.595	49.9	LOS D	6.0	42.1	0.99	0.81	1.01	21.5
Approach		454	14	478	3.1	0.609	31.7	LOS C	12.5	90.4	0.83	0.78	0.83	26.0
North: New Canterbury Rd														
4	L2	75	0	79	0.0	* 0.637	41.2	LOS C	24.3	172.8	1.00	0.89	1.00	25.1
5	T1	943	22	993	2.3	0.637	35.4	LOS C	24.8	177.3	1.00	0.89	1.00	17.9
6	R2	1	1	1	100.0	0.637	41.8	LOS C	24.8	177.3	1.00	0.89	1.00	21.4
Approach		1019	23	1073	2.3	0.637	35.8	LOS C	24.8	177.3	1.00	0.89	1.00	18.8
West: Dulwich St														
7	L2	17	0	18	0.0	0.088	48.8	LOS D	0.8	5.6	0.93	0.69	0.93	17.9
8	T1	60	7	63	11.7	0.264	43.0	LOS D	3.0	22.6	0.92	0.73	0.92	25.0
9	R2	3	0	3	0.0	0.264	46.3	LOS D	3.0	22.6	0.92	0.73	0.92	18.9
Approach		80	7	84	8.8	0.264	44.4	LOS D	3.0	22.6	0.93	0.72	0.93	23.7
All Vehicles		2365	63	2489	2.7	0.637	27.4	LOS B	24.8	177.3	0.72	0.65	0.72	24.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: New Canterbury Rd												
P4	Full	20	21	40.5	LOS E	0.1	0.1	0.90	0.90	66.3	33.5	0.51
East: Marrickville Rd												
P1	Full	18	19	18.0	LOS B	0.0	0.0	0.60	0.60	44.2	34.0	0.77

MOVEMENT SUMMARY

**Site: TCS 86 [New Canterbury Road / Marrickville Road - TTP
(Site Folder: PM)]**

New Canterbury Road / Marrickville Road

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: New Canterbury Rd														
10	L2	6	1	6	16.7	0.490	7.1	LOS A	3.1	22.7	0.11	0.10	0.11	48.0
11	T1	610	28	642	4.6	0.490	1.5	LOS A	3.1	22.7	0.11	0.10	0.11	54.6
12	R2	211	5	222	2.4	0.532	42.6	LOS D	9.1	65.3	0.88	0.80	0.88	23.2
Approach		827	34	871	4.1	0.532	12.0	LOS A	9.1	65.3	0.30	0.28	0.30	34.2
East: Marrickville Rd														
1	L2	386	64	406	16.6	* 0.689	24.7	LOS B	14.4	115.3	0.78	0.78	0.78	27.7
2	T1	64	0	67	0.0	0.553	45.1	LOS D	5.9	41.3	0.98	0.79	0.98	24.3
3	R2	54	0	57	0.0	0.553	48.5	LOS D	5.9	41.3	0.98	0.79	0.98	21.8
Approach		504	64	531	12.7	0.689	29.8	LOS C	14.4	115.3	0.83	0.78	0.83	26.4
North: New Canterbury Rd														
4	L2	75	0	79	0.0	* 0.700	44.4	LOS D	24.7	175.8	1.00	0.89	1.00	24.2
5	T1	943	22	993	2.3	0.700	38.6	LOS C	25.3	180.9	1.00	0.89	1.00	16.8
6	R2	1	1	1	100.0	0.700	45.1	LOS D	25.3	180.9	1.00	0.89	1.00	20.3
Approach		1019	23	1073	2.3	0.700	39.1	LOS C	25.3	180.9	1.00	0.89	1.00	17.7
West: Dulwich St														
7	L2	17	0	18	0.0	0.080	47.6	LOS D	0.8	5.6	0.92	0.69	0.92	18.2
8	T1	60	7	63	11.7	0.248	42.0	LOS C	2.9	22.3	0.91	0.73	0.91	25.3
9	R2	3	0	3	0.0	0.248	45.2	LOS D	2.9	22.3	0.91	0.73	0.91	19.2
Approach		80	7	84	8.8	0.248	43.3	LOS D	2.9	22.3	0.91	0.72	0.91	23.9
All Vehicles		2430	128	2558	5.3	0.700	28.1	LOS B	25.3	180.9	0.72	0.65	0.72	24.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: New Canterbury Rd												
P4	Full	20	21	39.6	LOS D	0.1	0.1	0.89	0.89	65.4	33.5	0.51
East: Marrickville Rd												
P1	Full	18	19	20.5	LOS C	0.0	0.0	0.64	0.64	46.7	34.0	0.73

MOVEMENT SUMMARY

**Site: TCS 162 [Canterbury Rd / Burwood Rd - Future Base
(Site Folder: PM)]**

Canterbury Rd / Burwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Canterbury Rd														
5	T1	1229	65	1294	5.3	0.759	5.1	LOS A	13.0	95.4	0.28	0.29	0.29	53.6
6	R2	213	15	224	7.0	* 0.759	27.4	LOS B	13.0	95.4	0.89	0.97	0.97	38.0
Approach		1442	80	1518	5.5	0.759	8.4	LOS A	13.0	95.4	0.37	0.39	0.39	50.2
North: Burwood Rd														
7	L2	91	9	96	9.9	0.136	18.4	LOS B	2.0	15.5	0.65	0.70	0.65	40.1
9	R2	153	4	161	2.6	* 1.037	97.1	LOS F	10.2	72.8	1.00	1.43	2.49	20.1
Approach		244	13	257	5.3	1.037	67.8	LOS E	10.2	72.8	0.87	1.16	1.80	24.7
West: Canterbury Rd														
10	L2	60	0	63	0.0	* 0.886	32.5	LOS C	25.1	178.7	0.94	1.00	1.16	36.7
11	T1	1256	25	1322	2.0	0.886	26.8	LOS B	25.8	183.6	0.94	1.00	1.16	38.1
Approach		1316	25	1385	1.9	0.886	27.0	LOS B	25.8	183.6	0.94	1.00	1.16	38.0
All Vehicles		3002	118	3160	3.9	1.037	21.4	LOS B	25.8	183.6	0.66	0.72	0.84	40.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: Canterbury Rd												
P2	Full	14	15	28.4	LOS C	0.0	0.0	0.90	0.90	53.8	33.0	0.61
North: Burwood Rd												
P3	Full	1	1	17.2	LOS B	0.0	0.0	0.70	0.70	45.6	37.0	0.81
West: Canterbury Rd												
P4	Full	20	21	28.4	LOS C	0.0	0.0	0.90	0.90	53.8	33.0	0.61
All Pedestrians		35	37	28.1	LOS C	0.0	0.0	0.89	0.89	53.5	33.1	0.62

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

**Site: TCS 162 [Canterbury Rd / Burwood Rd - Construction
(Site Folder: PM)]**

Canterbury Rd / Burwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Canterbury Rd														
5	T1	1229	65	1294	5.3	0.759	5.1	LOS A	13.0	95.4	0.28	0.29	0.29	53.6
6	R2	213	15	224	7.0	* 0.759	27.4	LOS B	13.0	95.4	0.89	0.97	0.97	38.0
Approach		1442	80	1518	5.5	0.759	8.4	LOS A	13.0	95.4	0.37	0.39	0.39	50.2
North: Burwood Rd														
7	L2	91	9	96	9.9	0.136	18.4	LOS B	2.0	15.5	0.65	0.70	0.65	40.1
9	R2	153	4	161	2.6	* 1.037	97.1	LOS F	10.2	72.8	1.00	1.43	2.49	20.1
Approach		244	13	257	5.3	1.037	67.8	LOS E	10.2	72.8	0.87	1.16	1.80	24.7
West: Canterbury Rd														
10	L2	60	0	63	0.0	* 0.886	32.5	LOS C	25.1	178.7	0.94	1.00	1.16	36.7
11	T1	1256	25	1322	2.0	0.886	26.8	LOS B	25.8	183.6	0.94	1.00	1.16	38.1
Approach		1316	25	1385	1.9	0.886	27.0	LOS B	25.8	183.6	0.94	1.00	1.16	38.0
All Vehicles		3002	118	3160	3.9	1.037	21.4	LOS B	25.8	183.6	0.66	0.72	0.84	40.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
East: Canterbury Rd												
P2	Full	14	15	28.4	LOS C	0.0	0.0	0.90	0.90	53.8	33.0	0.61
North: Burwood Rd												
P3	Full	1	1	17.2	LOS B	0.0	0.0	0.70	0.70	45.6	37.0	0.81
West: Canterbury Rd												
P4	Full	20	21	28.4	LOS C	0.0	0.0	0.90	0.90	53.8	33.0	0.61
All Pedestrians		35	37	28.1	LOS C	0.0	0.0	0.89	0.89	53.5	33.1	0.62

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 162 [Canterbury Rd / Burwood Rd - TTP (Site Folder: PM)]

Canterbury Rd / Burwood Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Canterbury Rd														
5	T1	1229	65	1294	5.3	0.720	5.9	LOS A	19.7	151.8	0.20	0.22	0.20	52.8
6	R2	241	43	254	17.8	* 0.720	36.6	LOS C	19.7	151.8	0.83	0.97	0.83	34.2
Approach		1470	108	1547	7.3	0.720	11.0	LOS A	19.7	151.8	0.31	0.35	0.31	48.0
North: Burwood Rd														
7	L2	101	19	106	18.8	0.151	26.8	LOS B	3.9	31.7	0.62	0.71	0.62	36.2
9	R2	153	4	161	2.6	* 0.889	79.5	LOS F	11.6	82.9	1.00	0.98	1.38	22.8
Approach		254	23	267	9.1	0.889	58.5	LOS E	11.6	82.9	0.85	0.87	1.08	26.8
West: Canterbury Rd														
10	L2	60	0	63	0.0	* 0.803	32.9	LOS C	33.4	237.2	0.83	0.77	0.84	36.5
11	T1	1256	25	1322	2.0	0.803	27.3	LOS B	33.8	240.9	0.83	0.76	0.83	37.8
Approach		1316	25	1385	1.9	0.803	27.6	LOS B	33.8	240.9	0.83	0.76	0.83	37.7
All Vehicles		3040	156	3200	5.1	0.889	22.1	LOS B	33.8	240.9	0.58	0.57	0.60	40.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: Canterbury Rd												
P2	Full	14	15	55.4	LOS E	0.1	0.1	0.92	0.92	80.8	33.0	0.41
North: Burwood Rd												
P3	Full	1	1	24.0	LOS C	0.0	0.0	0.61	0.61	52.5	37.0	0.71
West: Canterbury Rd												
P4	Full	20	21	55.4	LOS E	0.1	0.1	0.92	0.92	80.8	33.0	0.41
All Pedestrians		35	37	54.5	LOS E	0.1	0.1	0.91	0.91	80.0	33.1	0.41

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 382 [King Georges Rd / The Boulevard - Future Base (Site Folder: AM)]

King Georges Rd / The Boulevard

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: King Georges Rd														
1	L2	19	2	20	10.5	* 0.821	31.3	LOS C	50.1	375.5	0.86	0.80	0.86	37.8
2	T1	2500	202	2632	8.1	0.821	25.5	LOS B	50.3	376.8	0.86	0.80	0.86	36.8
Approach		2519	204	2652	8.1	0.821	25.6	LOS B	50.3	376.8	0.86	0.80	0.86	36.8
East: The Boulevard														
4	L2	9	1	9	11.1	0.315	59.9	LOS E	7.2	51.1	0.90	0.73	0.90	27.8
5	T1	100	1	105	1.0	0.315	55.3	LOS D	7.2	51.1	0.90	0.73	0.90	25.0
6	R2	114	1	120	0.9	* 0.815	85.1	LOS F	9.4	66.2	1.00	0.91	1.23	16.2
Approach		223	3	235	1.3	0.815	70.7	LOS F	9.4	66.2	0.95	0.82	1.07	20.4
North: King Georges Rd														
7	L2	106	2	112	1.9	0.707	20.7	LOS B	35.3	266.6	0.63	0.62	0.63	36.8
8	T1	2289	232	2409	10.1	0.707	15.5	LOS B	38.0	288.7	0.66	0.62	0.66	43.2
9	R2	38	1	40	2.6	* 0.312	59.5	LOS E	2.8	19.8	0.92	0.79	0.92	20.2
Approach		2433	235	2561	9.7	0.707	16.5	LOS B	38.0	288.7	0.66	0.62	0.66	42.3
West: The Boulevard														
10	L2	130	3	137	2.3	0.390	61.6	LOS E	8.8	62.6	0.92	0.79	0.92	19.4
11	T1	136	2	143	1.5	* 0.656	70.6	LOS F	10.3	73.2	1.00	0.82	1.02	22.0
Approach		266	5	280	1.9	0.656	66.2	LOS E	10.3	73.2	0.96	0.81	0.97	20.9
All Vehicles		5441	447	5727	8.2	0.821	25.3	LOS B	50.3	376.8	0.78	0.72	0.79	36.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: King Georges Rd												
P1	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	243.5	225.3	0.93
East: The Boulevard												
P2	Full	50	53	65.5	LOS F	0.2	0.2	0.94	0.94	231.0	215.2	0.93
North: King Georges Rd												
P3	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	244.2	226.1	0.93

MOVEMENT SUMMARY

Site: TCS 382 [King Georges Rd / The Boulevard - Construction (Site Folder: AM)]

King Georges Rd / The Boulevard

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: King Georges Rd														
1	L2	27	10	28	37.0	* 0.840	32.8	LOS C	51.6	390.0	0.89	0.83	0.89	37.0
2	T1	2508	210	2640	8.4	0.840	26.7	LOS B	52.3	392.1	0.89	0.83	0.89	36.2
Approach		2535	220	2668	8.7	0.840	26.7	LOS B	52.3	392.1	0.89	0.83	0.89	36.2
East: The Boulevard														
4	L2	11	3	12	27.3	0.326	60.2	LOS E	7.3	52.9	0.90	0.73	0.90	27.6
5	T1	100	1	105	1.0	0.326	55.5	LOS D	7.3	52.9	0.90	0.73	0.90	24.9
6	R2	114	1	120	0.9	* 0.815	85.1	LOS F	9.4	66.2	1.00	0.91	1.23	16.2
Approach		225	5	237	2.2	0.815	70.7	LOS F	9.4	66.2	0.95	0.82	1.07	20.4
North: King Georges Rd														
7	L2	106	2	112	1.9	0.714	21.4	LOS B	36.1	272.1	0.64	0.63	0.64	36.4
8	T1	2289	232	2409	10.1	0.714	16.2	LOS B	38.7	294.7	0.67	0.63	0.67	42.7
9	R2	38	1	40	2.6	* 0.314	62.4	LOS E	2.8	20.1	0.93	0.79	0.93	19.6
Approach		2433	235	2561	9.7	0.714	17.1	LOS B	38.7	294.7	0.67	0.63	0.67	41.8
West: The Boulevard														
10	L2	138	11	145	8.0	0.526	61.4	LOS E	9.3	69.9	0.92	0.79	0.92	19.3
11	T1	136	2	143	1.5	* 0.827	75.4	LOS F	10.8	76.9	1.00	0.95	1.23	21.2
Approach		274	13	288	4.7	0.827	68.3	LOS E	10.8	76.9	0.96	0.87	1.08	20.4
All Vehicles		5467	473	5755	8.7	0.840	26.4	LOS B	52.3	392.1	0.80	0.74	0.81	35.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: King Georges Rd												
P1	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	243.5	225.3	0.93
East: The Boulevard												
P2	Full	50	53	65.5	LOS F	0.2	0.2	0.94	0.94	231.0	215.2	0.93
North: King Georges Rd												
P3	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	244.2	226.1	0.93

MOVEMENT SUMMARY

Site: TCS 382 [King Georges Rd / The Boulevard - TTP (Site Folder: AM)]

King Georges Rd / The Boulevard

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: King Georges Rd														
1	L2	27	10	28	37.0	0.960	72.6	LOS F	78.6	594.0	1.00	1.10	1.22	25.3
2	T1	2508	210	2640	8.4	*0.960	66.2	LOS E	79.4	595.8	1.00	1.10	1.22	22.8
Approach		2535	220	2668	8.7	0.960	66.3	LOS E	79.4	595.8	1.00	1.10	1.22	22.8
East: The Boulevard														
4	L2	11	3	12	27.3	0.277	49.9	LOS D	7.4	53.3	0.82	0.68	0.82	30.2
5	T1	113	1	119	0.9	0.277	45.2	LOS D	7.4	53.3	0.82	0.68	0.82	27.5
6	R2	114	1	120	0.9	*0.889	91.5	LOS F	9.8	69.4	1.00	0.99	1.38	15.4
Approach		238	5	251	2.1	0.889	67.6	LOS E	9.8	69.4	0.91	0.83	1.09	21.1
North: King Georges Rd														
7	L2	106	2	112	1.9	0.802	29.2	LOS C	44.1	332.8	0.79	0.75	0.79	31.9
8	T1	2289	232	2409	10.1	0.802	24.2	LOS B	47.4	360.4	0.82	0.76	0.82	37.5
9	R2	38	1	40	2.6	*0.321	76.5	LOS F	2.9	21.0	0.98	0.74	0.98	17.2
Approach		2433	235	2561	9.7	0.802	25.2	LOS B	47.4	360.4	0.82	0.76	0.82	36.7
West: The Boulevard														
10	L2	138	11	145	8.0	0.407	50.0	LOS D	8.3	62.1	0.83	0.77	0.83	21.8
11	T1	206	2	217	1.0	*0.976	106.3	LOS F	20.7	145.8	1.00	1.22	1.56	17.2
Approach		344	13	362	3.8	0.976	83.8	LOS F	20.7	145.8	0.93	1.04	1.27	18.4
All Vehicles		5550	473	5842	8.5	0.976	49.4	LOS D	79.4	595.8	0.91	0.94	1.04	26.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: King Georges Rd												
P1	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	243.5	225.3	0.93
East: The Boulevard												
P2	Full	50	53	65.5	LOS F	0.2	0.2	0.94	0.94	231.0	215.2	0.93
North: King Georges Rd												
P3	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	244.2	226.1	0.93

MOVEMENT SUMMARY

Site: TCS 382 [King Georges Rd / The Boulevard - Future Base (Site Folder: PM)]

King Georges Rd / The Boulevard

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: King Georges Rd														
1	L2	30	0	32	0.0	* 0.872	42.3	LOS C	56.4	416.1	0.95	0.90	0.98	33.7
2	T1	2407	159	2534	6.6	0.872	36.0	LOS C	56.5	418.1	0.95	0.90	0.98	31.8
Approach		2437	159	2565	6.5	0.872	36.1	LOS C	56.5	418.1	0.95	0.90	0.98	31.8
East: The Boulevard														
4	L2	27	0	28	0.0	0.701	55.7	LOS D	24.8	175.1	0.95	0.83	0.95	29.0
5	T1	341	4	359	1.2	0.877	51.9	LOS D	24.8	175.1	0.96	0.83	0.96	25.8
6	R2	200	1	211	0.5	* 0.877	84.2	LOS F	17.5	122.8	1.00	0.97	1.26	16.3
Approach		568	5	598	0.9	0.877	63.4	LOS E	24.8	175.1	0.97	0.88	1.07	22.3
North: King Georges Rd														
7	L2	165	1	174	0.6	0.809	27.0	LOS B	51.7	371.5	0.81	0.78	0.81	32.9
8	T1	2513	92	2645	3.7	0.809	21.0	LOS B	52.0	375.7	0.80	0.75	0.80	39.3
9	R2	93	1	98	1.1	* 0.590	41.4	LOS C	4.7	33.1	1.00	0.82	1.00	24.8
Approach		2771	94	2917	3.4	0.809	22.0	LOS B	52.0	375.7	0.80	0.75	0.80	38.4
West: The Boulevard														
10	L2	183	0	193	0.0	0.741	50.2	LOS D	11.0	76.7	1.00	0.85	1.07	21.9
11	T1	145	1	153	0.7	* 0.695	71.4	LOS F	11.1	78.4	1.00	0.84	1.05	21.9
Approach		328	1	345	0.3	0.741	59.6	LOS E	11.1	78.4	1.00	0.84	1.06	21.9
All Vehicles		6104	259	6425	4.2	0.877	33.5	LOS C	56.5	418.1	0.89	0.83	0.91	32.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: King Georges Rd												
P1	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	243.5	225.3	0.93
East: The Boulevard												
P2	Full	50	53	65.5	LOS F	0.2	0.2	0.94	0.94	231.0	215.2	0.93
North: King Georges Rd												
P3	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	244.2	226.1	0.93

MOVEMENT SUMMARY

Site: TCS 382 [King Georges Rd / The Boulevard - Construction (Site Folder: PM)]

King Georges Rd / The Boulevard

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: King Georges Rd														
1	L2	38	8	40	21.1	0.914	51.7	LOS D	58.5	436.3	0.99	1.03	1.13	30.5
2	T1	2415	167	2542	6.9	*0.914	45.0	LOS D	59.2	438.7	0.99	1.03	1.13	28.4
Approach		2453	175	2582	7.1	0.914	45.1	LOS D	59.2	438.7	0.99	1.03	1.13	28.5
East: The Boulevard														
4	L2	29	2	31	6.9	0.690	47.8	LOS D	21.8	154.7	0.94	0.82	0.94	31.1
5	T1	341	4	359	1.2	0.690	43.4	LOS D	21.8	154.7	0.94	0.82	0.94	28.0
6	R2	200	1	211	0.5	*0.871	74.7	LOS F	14.8	103.9	1.00	0.98	1.29	17.7
Approach		570	7	600	1.2	0.871	54.6	LOS D	21.8	154.7	0.96	0.88	1.06	24.2
North: King Georges Rd														
7	L2	165	1	174	0.6	0.842	26.9	LOS B	48.1	345.6	0.87	0.82	0.87	32.9
8	T1	2513	92	2645	3.7	0.842	21.3	LOS B	48.3	349.0	0.85	0.80	0.85	39.1
9	R2	93	1	98	1.1	*0.666	40.0	LOS C	4.0	28.1	1.00	0.82	1.09	25.3
Approach		2771	94	2917	3.4	0.842	22.3	LOS B	48.3	349.0	0.86	0.80	0.86	38.2
West: The Boulevard														
10	L2	191	8	201	4.2	*0.921	60.3	LOS E	11.9	86.6	1.00	1.01	1.43	19.6
11	T1	145	1	153	0.7	0.848	67.7	LOS E	10.3	72.4	1.00	0.98	1.30	22.5
Approach		336	9	354	2.7	0.921	63.5	LOS E	11.9	86.6	1.00	1.00	1.37	21.0
All Vehicles		6130	285	6453	4.6	0.921	36.7	LOS C	59.2	438.7	0.93	0.91	1.02	30.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: King Georges Rd												
P1	Full	50	53	60.2	LOS F	0.2	0.2	0.96	0.96	233.5	225.3	0.96
East: The Boulevard												
P2	Full	50	53	55.5	LOS E	0.2	0.2	0.93	0.93	221.0	215.2	0.97
North: King Georges Rd												
P3	Full	50	53	60.2	LOS F	0.2	0.2	0.96	0.96	234.2	226.1	0.97

MOVEMENT SUMMARY

Site: TCS 382 [King Georges Rd / The Boulevard - TTP (Site Folder: PM)]

King Georges Rd / The Boulevard

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: King Georges Rd														
1	L2	38	8	40	21.1	0.955	72.4	LOS F	74.9	558.5	1.00	1.09	1.21	25.5
2	T1	2415	167	2542	6.9	*0.955	65.5	LOS E	75.7	561.6	1.00	1.09	1.21	22.9
Approach		2453	175	2582	7.1	0.955	65.6	LOS E	75.7	561.6	1.00	1.09	1.21	23.0
East: The Boulevard														
4	L2	29	2	31	6.9	0.758	52.8	LOS D	27.5	194.5	0.96	0.85	0.96	29.7
5	T1	403	4	424	1.0	0.948	52.2	LOS D	27.5	194.5	0.96	0.87	1.00	25.7
6	R2	200	1	211	0.5	*0.948	98.5	LOS F	21.9	154.0	1.00	1.07	1.42	14.7
Approach		632	7	665	1.1	0.948	66.9	LOS E	27.5	194.5	0.97	0.93	1.13	21.8
North: King Georges Rd														
7	L2	165	1	174	0.6	0.873	34.5	LOS C	59.8	429.8	0.92	0.88	0.93	29.3
8	T1	2513	92	2645	3.7	0.873	28.9	LOS C	60.0	433.3	0.90	0.85	0.91	34.9
9	R2	93	1	98	1.1	*0.648	45.3	LOS D	4.4	30.7	1.00	0.80	1.05	23.7
Approach		2771	94	2917	3.4	0.873	29.8	LOS C	60.0	433.3	0.90	0.85	0.92	34.1
West: The Boulevard														
10	L2	191	8	201	4.2	0.769	47.0	LOS D	10.9	79.0	0.98	0.86	1.09	22.6
11	T1	167	1	176	0.6	*0.982	109.0	LOS F	16.5	116.4	1.00	1.19	1.61	16.9
Approach		358	9	377	2.5	0.982	76.0	LOS F	16.5	116.4	0.99	1.02	1.33	19.0
All Vehicles		6214	285	6541	4.6	0.982	50.3	LOS D	75.7	561.6	0.95	0.96	1.08	26.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: King Georges Rd												
P1	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	243.5	225.3	0.93
East: The Boulevard												
P2	Full	50	53	65.5	LOS F	0.2	0.2	0.94	0.94	231.0	215.2	0.93
North: King Georges Rd												
P3	Full	50	53	70.2	LOS F	0.2	0.2	0.97	0.97	244.2	226.1	0.93

MOVEMENT SUMMARY

Site: TCS 507 [Canterbury Rd / Charlotte St / Thorncraft Pde - Future Base (Site Folder: AM)]

Canterbury Rd / Charlotte St / Thorncraft Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Charlotte St														
1	L2	16	1	17	6.3	0.223	29.8	LOS C	3.4	24.5	0.82	0.67	0.82	37.5
2	T1	245	6	258	2.4	0.746	34.0	LOS C	8.2	59.2	0.94	0.83	1.04	32.2
3	R2	35	2	37	5.7	0.746	43.5	LOS D	8.2	59.2	1.00	0.91	1.17	32.3
Approach		296	9	312	3.0	0.746	34.9	LOS C	8.2	59.2	0.94	0.83	1.04	32.4
East: Canterbury Rd														
4	L2	26	1	27	3.8	0.398	15.1	LOS B	9.0	65.7	0.58	0.52	0.58	46.4
5	T1	795	43	837	5.4	0.398	9.5	LOS A	9.1	66.6	0.58	0.52	0.58	51.2
6	R2	135	0	142	0.0	* 1.020	92.9	LOS F	9.1	63.5	1.00	1.25	2.25	20.8
Approach		956	44	1006	4.6	1.020	21.4	LOS B	9.1	66.6	0.64	0.62	0.81	42.8
North: Thorncraft Pde														
7	L2	62	0	65	0.0	0.198	29.6	LOS C	3.0	21.2	0.82	0.71	0.82	36.2
8	T1	238	2	251	0.8	* 0.940	52.2	LOS D	14.0	98.6	0.98	1.15	1.55	27.0
9	R2	49	1	52	2.0	0.940	60.9	LOS E	14.0	98.6	1.00	1.22	1.66	27.4
Approach		349	3	367	0.9	0.940	49.4	LOS D	14.0	98.6	0.95	1.08	1.43	28.3
West: Canterbury Rd														
10	L2	153	2	161	1.3	0.988	74.1	LOS F	48.7	355.2	1.00	1.38	1.66	25.1
11	T1	1331	77	1401	5.8	* 0.988	67.2	LOS E	51.2	376.1	1.00	1.40	1.65	27.3
Approach		1484	79	1562	5.3	0.988	68.0	LOS E	51.2	376.1	1.00	1.40	1.65	27.0
All Vehicles		3085	135	3247	4.4	1.020	48.3	LOS D	51.2	376.1	0.88	1.07	1.31	31.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Charlotte St												
P1	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.8	215.2	1.08
East: Canterbury Rd												
P2	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	202.4	218.5	1.08
North: Thorncraft Pde												

MOVEMENT SUMMARY

Site: TCS 507 [Canterbury Rd / Charlotte St / Thorncraft Pde - Construction (Site Folder: AM)]

Canterbury Rd / Charlotte St / Thorncraft Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Charlotte St														
1	L2	16	1	17	6.3	0.223	29.8	LOS C	3.4	24.5	0.82	0.67	0.82	37.5
2	T1	245	6	258	2.4	0.746	34.0	LOS C	8.2	59.2	0.94	0.83	1.04	32.2
3	R2	35	2	37	5.7	0.746	43.5	LOS D	8.2	59.2	1.00	0.91	1.17	32.3
Approach		296	9	312	3.0	0.746	34.9	LOS C	8.2	59.2	0.94	0.83	1.04	32.4
East: Canterbury Rd														
4	L2	26	1	27	3.8	0.398	15.1	LOS B	9.0	65.7	0.58	0.52	0.58	46.4
5	T1	795	43	837	5.4	0.398	9.5	LOS A	9.1	66.6	0.58	0.52	0.58	51.2
6	R2	135	0	142	0.0	* 1.020	92.9	LOS F	9.1	63.5	1.00	1.25	2.25	20.8
Approach		956	44	1006	4.6	1.020	21.4	LOS B	9.1	66.6	0.64	0.62	0.81	42.8
North: Thorncraft Pde														
7	L2	62	0	65	0.0	0.198	29.6	LOS C	3.0	21.2	0.82	0.71	0.82	36.2
8	T1	238	2	251	0.8	* 0.940	52.2	LOS D	14.0	98.6	0.98	1.15	1.55	27.0
9	R2	49	1	52	2.0	0.940	60.9	LOS E	14.0	98.6	1.00	1.22	1.66	27.4
Approach		349	3	367	0.9	0.940	49.4	LOS D	14.0	98.6	0.95	1.08	1.43	28.3
West: Canterbury Rd														
10	L2	153	2	161	1.3	0.988	74.1	LOS F	48.7	355.2	1.00	1.38	1.66	25.1
11	T1	1331	77	1401	5.8	* 0.988	67.2	LOS E	51.2	376.1	1.00	1.40	1.65	27.3
Approach		1484	79	1562	5.3	0.988	68.0	LOS E	51.2	376.1	1.00	1.40	1.65	27.0
All Vehicles		3085	135	3247	4.4	1.020	48.3	LOS D	51.2	376.1	0.88	1.07	1.31	31.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Charlotte St												
P1	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	199.8	215.2	1.08
East: Canterbury Rd												
P2	Full	50	53	34.3	LOS D	0.1	0.1	0.93	0.93	202.4	218.5	1.08
North: Thorncraft Pde												

MOVEMENT SUMMARY

Site: TCS 507 [Canterbury Rd / Charlotte St / Thorncraft Pde - TTP (Site Folder: AM)]

Canterbury Rd / Charlotte St / Thorncraft Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Charlotte St														
1	L2	16	1	17	6.3	0.244	29.8	LOS C	2.9	20.5	0.87	0.69	0.87	37.5
2	T1	245	6	258	2.4	0.815	33.4	LOS C	8.2	58.6	0.96	0.90	1.18	32.4
3	R2	35	2	37	5.7	0.815	41.7	LOS C	8.2	58.6	1.00	1.00	1.32	32.9
Approach		296	9	312	3.0	0.815	34.2	LOS C	8.2	58.6	0.96	0.90	1.18	32.7
East: Canterbury Rd														
4	L2	26	1	27	3.8	0.383	12.9	LOS A	7.4	54.2	0.54	0.49	0.54	47.9
5	T1	795	47	837	5.9	0.383	7.3	LOS A	7.5	55.0	0.54	0.48	0.54	53.0
6	R2	135	0	142	0.0	* 0.893	50.3	LOS D	5.9	41.2	1.00	1.03	1.66	29.1
Approach		956	48	1006	5.0	0.893	13.5	LOS A	7.5	55.0	0.61	0.56	0.70	47.6
North: Thorncraft Pde														
7	L2	62	0	65	0.0	0.213	29.6	LOS C	2.5	17.3	0.86	0.73	0.86	36.0
8	T1	238	2	251	0.8	* 1.010	74.1	LOS F	16.6	117.3	0.99	1.41	2.05	22.7
9	R2	49	1	52	2.0	1.010	83.1	LOS F	16.6	117.3	1.00	1.47	2.16	23.0
Approach		349	3	367	0.9	1.010	67.5	LOS E	16.6	117.3	0.97	1.30	1.86	24.3
West: Canterbury Rd														
10	L2	153	2	161	1.3	0.999	76.5	LOS F	46.8	346.8	1.00	1.50	1.83	24.7
11	T1	1331	109	1401	8.2	* 0.999	69.8	LOS E	49.4	369.9	1.00	1.51	1.82	26.7
Approach		1484	111	1562	7.5	0.999	70.5	LOS E	49.4	369.9	1.00	1.51	1.82	26.5
All Vehicles		3085	171	3247	5.5	1.010	49.0	LOS D	49.4	369.9	0.87	1.13	1.42	31.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Charlotte St												
P1	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	194.9	215.2	1.10
East: Canterbury Rd												
P2	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	197.4	218.5	1.11
North: Thorncraft Pde												

MOVEMENT SUMMARY

Site: TCS 507 [Canterbury Rd / Charlotte St / Thorncraft Pde - Future Base (Site Folder: PM)]

Canterbury Rd / Charlotte St / Thorncraft Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Charlotte St														
1	L2	29	1	31	3.4	0.252	30.9	LOS C	5.6	39.5	0.77	0.66	0.77	37.0
2	T1	242	3	255	1.2	* 0.843	40.4	LOS C	10.3	73.0	0.89	0.83	1.05	30.1
3	R2	57	1	60	1.8	0.843	58.6	LOS E	10.3	73.0	1.00	1.01	1.32	28.1
Approach		328	5	345	1.5	0.843	42.7	LOS D	10.3	73.0	0.90	0.85	1.07	30.2
East: Canterbury Rd														
4	L2	67	0	71	0.0	0.731	23.6	LOS B	27.7	197.6	0.81	0.75	0.81	41.4
5	T1	1242	31	1307	2.5	0.731	17.1	LOS B	27.7	197.6	0.77	0.70	0.77	45.9
6	R2	180	1	189	0.6	* 0.855	60.8	LOS E	10.4	72.8	1.00	0.95	1.34	26.6
Approach		1489	32	1567	2.1	0.855	22.7	LOS B	27.7	197.6	0.80	0.73	0.84	42.2
North: Thorncraft Pde														
7	L2	97	1	102	1.0	0.795	40.6	LOS C	23.3	165.4	0.97	0.92	1.05	32.8
8	T1	371	7	391	1.9	0.795	36.0	LOS C	23.3	165.4	0.97	0.92	1.05	31.4
9	R2	126	5	133	4.0	0.997	93.5	LOS F	9.3	67.7	1.00	1.24	1.95	20.9
Approach		594	13	625	2.2	0.997	49.0	LOS D	23.3	165.4	0.98	0.98	1.24	28.5
West: Canterbury Rd														
10	L2	140	0	147	0.0	0.927	58.8	LOS E	38.6	274.3	1.00	1.12	1.31	28.5
11	T1	1087	25	1144	2.3	* 0.927	52.1	LOS D	39.6	282.4	1.00	1.13	1.31	31.1
Approach		1227	25	1292	2.0	0.927	52.8	LOS D	39.6	282.4	1.00	1.13	1.31	30.8
All Vehicles		3638	75	3829	2.1	0.997	38.9	LOS C	39.6	282.4	0.90	0.92	1.08	34.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Charlotte St												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	209.8	215.2	1.03
East: Canterbury Rd												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	212.4	218.5	1.03
North: Thorncraft Pde												

MOVEMENT SUMMARY

Site: TCS 507 [Canterbury Rd / Charlotte St / Thorncraft Pde - Construction (Site Folder: PM)]

Canterbury Rd / Charlotte St / Thorncraft Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Charlotte St														
1	L2	29	1	31	3.4	0.252	30.9	LOS C	5.6	39.5	0.77	0.66	0.77	37.0
2	T1	242	3	255	1.2	* 0.843	40.4	LOS C	10.3	73.0	0.89	0.83	1.05	30.1
3	R2	57	1	60	1.8	0.843	58.6	LOS E	10.3	73.0	1.00	1.01	1.32	28.1
Approach		328	5	345	1.5	0.843	42.7	LOS D	10.3	73.0	0.90	0.85	1.07	30.2
East: Canterbury Rd														
4	L2	67	0	71	0.0	0.731	23.6	LOS B	27.7	197.6	0.81	0.75	0.81	41.4
5	T1	1242	31	1307	2.5	0.731	17.1	LOS B	27.7	197.6	0.77	0.70	0.77	45.9
6	R2	180	1	189	0.6	* 0.855	60.8	LOS E	10.4	72.8	1.00	0.95	1.34	26.6
Approach		1489	32	1567	2.1	0.855	22.7	LOS B	27.7	197.6	0.80	0.73	0.84	42.2
North: Thorncraft Pde														
7	L2	97	1	102	1.0	0.795	40.6	LOS C	23.3	165.4	0.97	0.92	1.05	32.8
8	T1	371	7	391	1.9	0.795	36.0	LOS C	23.3	165.4	0.97	0.92	1.05	31.4
9	R2	126	5	133	4.0	0.997	93.5	LOS F	9.3	67.7	1.00	1.24	1.95	20.9
Approach		594	13	625	2.2	0.997	49.0	LOS D	23.3	165.4	0.98	0.98	1.24	28.5
West: Canterbury Rd														
10	L2	140	0	147	0.0	0.927	58.8	LOS E	38.6	274.3	1.00	1.12	1.31	28.5
11	T1	1087	25	1144	2.3	* 0.927	52.1	LOS D	39.6	282.4	1.00	1.13	1.31	31.1
Approach		1227	25	1292	2.0	0.927	52.8	LOS D	39.6	282.4	1.00	1.13	1.31	30.8
All Vehicles		3638	75	3829	2.1	0.997	38.9	LOS C	39.6	282.4	0.90	0.92	1.08	34.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Charlotte St												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	209.8	215.2	1.03
East: Canterbury Rd												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	212.4	218.5	1.03
North: Thorncraft Pde												

MOVEMENT SUMMARY

Site: TCS 507 [Canterbury Rd / Charlotte St / Thorncraft Pde - TTP (Site Folder: PM)]

Canterbury Rd / Charlotte St / Thorncraft Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Charlotte St														
1	L2	29	1	31	3.4	0.233	30.0	LOS C	5.2	36.8	0.76	0.65	0.76	37.4
2	T1	242	3	255	1.2	0.779	37.7	LOS C	10.1	71.7	0.89	0.81	0.99	30.9
3	R2	57	1	60	1.8	0.779	52.8	LOS D	10.1	71.7	1.00	0.94	1.19	29.5
Approach		328	5	345	1.5	0.779	39.6	LOS C	10.1	71.7	0.90	0.82	1.00	31.1
East: Canterbury Rd														
4	L2	67	0	71	0.0	0.772	25.0	LOS B	29.6	214.7	0.85	0.79	0.85	40.7
5	T1	1270	59	1337	4.6	0.772	18.9	LOS B	29.6	214.7	0.81	0.74	0.81	44.8
6	R2	180	1	189	0.6	*0.933	71.4	LOS F	11.5	80.6	1.00	1.05	1.59	24.4
Approach		1517	60	1597	4.0	0.933	25.4	LOS B	29.6	214.7	0.83	0.78	0.91	40.8
North: Thorncraft Pde														
7	L2	97	1	102	1.0	0.757	37.7	LOS C	21.7	154.0	0.95	0.87	0.99	33.9
8	T1	371	7	391	1.9	*0.947	34.0	LOS C	21.7	154.0	0.95	0.88	1.01	32.0
9	R2	126	5	133	4.0	0.947	77.1	LOS F	9.1	65.7	1.00	1.17	1.73	23.4
Approach		594	13	625	2.2	0.947	43.8	LOS D	21.7	154.0	0.96	0.94	1.16	29.9
West: Canterbury Rd														
10	L2	140	0	147	0.0	0.942	63.4	LOS E	40.8	291.3	1.00	1.16	1.37	27.4
11	T1	1097	35	1155	3.2	*0.942	56.7	LOS E	41.7	299.9	1.00	1.17	1.36	29.8
Approach		1237	35	1302	2.8	0.942	57.5	LOS E	41.7	299.9	1.00	1.17	1.36	29.5
All Vehicles		3676	113	3869	3.1	0.947	40.4	LOS C	41.7	299.9	0.91	0.94	1.11	33.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Charlotte St												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	209.8	215.2	1.03
East: Canterbury Rd												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	212.4	218.5	1.03
North: Thorncraft Pde												

MOVEMENT SUMMARY

Site: TCS 602 [Canterbury Rd / Fore St - Future Base (Site Folder: AM)]

Canterbury Rd / Fore St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Fore St														
1	L2	209	9	220	4.3	0.264	20.2	LOS B	5.8	42.5	0.65	0.73	0.65	35.3
3	R2	280	15	295	5.4	* 0.835	49.1	LOS D	14.2	103.7	1.00	0.96	1.25	29.0
Approach		489	24	515	4.9	0.835	36.8	LOS C	14.2	103.7	0.85	0.86	0.99	31.0
East: Canterbury Rd														
4	L2	103	8	108	7.8	* 0.834	46.1	LOS D	26.6	193.6	0.97	1.01	1.09	31.6
5	T1	1071	41	1127	3.8	* 0.834	35.5	LOS C	27.7	200.6	0.97	0.98	1.09	29.0
Approach		1174	49	1236	4.2	0.834	36.5	LOS C	27.7	200.6	0.97	0.98	1.09	29.3
West: Canterbury Rd														
11	T1	1632	68	1718	4.2	0.729	9.9	LOS A	25.8	186.9	0.67	0.62	0.67	46.4
12	R2	167	4	176	2.4	* 0.726	30.6	LOS C	5.3	37.5	1.00	0.85	1.14	31.3
Approach		1799	72	1894	4.0	0.729	11.8	LOS A	25.8	186.9	0.70	0.64	0.71	44.1
All Vehicles		3462	145	3644	4.2	0.835	23.7	LOS B	27.7	200.6	0.81	0.79	0.88	35.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input	Dem.	Aver.	Level of	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		Vol.	Flow	Delay	Service	[Ped	Dist]					
		ped/h	ped/h	sec		ped	m			sec	m	m/sec
South: Fore St												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
East: Canterbury Rd												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	206.7	217.7	1.05
All Pedestrians		100	105	39.3	LOS D	0.1	0.1	0.94	0.94	205.8	216.5	1.05

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 602 [Canterbury Rd / Fore St - Construction (Site Folder: AM)]

Canterbury Rd / Fore St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Fore St														
1	L2	209	9	220	4.3	0.264	20.2	LOS B	5.8	42.5	0.65	0.73	0.65	35.3
3	R2	280	15	295	5.4	* 0.835	49.1	LOS D	14.2	103.7	1.00	0.96	1.25	29.0
Approach		489	24	515	4.9	0.835	36.8	LOS C	14.2	103.7	0.85	0.86	0.99	31.0
East: Canterbury Rd														
4	L2	103	8	108	7.8	* 0.834	46.1	LOS D	26.6	193.6	0.97	1.01	1.09	31.6
5	T1	1071	41	1127	3.8	* 0.834	35.5	LOS C	27.7	200.6	0.97	0.98	1.09	29.0
Approach		1174	49	1236	4.2	0.834	36.5	LOS C	27.7	200.6	0.97	0.98	1.09	29.3
West: Canterbury Rd														
11	T1	1632	68	1718	4.2	0.729	9.9	LOS A	25.8	186.9	0.67	0.62	0.67	46.4
12	R2	167	4	176	2.4	* 0.726	30.6	LOS C	5.3	37.5	1.00	0.85	1.14	31.3
Approach		1799	72	1894	4.0	0.729	11.8	LOS A	25.8	186.9	0.70	0.64	0.71	44.1
All Vehicles		3462	145	3644	4.2	0.835	23.7	LOS B	27.7	200.6	0.81	0.79	0.88	35.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Fore St												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
East: Canterbury Rd												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	206.7	217.7	1.05
All Pedestrians		100	105	39.3	LOS D	0.1	0.1	0.94	0.94	205.8	216.5	1.05

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 602 [Canterbury Rd / Fore St - TTP (Site Folder: AM)]

Canterbury Rd / Fore St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Fore St														
1	L2	209	9	220	4.3	0.264	20.2	LOS B	5.8	42.5	0.65	0.73	0.65	35.3
3	R2	280	15	295	5.4	* 0.835	49.1	LOS D	14.2	103.7	1.00	0.96	1.25	29.0
Approach		489	24	515	4.9	0.835	36.8	LOS C	14.2	103.7	0.85	0.86	0.99	31.0
East: Canterbury Rd														
4	L2	103	8	108	7.8	* 0.857	49.0	LOS D	28.5	209.0	0.98	1.05	1.14	30.8
5	T1	1088	58	1145	5.3	* 0.857	38.3	LOS C	29.5	216.0	0.98	1.02	1.14	27.9
Approach		1191	66	1254	5.5	0.857	39.2	LOS C	29.5	216.0	0.98	1.03	1.14	28.3
West: Canterbury Rd														
11	T1	1727	163	1818	9.4	0.806	12.5	LOS A	31.1	235.4	0.74	0.70	0.76	43.8
12	R2	167	4	176	2.4	* 0.726	30.6	LOS C	5.3	37.5	1.00	0.85	1.14	31.3
Approach		1894	167	1994	8.8	0.806	14.1	LOS A	31.1	235.4	0.76	0.72	0.80	42.0
All Vehicles		3574	257	3762	7.2	0.857	25.5	LOS B	31.1	235.4	0.85	0.84	0.94	34.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Fore St												
P1	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
East: Canterbury Rd												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	206.7	217.7	1.05
All Pedestrians		100	105	39.3	LOS D	0.1	0.1	0.94	0.94	205.8	216.5	1.05

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 602 [Canterbury Rd / Fore St - Future Base (Site Folder: PM)]

Canterbury Rd / Fore St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Fore St														
1	L2	243	1	256	0.4	0.437	39.5	LOS C	11.9	83.3	0.84	0.80	0.84	27.8
3	R2	186	3	196	1.6	*0.803	64.8	LOS E	12.1	85.9	1.00	0.91	1.19	25.5
Approach		429	4	452	0.9	0.803	50.4	LOS D	12.1	85.9	0.91	0.85	0.99	26.6
East: Canterbury Rd														
4	L2	178	6	187	3.4	0.833	28.4	LOS B	43.0	306.9	0.88	0.85	0.89	38.2
5	T1	1574	32	1657	2.0	*0.833	22.4	LOS B	44.0	313.7	0.88	0.83	0.89	35.7
Approach		1752	38	1844	2.2	0.833	23.0	LOS B	44.0	313.7	0.88	0.84	0.89	36.1
West: Canterbury Rd														
11	T1	1261	14	1327	1.1	0.463	6.4	LOS A	15.0	105.7	0.43	0.39	0.43	50.4
12	R2	160	2	168	1.3	*0.847	70.7	LOS F	10.8	76.6	1.00	0.93	1.29	20.7
Approach		1421	16	1496	1.1	0.847	13.7	LOS A	15.0	105.7	0.49	0.45	0.52	42.3
All Vehicles		3602	58	3792	1.6	0.847	22.6	LOS B	44.0	313.7	0.73	0.68	0.76	36.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Fore St												
P1	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	219.8	215.2	0.98
East: Canterbury Rd												
P2	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	221.7	217.7	0.98
All Pedestrians		100	105	54.3	LOS E	0.2	0.2	0.95	0.95	220.8	216.5	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 602 [Canterbury Rd / Fore St - Construction (Site Folder: PM)]

Canterbury Rd / Fore St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 120 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Fore St														
1	L2	243	1	256	0.4	0.437	39.5	LOS C	11.9	83.3	0.84	0.80	0.84	27.8
3	R2	186	3	196	1.6	*0.803	64.8	LOS E	12.1	85.9	1.00	0.91	1.19	25.5
Approach		429	4	452	0.9	0.803	50.4	LOS D	12.1	85.9	0.91	0.85	0.99	26.6
East: Canterbury Rd														
4	L2	178	6	187	3.4	0.833	28.4	LOS B	43.0	306.9	0.88	0.85	0.89	38.2
5	T1	1574	32	1657	2.0	*0.833	22.4	LOS B	44.0	313.7	0.88	0.83	0.89	35.7
Approach		1752	38	1844	2.2	0.833	23.0	LOS B	44.0	313.7	0.88	0.84	0.89	36.1
West: Canterbury Rd														
11	T1	1261	14	1327	1.1	0.463	6.4	LOS A	15.0	105.7	0.43	0.39	0.43	50.4
12	R2	160	2	168	1.3	*0.847	70.7	LOS F	10.8	76.6	1.00	0.93	1.29	20.7
Approach		1421	16	1496	1.1	0.847	13.7	LOS A	15.0	105.7	0.49	0.45	0.52	42.3
All Vehicles		3602	58	3792	1.6	0.847	22.6	LOS B	44.0	313.7	0.73	0.68	0.76	36.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Fore St												
P1	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	219.8	215.2	0.98
East: Canterbury Rd												
P2	Full	50	53	54.3	LOS E	0.2	0.2	0.95	0.95	221.7	217.7	0.98
All Pedestrians		100	105	54.3	LOS E	0.2	0.2	0.95	0.95	220.8	216.5	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 602 [Canterbury Rd / Fore St - TTP (Site Folder: PM)]

Canterbury Rd / Fore St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Fore St														
1	L2	243	1	256	0.4	0.461	44.2	LOS D	13.1	92.3	0.86	0.81	0.86	26.3
3	R2	186	3	196	1.6	* 0.870	75.4	LOS F	13.8	97.7	1.00	0.96	1.30	23.5
Approach		429	4	452	0.9	0.870	57.7	LOS E	13.8	97.7	0.92	0.87	1.05	24.9
East: Canterbury Rd														
4	L2	178	6	187	3.4	0.874	33.2	LOS C	53.6	395.3	0.91	0.90	0.95	36.2
5	T1	1658	116	1745	7.0	* 0.874	27.2	LOS B	54.3	402.6	0.91	0.89	0.95	32.9
Approach		1836	122	1933	6.6	0.874	27.8	LOS B	54.3	402.6	0.91	0.89	0.95	33.4
West: Canterbury Rd														
11	T1	1288	41	1356	3.2	0.471	6.0	LOS A	15.6	112.1	0.40	0.37	0.40	50.9
12	R2	160	2	168	1.3	* 0.852	76.0	LOS F	11.7	82.8	1.00	0.93	1.28	19.8
Approach		1448	43	1524	3.0	0.852	13.8	LOS A	15.6	112.1	0.47	0.43	0.50	42.2
All Vehicles		3713	169	3908	4.6	0.874	25.8	LOS B	54.3	402.6	0.74	0.71	0.79	34.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Fore St												
P1	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	224.8	215.2	0.96
East: Canterbury Rd												
P2	Full	50	53	59.3	LOS E	0.2	0.2	0.96	0.96	226.7	217.7	0.96
All Pedestrians		100	105	59.3	LOS E	0.2	0.2	0.96	0.96	225.8	216.5	0.96

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 855 [Canterbury Rd / Jeffrey St / Tincombe St / Broughton St - AM (Site Folder: AM)]

Canterbury Rd / Jeffrey St / Tincombe St / Broughton St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Canterbury Rd														
4b	L3	12	0	13	0.0	0.391	18.3	LOS B	16.5	120.6	0.52	0.47	0.52	35.8
5	T1	901	49	948	5.4	0.558	22.5	LOS B	21.4	160.0	0.67	0.60	0.67	34.0
6	R2	13	10	14	76.9	* 0.558	42.3	LOS C	21.4	160.0	0.87	0.76	0.87	19.2
Approach		926	59	975	6.4	0.558	22.8	LOS B	21.4	160.0	0.67	0.60	0.67	33.8
NorthEast: Jeffrey St														
24b	L3	22	3	23	13.6	0.859	80.5	LOS F	7.3	53.9	1.00	0.97	1.38	15.9
24	L2	8	0	8	0.0	0.859	79.5	LOS F	7.3	53.9	1.00	0.97	1.38	20.7
26a	R1	173	6	182	3.5	* 0.859	78.0	LOS F	7.8	56.0	1.00	0.97	1.37	23.2
Approach		203	9	214	4.4	0.859	78.3	LOS F	7.8	56.0	1.00	0.97	1.37	22.3
North: Broughton St														
7b	L3	1	0	1	0.0	0.264	64.9	LOS E	2.5	20.5	0.96	0.74	0.96	22.7
7	L2	25	7	26	28.0	0.264	64.3	LOS E	2.5	20.5	0.96	0.74	0.96	11.5
7a	L1	14	0	15	0.0	0.264	62.5	LOS E	2.5	20.5	0.96	0.74	0.96	18.3
9	R2	80	3	84	3.8	* 0.764	75.9	LOS F	5.8	41.6	1.00	0.87	1.22	18.7
Approach		120	10	126	8.3	0.764	71.8	LOS F	5.8	41.6	0.99	0.83	1.13	17.3
West: Canterbury Rd														
10	L2	29	0	31	0.0	* 0.858	12.0	LOS A	28.1	204.6	0.48	0.53	0.48	46.1
10a	L1	265	18	279	6.8	0.858	10.9	LOS A	28.1	204.6	0.48	0.53	0.48	47.6
11	T1	1642	67	1728	4.1	0.858	6.3	LOS A	28.5	206.2	0.48	0.48	0.48	48.7
Approach		1936	85	2038	4.4	0.858	7.1	LOS A	28.5	206.2	0.48	0.49	0.48	48.4
All Vehicles		3185	163	3353	5.1	0.859	18.6	LOS B	28.5	206.2	0.59	0.56	0.62	37.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
SouthEast: Tincombe St												
P5	Full	40	42	10.4	LOS B	0.1	0.1	0.40	0.40	37.7	35.5	0.94
East: Canterbury Rd												

MOVEMENT SUMMARY

Site: TCS 855 [Canterbury Rd / Jeffrey St / Tincombe St / Broughton St - AM - Construction (Site Folder: AM)]

Canterbury Rd / Jeffrey St / Tincombe St / Broughton St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Canterbury Rd														
4b	L3	12	0	13	0.0	0.399	18.4	LOS B	16.7	124.0	0.52	0.48	0.52	35.7
5	T1	917	65	965	7.1	0.570	22.5	LOS B	22.1	166.7	0.67	0.60	0.67	34.0
6	R2	13	10	14	76.9	*0.570	41.8	LOS C	22.1	166.7	0.87	0.76	0.87	19.4
Approach		942	75	992	8.0	0.570	22.7	LOS B	22.1	166.7	0.67	0.60	0.67	33.8
NorthEast: Jeffrey St														
24b	L3	22	3	23	13.6	0.859	80.5	LOS F	7.3	53.9	1.00	0.97	1.38	15.9
24	L2	8	0	8	0.0	0.859	79.5	LOS F	7.3	53.9	1.00	0.97	1.38	20.7
26a	R1	173	6	182	3.5	*0.859	78.0	LOS F	7.8	56.0	1.00	0.97	1.37	23.2
Approach		203	9	214	4.4	0.859	78.3	LOS F	7.8	56.0	1.00	0.97	1.37	22.3
North: Broughton St														
7b	L3	1	0	1	0.0	0.375	66.3	LOS E	3.3	29.4	0.97	0.76	0.97	22.4
7	L2	35	17	37	48.6	0.375	65.9	LOS E	3.3	29.4	0.97	0.76	0.97	11.2
7a	L1	14	0	15	0.0	0.375	63.9	LOS E	3.3	29.4	0.97	0.76	0.97	18.0
9	R2	80	3	84	3.8	*0.764	75.9	LOS F	5.8	41.6	1.00	0.87	1.22	18.7
Approach		130	20	137	15.4	0.764	71.8	LOS F	5.8	41.6	0.99	0.83	1.13	16.8
West: Canterbury Rd														
10	L2	40	11	42	27.5	*0.870	13.1	LOS A	30.1	221.6	0.50	0.55	0.51	44.7
10a	L1	265	18	279	6.8	0.870	11.7	LOS A	30.1	221.6	0.50	0.55	0.51	47.0
11	T1	1644	69	1731	4.2	0.870	7.1	LOS A	30.8	223.2	0.50	0.50	0.51	47.7
Approach		1949	98	2052	5.0	0.870	7.8	LOS A	30.8	223.2	0.50	0.51	0.51	47.5
All Vehicles		3224	202	3394	6.3	0.870	19.2	LOS B	30.8	223.2	0.60	0.58	0.64	36.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
SouthEast: Tincombe St												
P5	Full	40	42	10.4	LOS B	0.1	0.1	0.40	0.40	37.7	35.5	0.94
East: Canterbury Rd												

MOVEMENT SUMMARY

Site: TCS 855 [Canterbury Rd / Jeffrey St / Tincombe St / Broughton St - AM - TTP (Site Folder: AM)]

Canterbury Rd / Jeffrey St / Tincombe St / Broughton St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 130 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Canterbury Rd														
4b	L3	12	0	13	0.0	0.399	17.1	LOS B	16.2	121.5	0.50	0.45	0.50	37.1
5	T1	934	82	983	8.8	0.570	21.4	LOS B	22.2	170.1	0.65	0.59	0.65	34.8
6	R2	13	10	14	76.9	*0.570	41.1	LOS C	22.2	170.1	0.86	0.76	0.86	19.6
Approach		959	92	1009	9.6	0.570	21.6	LOS B	22.2	170.1	0.66	0.59	0.66	34.5
NorthEast: Jeffrey St														
24b	L3	22	3	23	13.6	1.289	330.3	LOS F	17.0	124.6	1.00	1.60	2.93	5.4
24	L2	8	0	8	0.0	1.289	329.4	LOS F	17.0	124.6	1.00	1.60	2.93	7.0
26a	R1	173	6	182	3.5	*1.289	327.9	LOS F	18.0	129.8	1.00	1.61	2.93	8.0
Approach		203	9	214	4.4	1.289	328.3	LOS F	18.0	129.8	1.00	1.61	2.93	7.7
North: Broughton St														
7b	L3	1	0	1	0.0	0.375	66.3	LOS E	3.3	29.4	0.97	0.76	0.97	22.4
7	L2	35	17	37	48.6	0.375	65.9	LOS E	3.3	29.4	0.97	0.76	0.97	11.2
7a	L1	14	0	15	0.0	0.375	63.9	LOS E	3.3	29.4	0.97	0.76	0.97	18.0
9	R2	80	3	84	3.8	*0.764	75.9	LOS F	5.8	41.6	1.00	0.87	1.22	18.7
Approach		130	20	137	15.4	0.764	71.8	LOS F	5.8	41.6	0.99	0.83	1.13	16.8
West: Canterbury Rd														
10	L2	40	11	42	27.5	0.911	16.9	LOS B	41.3	312.2	0.60	0.65	0.65	41.6
10a	L1	265	18	279	6.8	0.911	15.5	LOS B	41.3	312.2	0.60	0.65	0.65	44.6
11	T1	1739	164	1831	9.4	*0.911	10.9	LOS A	41.6	314.9	0.60	0.62	0.65	43.3
Approach		2044	193	2152	9.4	0.911	11.6	LOS A	41.6	314.9	0.60	0.62	0.65	43.5
All Vehicles		3336	314	3512	9.4	1.289	36.1	LOS C	41.6	314.9	0.66	0.68	0.81	27.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
SouthEast: Tincombe St												
P5	Full	40	42	9.3	LOS A	0.1	0.1	0.38	0.38	36.6	35.5	0.97
East: Canterbury Rd												

MOVEMENT SUMMARY

**Site: TCS 1153 [Marrickville Rd / Petersham Rd - Future Base
(Site Folder: PM)]**

Marrickville Rd / Petersham Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 42 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Petersham Rd														
1	L2	57	1	60	1.8	0.321	20.6	LOS B	2.0	14.2	0.88	0.74	0.88	33.0
2	T1	28	0	29	0.0	0.321	16.1	LOS B	2.0	14.2	0.88	0.74	0.88	37.8
3	R2	18	0	19	0.0	0.321	20.6	LOS B	2.0	14.2	0.88	0.74	0.88	30.9
Approach		103	1	108	1.0	0.321	19.4	LOS B	2.0	14.2	0.88	0.74	0.88	34.3
East: Marrickville Rd														
4	L2	26	0	27	0.0	0.385	10.6	LOS A	4.7	33.9	0.66	0.58	0.66	37.9
5	T1	660	17	695	2.6	0.385	7.2	LOS A	4.7	33.9	0.66	0.57	0.66	37.6
6	R2	4	0	4	0.0	0.385	10.6	LOS A	4.7	33.6	0.66	0.57	0.66	40.5
Approach		690	17	726	2.5	0.385	7.3	LOS A	4.7	33.9	0.66	0.57	0.66	37.6
North: Petersham Rd														
7	L2	34	0	36	0.0	0.478	22.2	LOS B	3.3	23.2	0.92	0.76	0.92	35.0
8	T1	95	0	100	0.0	* 0.478	16.7	LOS B	3.3	23.2	0.92	0.76	0.92	38.2
9	R2	33	2	35	6.1	0.478	21.3	LOS B	3.3	23.2	0.92	0.76	0.92	36.3
Approach		162	2	171	1.2	0.478	18.8	LOS B	3.3	23.2	0.92	0.76	0.92	37.2
West: Marrickville Rd														
11	T1	424	13	446	3.1	* 0.507	9.9	LOS A	5.6	40.1	0.69	0.71	0.69	35.6
12	R2	168	1	177	0.6	0.507	16.3	LOS B	3.4	24.2	0.79	0.79	0.79	35.9
Approach		592	14	623	2.4	0.507	11.7	LOS A	5.6	40.1	0.72	0.73	0.72	35.7
All Vehicles		1547	34	1628	2.2	0.507	11.0	LOS A	5.6	40.1	0.72	0.66	0.72	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Petersham Rd												
P1	Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	175.9	208.6	1.19
East: Marrickville Rd												
P2	Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	181.4	215.7	1.19
North: Petersham Rd												

MOVEMENT SUMMARY

**Site: TCS 1153 [Marrickville Rd / Petersham Rd - Construction
(Site Folder: PM)]**

Marrickville Rd / Petersham Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 42 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Petersham Rd														
1	L2	57	1	60	1.8	0.321	20.6	LOS B	2.0	14.2	0.88	0.74	0.88	33.0
2	T1	28	0	29	0.0	0.321	16.1	LOS B	2.0	14.2	0.88	0.74	0.88	37.8
3	R2	18	0	19	0.0	0.321	20.6	LOS B	2.0	14.2	0.88	0.74	0.88	30.9
Approach		103	1	108	1.0	0.321	19.4	LOS B	2.0	14.2	0.88	0.74	0.88	34.3
East: Marrickville Rd														
4	L2	26	0	27	0.0	0.385	10.6	LOS A	4.7	33.9	0.66	0.58	0.66	37.9
5	T1	660	17	695	2.6	0.385	7.2	LOS A	4.7	33.9	0.66	0.57	0.66	37.6
6	R2	4	0	4	0.0	0.385	10.6	LOS A	4.7	33.6	0.66	0.57	0.66	40.5
Approach		690	17	726	2.5	0.385	7.3	LOS A	4.7	33.9	0.66	0.57	0.66	37.6
North: Petersham Rd														
7	L2	34	0	36	0.0	0.478	22.2	LOS B	3.3	23.2	0.92	0.76	0.92	35.0
8	T1	95	0	100	0.0	* 0.478	16.7	LOS B	3.3	23.2	0.92	0.76	0.92	38.2
9	R2	33	2	35	6.1	0.478	21.3	LOS B	3.3	23.2	0.92	0.76	0.92	36.3
Approach		162	2	171	1.2	0.478	18.8	LOS B	3.3	23.2	0.92	0.76	0.92	37.2
West: Marrickville Rd														
11	T1	424	13	446	3.1	* 0.507	9.9	LOS A	5.6	40.1	0.69	0.71	0.69	35.6
12	R2	168	1	177	0.6	0.507	16.3	LOS B	3.4	24.2	0.79	0.79	0.79	35.9
Approach		592	14	623	2.4	0.507	11.7	LOS A	5.6	40.1	0.72	0.73	0.72	35.7
All Vehicles		1547	34	1628	2.2	0.507	11.0	LOS A	5.6	40.1	0.72	0.66	0.72	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Petersham Rd												
P1	Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	175.9	208.6	1.19
East: Marrickville Rd												
P2	Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	181.4	215.7	1.19
North: Petersham Rd												

MOVEMENT SUMMARY

Site: TCS 1153 [Marrickville Rd / Petersham Rd - TTP (Site Folder: PM)]

Marrickville Rd / Petersham Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 42 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Petersham Rd														
1	L2	57	1	60	1.8	0.366	21.8	LOS B	2.1	14.8	0.91	0.75	0.91	32.4
2	T1	28	0	29	0.0	0.366	17.2	LOS B	2.1	14.8	0.91	0.75	0.91	37.2
3	R2	18	0	19	0.0	0.366	21.8	LOS B	2.1	14.8	0.91	0.75	0.91	30.4
Approach		103	1	108	1.0	0.366	20.6	LOS B	2.1	14.8	0.91	0.75	0.91	33.7
East: Marrickville Rd														
4	L2	26	0	27	0.0	0.444	10.1	LOS A	4.9	37.2	0.65	0.57	0.65	38.3
5	T1	710	67	747	9.4	0.444	6.7	LOS A	5.1	38.2	0.65	0.57	0.65	38.2
6	R2	4	0	4	0.0	0.444	10.2	LOS A	5.1	38.2	0.65	0.56	0.65	40.8
Approach		740	67	779	9.1	0.444	6.9	LOS A	5.1	38.2	0.65	0.57	0.65	38.3
North: Petersham Rd														
7	L2	34	0	36	0.0	0.542	23.4	LOS B	3.4	24.3	0.95	0.79	0.97	34.4
8	T1	95	0	100	0.0	* 0.542	18.0	LOS B	3.4	24.3	0.95	0.79	0.97	37.5
9	R2	33	2	35	6.1	0.542	22.6	LOS B	3.4	24.3	0.95	0.79	0.97	35.7
Approach		162	2	171	1.2	0.542	20.1	LOS B	3.4	24.3	0.95	0.79	0.97	36.6
West: Marrickville Rd														
11	T1	424	13	446	3.1	* 0.503	9.1	LOS A	5.6	40.0	0.66	0.69	0.66	36.4
12	R2	168	1	177	0.6	0.503	15.7	LOS B	3.1	21.9	0.77	0.78	0.77	36.2
Approach		592	14	623	2.4	0.503	11.0	LOS A	5.6	40.0	0.69	0.72	0.69	36.3
All Vehicles		1597	84	1681	5.3	0.542	10.6	LOS A	5.6	40.0	0.71	0.66	0.72	36.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Petersham Rd												
P1	Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	175.9	208.6	1.19
East: Marrickville Rd												
P2	Full	50	53	15.5	LOS B	0.1	0.1	0.86	0.86	181.4	215.7	1.19
North: Petersham Rd												

MOVEMENT SUMMARY

Site: TCS 1167 [Canterbury Rd / Wonga St Future Base (Site Folder: AM)]

Canterbury Rd / Wonga St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Canterbury Rd														
5	T1	1115	47	1174	4.2	0.451	7.6	LOS A	19.8	143.9	0.72	0.65	0.72	49.6
6	R2	193	8	203	4.1	* 0.578	45.9	LOS D	9.7	70.5	1.00	0.93	1.00	26.3
Approach		1308	55	1377	4.2	0.578	13.3	LOS A	19.8	143.9	0.76	0.69	0.76	43.4
North: Wonga St														
7	L2	176	5	185	2.8	0.380	36.8	LOS C	7.4	53.2	0.86	0.79	0.86	28.6
9	R2	67	4	71	6.0	* 0.804	63.2	LOS E	3.9	28.6	1.00	0.91	1.39	26.6
Approach		243	9	256	3.7	0.804	44.1	LOS D	7.4	53.2	0.90	0.82	1.01	27.9
West: Canterbury Rd														
10	L2	15	0	16	0.0	* 0.799	17.0	LOS B	27.8	206.0	0.68	0.63	0.68	45.4
11	T1	1741	118	1833	6.8	0.799	11.4	LOS A	27.9	206.6	0.68	0.63	0.68	45.7
Approach		1756	118	1848	6.7	0.799	11.5	LOS A	27.9	206.6	0.68	0.63	0.68	45.7
All Vehicles		3307	182	3481	5.5	0.804	14.6	LOS B	27.9	206.6	0.73	0.67	0.73	42.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
North: Wonga St												
P3	Full	29	31	8.8	LOS A	0.0	0.0	0.42	0.42	35.0	34.0	0.97
West: Canterbury Rd												
P4	Full	27	28	42.4	LOS E	0.1	0.1	0.92	0.92	67.8	33.0	0.49
All Pedestrians		56	59	25.0	LOS C	0.1	0.1	0.66	0.66	50.8	33.5	0.66

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1167 [Canterbury Rd / Wonga St Construction (Site Folder: AM)]

Canterbury Rd / Wonga St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Canterbury Rd														
5	T1	1115	47	1174	4.2	0.451	7.6	LOS A	19.8	143.9	0.72	0.65	0.72	49.6
6	R2	193	8	203	4.1	* 0.578	45.9	LOS D	9.7	70.5	1.00	0.93	1.00	26.3
Approach		1308	55	1377	4.2	0.578	13.3	LOS A	19.8	143.9	0.76	0.69	0.76	43.4
North: Wonga St														
7	L2	176	5	185	2.8	0.380	36.8	LOS C	7.4	53.2	0.86	0.79	0.86	28.6
9	R2	67	4	71	6.0	* 0.804	63.2	LOS E	3.9	28.6	1.00	0.91	1.39	26.6
Approach		243	9	256	3.7	0.804	44.1	LOS D	7.4	53.2	0.90	0.82	1.01	27.9
West: Canterbury Rd														
10	L2	15	0	16	0.0	* 0.799	17.0	LOS B	27.8	206.0	0.68	0.63	0.68	45.4
11	T1	1741	118	1833	6.8	0.799	11.4	LOS A	27.9	206.6	0.68	0.63	0.68	45.7
Approach		1756	118	1848	6.7	0.799	11.5	LOS A	27.9	206.6	0.68	0.63	0.68	45.7
All Vehicles		3307	182	3481	5.5	0.804	14.6	LOS B	27.9	206.6	0.73	0.67	0.73	42.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
North: Wonga St												
P3	Full	29	31	8.8	LOS A	0.0	0.0	0.42	0.42	35.0	34.0	0.97
West: Canterbury Rd												
P4	Full	27	28	42.4	LOS E	0.1	0.1	0.92	0.92	67.8	33.0	0.49
All Pedestrians		56	59	25.0	LOS C	0.1	0.1	0.66	0.66	50.8	33.5	0.66

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1167 [Canterbury Rd / Wonga St TTP (Site Folder: AM)]

Canterbury Rd / Wonga St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 120 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Canterbury Rd														
5	T1	1119	51	1178	4.6	0.454	7.1	LOS A	21.7	158.1	0.65	0.59	0.65	50.3
6	R2	206	21	217	10.2	* 0.662	66.5	LOS E	12.2	93.0	1.00	0.98	1.01	21.5
Approach		1325	72	1395	5.4	0.662	16.3	LOS B	21.7	158.1	0.70	0.65	0.70	41.0
North: Wonga St														
7	L2	201	30	212	14.9	0.495	45.1	LOS D	10.6	83.4	0.90	0.81	0.90	25.9
9	R2	67	4	71	6.0	* 0.964	91.1	LOS F	5.2	38.4	1.00	1.07	1.80	21.9
Approach		268	34	282	12.7	0.964	56.6	LOS E	10.6	83.4	0.92	0.87	1.12	24.4
West: Canterbury Rd														
10	L2	15	0	16	0.0	* 0.832	19.7	LOS B	37.0	281.9	0.72	0.68	0.73	43.8
11	T1	1811	188	1906	10.4	0.832	14.1	LOS A	37.1	282.5	0.72	0.68	0.73	43.3
Approach		1826	188	1922	10.3	0.832	14.2	LOS A	37.1	282.5	0.72	0.68	0.73	43.3
All Vehicles		3419	294	3599	8.6	0.964	18.3	LOS B	37.1	282.5	0.73	0.68	0.75	39.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
North: Wonga St												
P3	Full	29	31	9.2	LOS A	0.0	0.0	0.39	0.39	35.4	34.0	0.96
West: Canterbury Rd												
P4	Full	27	28	52.3	LOS E	0.1	0.1	0.93	0.93	77.7	33.0	0.42
All Pedestrians		56	59	30.0	LOS D	0.1	0.1	0.65	0.65	55.8	33.5	0.60

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1167 [Canterbury Rd / Wonga St Future Base (Site Folder: PM)]

Canterbury Rd / Wonga St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Canterbury Rd														
5	T1	1775	56	1868	3.2	0.764	11.3	LOS A	37.1	266.9	0.78	0.73	0.78	45.9
6	R2	328	2	345	0.6	*0.584	35.5	LOS C	12.9	91.0	1.00	0.93	1.00	29.6
Approach		2103	58	2214	2.8	0.764	15.0	LOS B	37.1	266.9	0.82	0.76	0.82	42.0
North: Wonga St														
7	L2	198	5	208	2.5	0.267	24.2	LOS B	6.5	46.5	0.68	0.74	0.68	33.5
9	R2	154	0	162	0.0	*0.873	62.5	LOS E	9.0	63.3	1.00	1.01	1.42	26.8
Approach		352	5	371	1.4	0.873	41.0	LOS C	9.0	63.3	0.82	0.86	1.00	29.7
West: Canterbury Rd														
10	L2	65	2	68	3.1	*0.758	16.7	LOS B	18.8	133.8	0.62	0.59	0.63	45.3
11	T1	1219	21	1283	1.7	0.758	11.0	LOS A	19.3	136.9	0.63	0.57	0.63	45.9
Approach		1284	23	1352	1.8	0.758	11.3	LOS A	19.3	136.9	0.63	0.58	0.63	45.8
All Vehicles		3739	86	3936	2.3	0.873	16.2	LOS B	37.1	266.9	0.75	0.70	0.77	41.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
North: Wonga St												
P3	Full	29	31	16.8	LOS B	0.1	0.1	0.58	0.58	43.0	34.0	0.79
West: Canterbury Rd												
P4	Full	27	28	42.4	LOS E	0.1	0.1	0.92	0.92	67.8	33.0	0.49
All Pedestrians		56	59	29.1	LOS C	0.1	0.1	0.74	0.74	54.9	33.5	0.61

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1167 [Canterbury Rd / Wonga St Construction (Site Folder: PM)]

Canterbury Rd / Wonga St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Canterbury Rd														
5	T1	1775	56	1868	3.2	0.764	11.3	LOS A	37.1	266.9	0.78	0.73	0.78	45.9
6	R2	328	2	345	0.6	*0.584	35.5	LOS C	12.9	91.0	1.00	0.93	1.00	29.6
Approach		2103	58	2214	2.8	0.764	15.0	LOS B	37.1	266.9	0.82	0.76	0.82	42.0
North: Wonga St														
7	L2	198	5	208	2.5	0.267	24.2	LOS B	6.5	46.5	0.68	0.74	0.68	33.5
9	R2	154	0	162	0.0	*0.873	62.5	LOS E	9.0	63.3	1.00	1.01	1.42	26.8
Approach		352	5	371	1.4	0.873	41.0	LOS C	9.0	63.3	0.82	0.86	1.00	29.7
West: Canterbury Rd														
10	L2	65	2	68	3.1	*0.758	16.7	LOS B	18.8	133.8	0.62	0.59	0.63	45.3
11	T1	1219	21	1283	1.7	0.758	11.0	LOS A	19.3	136.9	0.63	0.57	0.63	45.9
Approach		1284	23	1352	1.8	0.758	11.3	LOS A	19.3	136.9	0.63	0.58	0.63	45.8
All Vehicles		3739	86	3936	2.3	0.873	16.2	LOS B	37.1	266.9	0.75	0.70	0.77	41.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
North: Wonga St												
P3	Full	29	31	16.8	LOS B	0.1	0.1	0.58	0.58	43.0	34.0	0.79
West: Canterbury Rd												
P4	Full	27	28	42.4	LOS E	0.1	0.1	0.92	0.92	67.8	33.0	0.49
All Pedestrians		56	59	29.1	LOS C	0.1	0.1	0.74	0.74	54.9	33.5	0.61

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1167 [Canterbury Rd / Wonga St TTP (Site Folder: PM)]

Canterbury Rd / Wonga St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Canterbury Rd														
5	T1	1803	84	1898	4.7	0.814	12.2	LOS A	40.4	294.2	0.80	0.75	0.81	45.0
6	R2	384	58	404	15.1	* 0.712	43.2	LOS D	15.0	118.4	1.00	0.97	1.01	27.0
Approach		2187	142	2302	6.5	0.814	17.7	LOS B	40.4	294.2	0.84	0.79	0.84	39.9
North: Wonga St														
7	L2	203	10	214	4.9	0.252	21.0	LOS B	6.1	44.6	0.63	0.73	0.63	35.0
9	R2	154	0	162	0.0	* 0.873	62.5	LOS E	9.0	63.3	1.00	1.01	1.42	26.8
Approach		357	10	376	2.8	0.873	38.9	LOS C	9.0	63.3	0.79	0.85	0.97	30.3
West: Canterbury Rd														
10	L2	65	2	68	3.1	* 0.878	23.2	LOS B	27.1	194.9	0.79	0.79	0.88	41.7
11	T1	1241	43	1306	3.5	0.878	17.4	LOS B	27.6	199.2	0.79	0.78	0.87	40.5
Approach		1306	45	1375	3.4	0.878	17.7	LOS B	27.6	199.2	0.79	0.78	0.87	40.6
All Vehicles		3850	197	4053	5.1	0.878	19.6	LOS B	40.4	294.2	0.82	0.79	0.87	38.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec	[Ped ped	Dist] m						
North: Wonga St												
P3	Full	29	31	19.9	LOS B	0.1	0.1	0.63	0.63	46.0	34.0	0.74
West: Canterbury Rd												
P4	Full	27	28	42.4	LOS E	0.1	0.1	0.92	0.92	67.8	33.0	0.49
All Pedestrians		56	59	30.7	LOS D	0.1	0.1	0.77	0.77	56.5	33.5	0.59

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1203 [Chapel Rd / Rickard Rd - Future Base (Site Folder: AM)]

Chapel Rd / Rickard Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	89	0	94	0.0	0.336	16.6	LOS B	2.6	18.6	0.84	0.72	0.84	21.5
2	T1	186	3	196	1.6	0.336	14.9	LOS B	2.6	18.6	0.88	0.71	0.88	27.0
Approach		275	3	289	1.1	0.336	15.4	LOS B	2.6	18.6	0.87	0.71	0.87	25.2
East: Rickard Rd														
4	L2	80	3	84	3.8	0.471	22.0	LOS B	3.0	22.0	0.93	0.77	0.93	29.0
5	T1	241	13	254	5.4	0.471	16.4	LOS B	3.2	23.7	0.93	0.75	0.93	31.0
6	R2	93	25	98	26.9	0.443	24.3	LOS B	1.9	16.6	0.95	0.77	0.95	25.9
Approach		414	41	436	9.9	0.471	19.2	LOS B	3.2	23.7	0.93	0.76	0.93	29.2
North: Chapel Rd														
7	L2	118	25	124	21.2	0.174	11.8	LOS A	1.4	11.4	0.58	0.71	0.58	33.9
8	T1	231	9	243	3.9	* 0.823	24.8	LOS B	6.5	46.7	1.00	1.02	1.46	21.4
9	R2	34	1	36	2.9	0.823	27.9	LOS B	6.5	46.7	1.00	1.02	1.47	15.0
Approach		383	35	403	9.1	0.823	21.1	LOS B	6.5	46.7	0.87	0.92	1.19	24.0
West: Rickard Rd														
10	L2	67	1	71	1.5	* 0.734	24.3	LOS B	5.7	40.7	0.99	0.92	1.23	22.1
11	T1	458	9	482	2.0	0.734	19.1	LOS B	5.9	42.1	0.99	0.92	1.22	29.0
12	R2	129	0	136	0.0	* 0.487	23.5	LOS B	2.7	18.6	0.96	0.78	0.96	20.0
Approach		654	10	688	1.5	0.734	20.5	LOS B	5.9	42.1	0.98	0.89	1.17	26.4
All Vehicles		1726	89	1817	5.2	0.823	19.5	LOS B	6.5	46.7	0.93	0.84	1.07	26.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20
East: Rickard Rd												
P2	Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	183.3	219.5	1.20
North: Chapel Rd												

MOVEMENT SUMMARY

Site: TCS 1203 [Chapel Rd / Rickard Rd - Construction (Site Folder: AM)]

Chapel Rd / Rickard Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h]	[HV] veh/h	[Total veh/h]	[HV] %				[Veh. veh]	[Dist] m				
South: Chapel Rd														
1	L2	89	0	94	0.0	0.336	16.6	LOS B	2.6	18.6	0.84	0.72	0.84	21.5
2	T1	186	3	196	1.6	0.336	14.9	LOS B	2.6	18.6	0.88	0.71	0.88	27.0
Approach		275	3	289	1.1	0.336	15.4	LOS B	2.6	18.6	0.87	0.71	0.87	25.2
East: Rickard Rd														
4	L2	90	13	95	14.4	0.501	22.3	LOS B	3.1	23.3	0.93	0.77	0.93	28.6
5	T1	241	13	254	5.4	0.501	16.5	LOS B	3.5	25.4	0.93	0.76	0.93	30.9
6	R2	93	25	98	26.9	0.443	24.3	LOS B	1.9	16.6	0.95	0.77	0.95	25.9
Approach		424	51	446	12.0	0.501	19.4	LOS B	3.5	25.4	0.94	0.76	0.94	29.1
North: Chapel Rd														
7	L2	118	25	124	21.2	0.174	11.8	LOS A	1.4	11.4	0.58	0.71	0.58	33.9
8	T1	231	9	243	3.9	* 0.823	24.8	LOS B	6.5	46.7	1.00	1.02	1.46	21.4
9	R2	34	1	36	2.9	0.823	27.9	LOS B	6.5	46.7	1.00	1.02	1.47	15.0
Approach		383	35	403	9.1	0.823	21.1	LOS B	6.5	46.7	0.87	0.92	1.19	24.0
West: Rickard Rd														
10	L2	67	1	71	1.5	* 0.734	24.3	LOS B	5.7	40.7	0.99	0.92	1.23	22.1
11	T1	458	9	482	2.0	0.734	19.1	LOS B	5.9	42.1	0.99	0.92	1.22	29.0
12	R2	129	0	136	0.0	* 0.487	23.5	LOS B	2.7	18.6	0.96	0.78	0.96	20.0
Approach		654	10	688	1.5	0.734	20.5	LOS B	5.9	42.1	0.98	0.89	1.17	26.4
All Vehicles		1736	99	1827	5.7	0.823	19.6	LOS B	6.5	46.7	0.93	0.84	1.07	26.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped]	[Dist] m					
South: Chapel Rd												
P1	Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20
East: Rickard Rd												
P2	Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	183.3	219.5	1.20
North: Chapel Rd												

MOVEMENT SUMMARY

Site: TCS 1203 [Chapel Rd / Rickard Rd - TTP (Site Folder: AM)]

Chapel Rd / Rickard Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	89	0	94	0.0	0.282	16.8	LOS B	3.0	22.0	0.77	0.69	0.77	22.6
2	T1	202	19	213	9.4	0.282	14.9	LOS B	3.0	22.0	0.80	0.67	0.80	27.0
Approach		291	19	306	6.5	0.282	15.5	LOS B	3.0	22.0	0.79	0.68	0.79	25.7
East: Rickard Rd														
4	L2	90	13	95	14.4	0.413	23.9	LOS B	3.6	27.2	0.89	0.76	0.89	27.7
5	T1	241	13	254	5.4	0.413	18.1	LOS B	4.0	29.1	0.89	0.73	0.89	29.5
6	R2	93	25	98	26.9	0.554	30.9	LOS C	2.5	21.7	0.98	0.80	1.06	22.8
Approach		424	51	446	12.0	0.554	22.1	LOS B	4.0	29.1	0.91	0.75	0.93	27.2
North: Chapel Rd														
7	L2	118	25	124	21.2	0.161	13.2	LOS A	1.7	13.9	0.57	0.71	0.57	32.7
8	T1	245	23	258	9.4	* 0.647	21.1	LOS B	6.8	51.1	0.93	0.84	0.99	23.4
9	R2	34	1	36	2.9	0.647	24.2	LOS B	6.8	51.1	0.93	0.84	0.99	16.2
Approach		397	49	418	12.3	0.647	19.0	LOS B	6.8	51.1	0.83	0.80	0.87	25.2
West: Rickard Rd														
10	L2	67	1	71	1.5	* 0.609	24.5	LOS B	6.3	44.7	0.94	0.81	0.97	22.0
11	T1	458	9	482	2.0	0.609	19.3	LOS B	6.4	45.9	0.94	0.80	0.97	28.8
12	R2	129	0	136	0.0	* 0.609	30.1	LOS C	3.5	24.4	0.99	0.82	1.10	17.2
Approach		654	10	688	1.5	0.609	22.0	LOS B	6.4	45.9	0.95	0.81	0.99	25.5
All Vehicles		1766	129	1859	7.3	0.647	20.3	LOS B	6.8	51.1	0.89	0.77	0.92	25.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	184.9	215.2	1.16
East: Rickard Rd												
P2	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	188.2	219.5	1.17
North: Chapel Rd												

MOVEMENT SUMMARY

Site: TCS 1203 [Chapel Rd / Rickard Rd - Future Base (Site Folder: PM)]

Chapel Rd / Rickard Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	195	1	205	0.5	0.433	19.2	LOS B	6.3	44.0	0.80	0.74	0.80	19.8
2	T1	294	2	309	0.7	0.433	18.6	LOS B	6.3	44.0	0.85	0.72	0.85	24.6
Approach		489	3	515	0.6	0.433	18.8	LOS B	6.3	44.0	0.83	0.73	0.83	22.6
East: Rickard Rd														
4	L2	157	6	165	3.8	* 0.872	38.7	LOS C	13.6	97.2	1.00	1.08	1.42	21.2
5	T1	609	6	641	1.0	0.872	32.7	LOS C	14.8	104.2	1.00	1.08	1.40	21.3
6	R2	238	32	251	13.4	* 0.915	47.1	LOS D	9.7	75.7	1.00	1.12	1.71	17.7
Approach		1004	44	1057	4.4	0.915	37.0	LOS C	14.8	104.2	1.00	1.09	1.48	20.2
North: Chapel Rd														
7	L2	199	27	209	13.6	0.247	14.4	LOS A	3.4	26.8	0.59	0.73	0.59	32.4
8	T1	367	8	386	2.2	* 0.903	39.2	LOS C	16.0	114.2	1.00	1.14	1.51	16.3
9	R2	34	1	36	2.9	0.903	42.2	LOS C	16.0	114.2	1.00	1.14	1.51	11.8
Approach		600	36	632	6.0	0.903	31.1	LOS C	16.0	114.2	0.86	1.01	1.21	19.9
West: Rickard Rd														
10	L2	87	0	92	0.0	0.620	27.7	LOS B	7.6	54.2	0.94	0.81	0.96	20.0
11	T1	437	12	460	2.7	0.620	22.3	LOS B	7.6	54.2	0.93	0.79	0.95	26.6
12	R2	122	0	128	0.0	0.415	30.5	LOS C	3.5	24.8	0.94	0.78	0.94	17.0
Approach		646	12	680	1.9	0.620	24.6	LOS B	7.6	54.2	0.93	0.79	0.95	23.8
All Vehicles		2739	95	2883	3.5	0.915	29.6	LOS C	16.0	114.2	0.92	0.94	1.18	21.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	189.9	215.2	1.13
East: Rickard Rd												
P2	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	193.2	219.5	1.14
North: Chapel Rd												

MOVEMENT SUMMARY

Site: TCS 1203 [Chapel Rd / Rickard Rd - Construction (Site Folder: PM)]

Chapel Rd / Rickard Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 60 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	195	1	205	0.5	0.433	19.2	LOS B	6.3	44.0	0.80	0.74	0.80	19.8
2	T1	294	2	309	0.7	0.433	18.6	LOS B	6.3	44.0	0.85	0.72	0.85	24.6
Approach		489	3	515	0.6	0.433	18.8	LOS B	6.3	44.0	0.83	0.73	0.83	22.6
East: Rickard Rd														
4	L2	167	16	176	9.6	0.896	42.0	LOS C	14.4	104.7	1.00	1.13	1.51	20.1
5	T1	609	6	641	1.0	* 0.896	35.7	LOS C	15.9	112.5	1.00	1.12	1.49	20.1
6	R2	238	32	251	13.4	* 0.915	47.1	LOS D	9.7	75.7	1.00	1.12	1.71	17.7
Approach		1014	54	1067	5.3	0.915	39.4	LOS C	15.9	112.5	1.00	1.12	1.54	19.5
North: Chapel Rd														
7	L2	199	27	209	13.6	0.247	14.4	LOS A	3.4	26.8	0.59	0.73	0.59	32.4
8	T1	367	8	386	2.2	* 0.903	39.2	LOS C	16.0	114.2	1.00	1.14	1.51	16.3
9	R2	34	1	36	2.9	0.903	42.2	LOS C	16.0	114.2	1.00	1.14	1.51	11.8
Approach		600	36	632	6.0	0.903	31.1	LOS C	16.0	114.2	0.86	1.01	1.21	19.9
West: Rickard Rd														
10	L2	87	0	92	0.0	0.620	27.7	LOS B	7.6	54.2	0.94	0.81	0.96	20.0
11	T1	437	12	460	2.7	0.620	22.3	LOS B	7.6	54.2	0.93	0.79	0.95	26.6
12	R2	122	0	128	0.0	0.415	30.5	LOS C	3.5	24.8	0.94	0.78	0.94	17.0
Approach		646	12	680	1.9	0.620	24.6	LOS B	7.6	54.2	0.93	0.79	0.95	23.8
All Vehicles		2749	105	2894	3.8	0.915	30.5	LOS C	16.0	114.2	0.92	0.95	1.20	20.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	189.9	215.2	1.13
East: Rickard Rd												
P2	Full	50	53	24.4	LOS C	0.1	0.1	0.90	0.90	193.2	219.5	1.14
North: Chapel Rd												

MOVEMENT SUMMARY

Site: TCS 1203 [Chapel Rd / Rickard Rd - TTP (Site Folder: PM)]

Chapel Rd / Rickard Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	195	1	205	0.5	0.505	21.4	LOS B	7.4	52.9	0.79	0.74	0.79	18.8
2	T1	312	20	328	6.4	0.505	20.2	LOS B	7.4	52.9	0.83	0.71	0.83	23.6
Approach		507	21	534	4.1	0.505	20.6	LOS B	7.4	52.9	0.82	0.72	0.82	21.7
East: Rickard Rd														
4	L2	167	16	176	9.6	* 0.867	42.2	LOS C	15.5	112.9	1.00	1.06	1.35	20.0
5	T1	609	6	641	1.0	0.867	36.0	LOS C	17.0	120.2	1.00	1.05	1.33	20.0
6	R2	238	32	251	13.4	* 0.890	48.4	LOS D	10.5	82.3	1.00	1.04	1.52	17.4
Approach		1014	54	1067	5.3	0.890	39.9	LOS C	17.0	120.2	1.00	1.05	1.38	19.3
North: Chapel Rd														
7	L2	199	27	209	13.6	0.235	14.7	LOS B	3.8	29.3	0.56	0.72	0.56	32.1
8	T1	387	28	407	7.2	* 0.891	41.0	LOS C	18.7	138.8	1.00	1.11	1.40	15.8
9	R2	34	1	36	2.9	0.891	44.0	LOS D	18.7	138.8	1.00	1.11	1.40	11.5
Approach		620	56	653	9.0	0.891	32.7	LOS C	18.7	138.8	0.86	0.99	1.13	19.3
West: Rickard Rd														
10	L2	87	0	92	0.0	0.614	30.6	LOS C	8.9	63.5	0.94	0.80	0.94	18.6
11	T1	437	12	460	2.7	0.614	25.1	LOS B	8.9	63.5	0.92	0.78	0.92	25.0
12	R2	122	0	128	0.0	0.403	34.1	LOS C	4.1	28.5	0.93	0.78	0.93	15.8
Approach		646	12	680	1.9	0.614	27.5	LOS B	8.9	63.5	0.93	0.78	0.93	22.2
All Vehicles		2787	143	2934	5.1	0.891	31.9	LOS C	18.7	138.8	0.92	0.92	1.12	20.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	194.9	215.2	1.10
East: Rickard Rd												
P2	Full	50	53	29.3	LOS C	0.1	0.1	0.92	0.92	198.2	219.5	1.11
North: Chapel Rd												

MOVEMENT SUMMARY

Site: TCS 1299 [Haldon St / The Boulevard - Future Base (Site Folder: AM)]

Haldon St / The Boulevard

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 83 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Haldon St														
1	L2	47	8	49	17.0	0.315	22.7	LOS B	1.9	15.2	0.91	0.73	0.91	33.5
2	T1	261	21	275	8.0	* 0.906	45.8	LOS D	11.4	85.4	0.98	1.08	1.44	27.1
Approach		308	29	324	9.4	0.906	42.2	LOS C	11.4	85.4	0.97	1.02	1.36	27.8
East: The Boulevard														
4	L2	20	0	21	0.0	0.398	32.7	LOS C	3.4	26.1	0.93	0.78	0.93	30.4
5	T1	89	12	94	13.5	0.398	28.2	LOS B	3.4	26.1	0.93	0.78	0.93	17.8
6	R2	216	14	227	6.5	* 0.923	59.1	LOS E	11.6	85.7	1.00	1.11	1.61	15.1
Approach		325	26	342	8.0	0.923	49.0	LOS D	11.6	85.7	0.98	1.00	1.38	16.5
North: Haldon St														
7	L2	104	3	109	2.9	0.189	20.0	LOS B	3.6	26.1	0.65	0.67	0.65	28.4
8	T1	243	18	256	7.4	0.759	29.5	LOS C	13.7	99.4	0.92	0.99	1.00	31.6
9	R2	159	1	167	0.6	* 0.759	36.3	LOS C	13.7	99.4	0.97	1.05	1.06	21.3
Approach		506	22	533	4.3	0.759	29.7	LOS C	13.7	99.4	0.88	0.94	0.95	28.4
West: The Boulevard														
10	L2	160	3	168	1.9	0.225	21.7	LOS B	4.4	31.5	0.69	0.73	0.69	26.6
11	T1	191	31	201	16.2	* 0.931	56.4	LOS D	12.9	102.9	1.00	1.21	1.62	10.9
12	R2	43	6	45	14.0	0.931	61.1	LOS E	12.9	102.9	1.00	1.21	1.62	21.6
Approach		394	40	415	10.2	0.931	42.8	LOS D	12.9	102.9	0.87	1.01	1.24	17.3
All Vehicles		1533	117	1614	7.6	0.931	39.7	LOS C	13.7	102.9	0.92	0.99	1.20	23.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Haldon St												
P1	Full	70	74	32.2	LOS D	0.2	0.2	0.88	0.88	56.0	31.0	0.55
East: The Boulevard												
P2	Full	20	21	15.7	LOS B	0.0	0.0	0.61	0.61	41.1	33.0	0.80
North: Haldon St												

MOVEMENT SUMMARY

**Site: TCS 1299 [Haldon St / The Boulevard - Construction
(Site Folder: AM)]**

Haldon St / The Boulevard

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Haldon St														
1	L2	54	15	57	27.8	0.332	23.3	LOS B	2.2	17.7	0.90	0.74	0.90	32.9
2	T1	269	29	283	10.8	* 0.955	59.7	LOS E	14.3	109.6	0.98	1.18	1.59	23.8
Approach		323	44	340	13.6	0.955	53.6	LOS D	14.3	109.6	0.97	1.11	1.48	24.8
East: The Boulevard														
4	L2	20	0	21	0.0	0.399	35.9	LOS C	3.8	28.9	0.94	0.79	0.94	29.2
5	T1	89	12	94	13.5	0.399	31.4	LOS C	3.8	28.9	0.94	0.79	0.94	16.6
6	R2	216	14	227	6.5	* 0.957	71.6	LOS F	13.4	99.3	1.00	1.16	1.72	13.2
Approach		325	26	342	8.0	0.957	58.4	LOS E	13.4	99.3	0.98	1.04	1.46	14.6
North: Haldon St														
7	L2	104	3	109	2.9	0.182	20.0	LOS B	3.8	27.4	0.62	0.66	0.62	28.4
8	T1	251	26	264	10.4	0.731	29.4	LOS C	14.4	105.9	0.90	0.97	0.94	31.7
9	R2	159	1	167	0.6	* 0.731	36.2	LOS C	14.4	105.9	0.95	1.02	0.99	21.3
Approach		514	30	541	5.8	0.731	29.6	LOS C	14.4	105.9	0.86	0.92	0.89	28.5
West: The Boulevard														
10	L2	160	3	168	1.9	0.219	22.3	LOS B	4.7	33.3	0.67	0.73	0.67	26.3
11	T1	191	31	201	16.2	* 0.974	73.3	LOS F	15.8	127.4	1.00	1.31	1.77	8.8
12	R2	48	11	51	22.9	0.974	78.1	LOS F	15.8	127.4	1.00	1.31	1.77	18.5
Approach		399	45	420	11.3	0.974	53.4	LOS D	15.8	127.4	0.87	1.08	1.33	15.1
All Vehicles		1561	145	1643	9.3	0.974	46.6	LOS D	15.8	127.4	0.91	1.02	1.24	21.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Haldon St												
P1	Full	70	74	34.8	LOS D	0.2	0.2	0.88	0.88	58.6	31.0	0.53
East: The Boulevard												
P2	Full	20	21	15.6	LOS B	0.0	0.0	0.59	0.59	41.0	33.0	0.80
North: Haldon St												

MOVEMENT SUMMARY

Site: TCS 1299 [Haldon St / The Boulevard - TTP (Site Folder: AM)]

Haldon St / The Boulevard

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 88 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Haldon St														
1	L2	54	15	57	27.8	0.323	24.6	LOS B	2.6	21.3	0.89	0.74	0.89	32.3
2	T1	269	29	283	10.8	* 0.931	52.6	LOS D	13.2	100.8	0.98	1.13	1.50	25.4
Approach		323	44	340	13.6	0.931	47.9	LOS D	13.2	100.8	0.96	1.06	1.40	26.2
East: The Boulevard														
4	L2	20	0	21	0.0	0.479	34.6	LOS C	4.4	36.5	0.95	0.79	0.95	29.7
5	T1	102	25	107	24.5	0.479	30.1	LOS C	4.4	36.5	0.95	0.79	0.95	17.1
6	R2	216	14	227	6.5	* 0.953	69.2	LOS E	13.0	96.4	1.00	1.16	1.72	13.5
Approach		338	39	356	11.5	0.953	55.3	LOS D	13.0	96.4	0.98	1.03	1.44	15.1
North: Haldon St														
7	L2	104	3	109	2.9	0.602	29.4	LOS C	13.0	97.3	0.86	0.77	0.86	24.5
8	T1	251	26	264	10.4	0.602	24.8	LOS B	13.0	97.3	0.86	0.77	0.86	33.7
9	R2	159	1	167	0.6	* 0.628	40.8	LOS C	6.7	47.2	0.99	0.86	1.02	19.0
Approach		514	30	541	5.8	0.628	30.7	LOS C	13.0	97.3	0.90	0.80	0.91	28.0
West: The Boulevard														
10	L2	160	3	168	1.9	0.226	22.8	LOS B	4.7	33.4	0.69	0.73	0.69	26.1
11	T1	261	101	275	38.7	* 0.980	76.0	LOS F	21.3	195.7	1.00	1.42	1.78	8.6
12	R2	48	11	51	22.9	0.980	80.7	LOS F	21.3	195.7	1.00	1.42	1.78	18.1
Approach		469	115	494	24.5	0.980	58.3	LOS E	21.3	195.7	0.89	1.19	1.41	13.7
All Vehicles		1644	228	1731	13.9	0.980	47.0	LOS D	21.3	195.7	0.93	1.01	1.26	20.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Haldon St												
P1	Full	70	74	33.8	LOS D	0.2	0.2	0.88	0.88	57.6	31.0	0.54
East: The Boulevard												
P2	Full	20	21	21.2	LOS C	0.0	0.0	0.69	0.69	46.5	33.0	0.71
North: Haldon St												

MOVEMENT SUMMARY

Site: TCS 1299 [Haldon St / The Boulevard - Future Base (Site Folder: PM)]

Haldon St / The Boulevard

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Haldon St														
1	L2	100	9	105	9.0	0.310	17.2	LOS B	2.2	16.4	0.85	0.74	0.85	35.9
2	T1	275	14	289	5.1	* 0.891	38.8	LOS C	10.9	79.6	0.96	1.08	1.45	29.2
Approach		375	23	395	6.1	0.891	33.0	LOS C	10.9	79.6	0.93	0.99	1.29	30.5
East: The Boulevard														
4	L2	27	2	28	7.4	0.701	33.6	LOS C	6.5	50.3	0.99	0.90	1.12	30.1
5	T1	165	23	174	13.9	0.701	29.0	LOS C	6.5	50.3	0.99	0.90	1.12	17.6
6	R2	234	2	246	0.9	* 0.925	52.3	LOS D	10.9	76.7	1.00	1.15	1.68	16.4
Approach		426	27	448	6.3	0.925	42.1	LOS C	10.9	76.7	1.00	1.03	1.43	17.7
North: Haldon St														
7	L2	103	3	108	2.9	0.473	20.6	LOS B	8.8	64.0	0.77	0.70	0.77	29.4
8	T1	234	13	246	5.6	0.473	16.0	LOS B	8.8	64.0	0.77	0.70	0.77	37.9
9	R2	162	4	171	2.5	* 0.519	28.6	LOS C	5.1	36.4	0.95	0.79	0.95	23.3
Approach		499	20	525	4.0	0.519	21.0	LOS B	8.8	64.0	0.82	0.73	0.82	32.3
West: The Boulevard														
10	L2	194	4	204	2.1	0.341	24.0	LOS B	5.4	38.2	0.80	0.77	0.80	25.4
11	T1	148	20	156	13.5	* 0.899	44.8	LOS D	8.4	65.6	1.00	1.13	1.61	12.9
12	R2	41	5	43	12.2	0.899	49.4	LOS D	8.4	65.6	1.00	1.13	1.61	24.3
Approach		383	29	403	7.6	0.899	34.8	LOS C	8.4	65.6	0.90	0.95	1.20	20.2
All Vehicles		1683	99	1772	5.9	0.925	32.2	LOS C	10.9	79.6	0.91	0.91	1.17	25.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Haldon St												
P1	Full	70	74	27.5	LOS C	0.1	0.1	0.89	0.89	51.4	31.0	0.60
East: The Boulevard												
P2	Full	20	21	14.5	LOS B	0.0	0.0	0.64	0.64	39.9	33.0	0.83
North: Haldon St												

MOVEMENT SUMMARY

**Site: TCS 1299 [Haldon St / The Boulevard - Construction
(Site Folder: PM)]**

Haldon St / The Boulevard

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Haldon St														
1	L2	107	16	113	15.0	0.304	18.0	LOS B	2.6	20.4	0.82	0.74	0.82	35.2
2	T1	283	22	298	7.8	* 0.876	40.2	LOS C	12.2	90.8	0.94	1.03	1.33	28.7
Approach		390	38	411	9.7	0.876	34.1	LOS C	12.2	90.8	0.91	0.95	1.19	30.0
East: The Boulevard														
4	L2	27	2	28	7.4	0.641	35.6	LOS C	7.1	54.9	0.98	0.85	1.01	29.3
5	T1	165	23	174	13.9	0.641	31.0	LOS C	7.1	54.9	0.98	0.85	1.01	16.8
6	R2	234	2	246	0.9	* 0.904	53.1	LOS D	11.6	81.9	1.00	1.08	1.53	16.3
Approach		426	27	448	6.3	0.904	43.4	LOS D	11.6	81.9	0.99	0.98	1.30	17.4
North: Haldon St														
7	L2	103	3	108	2.9	0.480	22.2	LOS B	10.1	74.8	0.76	0.69	0.76	28.3
8	T1	242	21	255	8.7	0.480	17.6	LOS B	10.1	74.8	0.76	0.69	0.76	37.1
9	R2	162	4	171	2.5	* 0.509	31.3	LOS C	5.8	41.6	0.94	0.80	0.94	22.2
Approach		507	28	534	5.5	0.509	22.9	LOS B	10.1	74.8	0.82	0.73	0.82	31.4
West: The Boulevard														
10	L2	194	4	204	2.1	0.345	26.9	LOS B	6.1	43.7	0.80	0.77	0.80	24.0
11	T1	148	20	156	13.5	* 0.881	47.7	LOS D	9.5	75.2	1.00	1.09	1.48	12.3
12	R2	46	10	48	21.7	0.881	52.4	LOS D	9.5	75.2	1.00	1.09	1.48	23.5
Approach		388	34	408	8.8	0.881	37.9	LOS C	9.5	75.2	0.90	0.93	1.14	19.3
All Vehicles		1711	127	1801	7.4	0.904	34.0	LOS C	12.2	90.8	0.90	0.89	1.10	25.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Haldon St												
P1	Full	70	74	29.8	LOS C	0.1	0.1	0.87	0.87	53.7	31.0	0.58
East: The Boulevard												
P2	Full	20	21	15.6	LOS B	0.0	0.0	0.63	0.63	41.0	33.0	0.80
North: Haldon St												

MOVEMENT SUMMARY

Site: TCS 1299 [Haldon St / The Boulevard - TTP (Site Folder: PM)]

Haldon St / The Boulevard

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Haldon St														
1	L2	107	16	113	15.0	0.347	22.3	LOS B	3.5	27.5	0.86	0.75	0.86	33.0
2	T1	283	22	298	7.8	* 0.998	79.0	LOS F	18.3	136.9	0.97	1.33	1.80	20.4
Approach		390	38	411	9.7	0.998	63.4	LOS E	18.3	136.9	0.94	1.17	1.54	22.4
East: The Boulevard														
4	L2	27	2	28	7.4	0.970	79.2	LOS F	16.8	151.9	0.97	1.36	1.75	18.7
5	T1	227	85	239	37.4	* 0.970	74.7	LOS F	16.8	151.9	0.97	1.36	1.75	8.8
6	R2	234	2	246	0.9	0.700	37.5	LOS C	9.8	68.9	0.91	0.84	0.98	20.2
Approach		488	89	514	18.2	0.970	57.1	LOS E	16.8	151.9	0.94	1.11	1.38	14.0
North: Haldon St														
7	L2	103	3	108	2.9	0.557	28.7	LOS C	12.5	92.8	0.83	0.75	0.83	24.8
8	T1	242	21	255	8.7	0.557	24.1	LOS B	12.5	92.8	0.83	0.75	0.83	34.1
9	R2	162	4	171	2.5	* 0.651	41.9	LOS C	7.1	50.4	0.99	0.88	1.04	18.7
Approach		507	28	534	5.5	0.651	30.7	LOS C	12.5	92.8	0.88	0.79	0.90	27.9
West: The Boulevard														
10	L2	194	4	204	2.1	0.374	31.6	LOS C	7.1	50.9	0.83	0.78	0.83	22.1
11	T1	170	42	179	24.7	* 1.003	88.1	LOS F	15.7	132.8	1.00	1.41	1.96	7.6
12	R2	46	10	48	21.7	1.003	92.8	LOS F	15.7	132.8	1.00	1.41	1.96	16.5
Approach		410	56	432	13.7	1.003	61.9	LOS E	15.7	132.8	0.92	1.11	1.43	13.8
All Vehicles		1795	211	1889	11.8	1.003	52.1	LOS D	18.3	151.9	0.92	1.03	1.29	19.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Haldon St												
P1	Full	70	74	27.3	LOS C	0.1	0.1	0.78	0.78	51.2	31.0	0.61
East: The Boulevard												
P2	Full	20	21	20.7	LOS C	0.0	0.0	0.68	0.68	46.1	33.0	0.72
North: Haldon St												

MOVEMENT SUMMARY

Site: TCS 1303 [New Canterbury Rd / Duntroon St - Future Base (Site Folder: AM)]

New Canterbury Rd / Duntroon St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Duntroon St														
1	L2	6	0	6	0.0	0.031	45.8	LOS D	0.3	1.8	0.92	0.65	0.92	32.8
3b	R3	79	1	83	1.3	*0.473	49.0	LOS D	3.6	25.7	0.98	0.77	0.98	32.5
Approach		85	1	89	1.2	0.473	48.8	LOS D	3.6	25.7	0.98	0.77	0.98	32.5
SouthEast: New Caterbury Rd														
21b	L3	16	0	17	0.0	0.120	10.2	LOS A	1.9	14.0	0.31	0.63	0.31	51.8
21a	L1	547	38	576	6.9	0.342	9.1	LOS A	6.8	50.5	0.37	0.66	0.37	50.4
Approach		563	38	593	6.7	0.342	9.1	LOS A	6.8	50.5	0.36	0.66	0.36	50.4
West: New Canterbury Rd														
12a	R1	1072	82	1128	7.6	*0.494	9.9	LOS A	11.6	86.8	0.46	0.68	0.46	50.1
12	R2	55	1	58	1.8	0.494	11.3	LOS A	10.3	76.1	0.47	0.69	0.47	49.2
Approach		1127	83	1186	7.4	0.494	10.0	LOS A	11.6	86.8	0.46	0.68	0.46	50.1
All Vehicles		1775	122	1868	6.9	0.494	11.6	LOS A	11.6	86.8	0.45	0.68	0.45	48.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Duntroon St												
P1	Full	50	53	37.4	LOS D	0.1	0.1	0.91	0.91	61.3	31.0	0.51
SouthEast: New Caterbury Rd												
P5	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.7	34.4	0.52
West: New Canterbury Rd												
P4	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.5	34.1	0.52
All Pedestrians		150	158	38.7	LOS D	0.1	0.1	0.93	0.93	64.2	33.2	0.52

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1303 [New Canterbury Rd / Duntroon St - Construction (Site Folder: AM)]

New Canterbury Rd / Duntroon St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Duntroon St														
1	L2	6	0	6	0.0	0.031	45.8	LOS D	0.3	1.8	0.92	0.65	0.92	32.8
3b	R3	79	1	83	1.3	*0.473	49.0	LOS D	3.6	25.7	0.98	0.77	0.98	32.5
Approach		85	1	89	1.2	0.473	48.8	LOS D	3.6	25.7	0.98	0.77	0.98	32.5
SouthEast: New Caterbury Rd														
21b	L3	16	0	17	0.0	0.120	10.2	LOS A	1.9	14.0	0.31	0.63	0.31	51.8
21a	L1	547	38	576	6.9	0.342	9.1	LOS A	6.8	50.5	0.37	0.66	0.37	50.4
Approach		563	38	593	6.7	0.342	9.1	LOS A	6.8	50.5	0.36	0.66	0.36	50.4
West: New Canterbury Rd														
12a	R1	1072	82	1128	7.6	*0.494	9.9	LOS A	11.6	86.8	0.46	0.68	0.46	50.1
12	R2	55	1	58	1.8	0.494	11.3	LOS A	10.3	76.1	0.47	0.69	0.47	49.2
Approach		1127	83	1186	7.4	0.494	10.0	LOS A	11.6	86.8	0.46	0.68	0.46	50.1
All Vehicles		1775	122	1868	6.9	0.494	11.6	LOS A	11.6	86.8	0.45	0.68	0.45	48.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Duntroon St												
P1	Full	50	53	37.4	LOS D	0.1	0.1	0.91	0.91	61.3	31.0	0.51
SouthEast: New Caterbury Rd												
P5	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.7	34.4	0.52
West: New Canterbury Rd												
P4	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.5	34.1	0.52
All Pedestrians		150	158	38.7	LOS D	0.1	0.1	0.93	0.93	64.2	33.2	0.52

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1303 [New Canterbury Rd / Duntroon St - TTP (Site Folder: AM)]

New Canterbury Rd / Duntroon St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Duntroon St														
1	L2	6	0	6	0.0	0.035	47.0	LOS D	0.3	1.8	0.93	0.65	0.93	32.4
3b	R3	79	1	83	1.3	* 0.526	50.4	LOS D	3.7	26.2	0.99	0.77	0.99	32.1
Approach		85	1	89	1.2	0.526	50.1	LOS D	3.7	26.2	0.99	0.77	0.99	32.1
SouthEast: New Caterbury Rd														
21b	L3	16	0	17	0.0	0.122	9.9	LOS A	1.8	13.8	0.30	0.63	0.30	52.0
21a	L1	555	46	584	8.3	0.346	8.8	LOS A	6.7	50.1	0.35	0.65	0.35	50.6
Approach		571	46	601	8.1	0.346	8.8	LOS A	6.7	50.1	0.35	0.65	0.35	50.7
West: New Canterbury Rd														
12a	R1	1129	139	1188	12.3	* 0.531	9.8	LOS A	12.3	95.0	0.46	0.68	0.46	50.3
12	R2	55	1	58	1.8	0.531	11.1	LOS A	11.0	84.4	0.47	0.69	0.47	49.4
Approach		1184	140	1246	11.8	0.531	9.9	LOS A	12.3	95.0	0.46	0.69	0.46	50.2
All Vehicles		1840	187	1937	10.2	0.531	11.4	LOS A	12.3	95.0	0.45	0.68	0.45	49.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Duntroon St												
P1	Full	50	53	37.4	LOS D	0.1	0.1	0.91	0.91	61.3	31.0	0.51
SouthEast: New Caterbury Rd												
P5	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.7	34.4	0.52
West: New Canterbury Rd												
P4	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.5	34.1	0.52
All Pedestrians		150	158	38.7	LOS D	0.1	0.1	0.93	0.93	64.2	33.2	0.52

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1303 [New Canterbury Rd / Duntroon St - Future Base (Site Folder: PM)]

New Canterbury Rd / Duntroon St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Duntroon St														
1	L2	29	0	31	0.0	0.301	53.2	LOS D	1.4	9.8	0.99	0.72	0.99	30.3
3b	R3	33	0	35	0.0	*0.391	54.7	LOS D	1.6	11.3	1.00	0.73	1.00	31.0
Approach		62	0	65	0.0	0.391	54.0	LOS D	1.6	11.3	1.00	0.72	1.00	30.7
SouthEast: New Caterbury Rd														
21b	L3	101	1	106	1.0	0.482	9.9	LOS A	9.7	70.0	0.37	0.68	0.37	51.9
21a	L1	1177	49	1239	4.2	0.482	8.0	LOS A	10.2	73.7	0.37	0.67	0.37	51.1
Approach		1278	50	1345	3.9	0.482	8.1	LOS A	10.2	73.7	0.37	0.67	0.37	51.2
West: New Canterbury Rd														
12a	R1	709	23	746	3.2	*0.662	9.7	LOS A	13.3	95.2	0.46	0.68	0.46	50.7
12	R2	60	1	63	1.7	0.662	11.3	LOS A	13.3	95.2	0.53	0.72	0.53	49.2
Approach		769	24	809	3.1	0.662	9.8	LOS A	13.3	95.2	0.46	0.69	0.46	50.6
All Vehicles		2109	74	2220	3.5	0.662	10.1	LOS A	13.3	95.2	0.42	0.68	0.42	50.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Duntroon St												
P1	Full	50	53	37.4	LOS D	0.1	0.1	0.91	0.91	61.3	31.0	0.51
SouthEast: New Caterbury Rd												
P5	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.7	34.4	0.52
West: New Canterbury Rd												
P4	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.5	34.1	0.52
All Pedestrians		150	158	38.7	LOS D	0.1	0.1	0.93	0.93	64.2	33.2	0.52

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1303 [New Canterbury Rd / Duntroon St - Construction (Site Folder: PM)]

New Canterbury Rd / Duntroon St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Duntroon St														
1	L2	29	0	31	0.0	0.301	53.2	LOS D	1.4	9.8	0.99	0.72	0.99	30.3
3b	R3	33	0	35	0.0	*0.391	54.7	LOS D	1.6	11.3	1.00	0.73	1.00	31.0
Approach		62	0	65	0.0	0.391	54.0	LOS D	1.6	11.3	1.00	0.72	1.00	30.7
SouthEast: New Caterbury Rd														
21b	L3	101	1	106	1.0	0.482	9.9	LOS A	9.7	70.0	0.37	0.68	0.37	51.9
21a	L1	1177	49	1239	4.2	0.482	8.0	LOS A	10.2	73.7	0.37	0.67	0.37	51.1
Approach		1278	50	1345	3.9	0.482	8.1	LOS A	10.2	73.7	0.37	0.67	0.37	51.2
West: New Canterbury Rd														
12a	R1	709	23	746	3.2	*0.662	9.7	LOS A	13.3	95.2	0.46	0.68	0.46	50.7
12	R2	60	1	63	1.7	0.662	11.3	LOS A	13.3	95.2	0.53	0.72	0.53	49.2
Approach		769	24	809	3.1	0.662	9.8	LOS A	13.3	95.2	0.46	0.69	0.46	50.6
All Vehicles		2109	74	2220	3.5	0.662	10.1	LOS A	13.3	95.2	0.42	0.68	0.42	50.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Duntroon St												
P1	Full	50	53	37.4	LOS D	0.1	0.1	0.91	0.91	61.3	31.0	0.51
SouthEast: New Caterbury Rd												
P5	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.7	34.4	0.52
West: New Canterbury Rd												
P4	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	65.5	34.1	0.52
All Pedestrians		150	158	38.7	LOS D	0.1	0.1	0.93	0.93	64.2	33.2	0.52

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1303 [New Canterbury Rd / Duntroon St - TTP (Site Folder: PM)]

New Canterbury Rd / Duntroon St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Duntroon St														
1	L2	29	0	31	0.0	0.417	61.1	LOS E	1.6	11.2	1.00	0.71	1.00	28.3
3b	R3	33	0	35	0.0	* 0.543	63.1	LOS E	1.9	13.1	1.00	0.75	1.08	28.9
Approach		62	0	65	0.0	0.543	62.2	LOS E	1.9	13.1	1.00	0.73	1.04	28.6
SouthEast: New Caterbury Rd														
21b	L3	101	1	106	1.0	0.506	9.7	LOS A	10.6	78.5	0.35	0.67	0.35	52.0
21a	L1	1227	99	1292	8.1	0.506	7.8	LOS A	11.0	82.6	0.35	0.67	0.35	51.3
Approach		1328	100	1398	7.5	0.506	8.0	LOS A	11.0	82.6	0.35	0.67	0.35	51.3
West: New Canterbury Rd														
12a	R1	724	38	762	5.2	* 0.695	9.8	LOS A	15.0	109.3	0.45	0.68	0.45	50.6
12	R2	60	1	63	1.7	0.695	11.6	LOS A	15.0	109.3	0.54	0.73	0.54	49.0
Approach		784	39	825	5.0	0.695	10.0	LOS A	15.0	109.3	0.46	0.69	0.46	50.5
All Vehicles		2174	139	2288	6.4	0.695	10.2	LOS A	15.0	109.3	0.41	0.68	0.41	49.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Duntroon St												
P1	Full	50	53	42.4	LOS E	0.1	0.1	0.92	0.92	66.3	31.0	0.47
SouthEast: New Caterbury Rd												
P5	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	70.7	34.4	0.49
West: New Canterbury Rd												
P4	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	70.5	34.1	0.48
All Pedestrians		150	158	43.7	LOS E	0.1	0.1	0.94	0.94	69.2	33.2	0.48

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

**Site: TCS 1329 [Burwood Rd / Leylands Parade - Future Base
(Site Folder: PM)]**

Burwood Rd / Leylands Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Burwood Rd														
1	L2	64	0	67	0.0	0.206	20.2	LOS B	3.1	22.9	0.70	0.65	0.70	38.8
2	T1	512	59	539	11.5	* 1.029	82.5	LOS F	36.0	275.4	0.96	1.59	1.99	14.5
3	R2	46	2	48	4.3	1.029	96.7	LOS F	36.0	275.4	1.00	1.73	2.17	17.9
Approach		622	61	655	9.8	1.029	77.1	LOS F	36.0	275.4	0.94	1.50	1.87	16.6
East: Leylands Pde														
4	L2	35	1	37	2.9	0.314	18.9	LOS B	5.6	40.2	0.70	0.61	0.70	38.5
5	T1	201	4	212	2.0	0.314	14.3	LOS A	5.6	40.2	0.70	0.61	0.70	40.2
6	R2	205	4	216	2.0	* 0.661	32.3	LOS C	6.8	48.1	0.98	0.88	1.04	24.2
Approach		441	9	464	2.0	0.661	23.0	LOS B	6.8	48.1	0.83	0.74	0.86	33.2
North: Burwood Rd														
7	L2	48	1	51	2.1	0.531	22.0	LOS B	10.1	74.7	0.81	0.72	0.81	31.1
8	T1	314	25	331	8.0	0.531	17.5	LOS B	10.1	74.7	0.81	0.72	0.81	32.7
9	R2	62	1	65	1.6	0.536	42.7	LOS D	2.4	17.0	1.00	0.76	1.05	24.5
Approach		424	27	446	6.4	0.536	21.7	LOS B	10.1	74.7	0.84	0.72	0.85	30.7
West: Leylands Pde														
10	L2	195	4	205	2.1	0.912	48.9	LOS D	15.0	106.8	1.00	1.18	1.54	23.6
11	T1	129	3	136	2.3	* 0.912	44.5	LOS D	15.0	106.8	1.00	1.18	1.54	28.3
Approach		324	7	341	2.2	0.912	47.2	LOS D	15.0	106.8	1.00	1.18	1.54	25.7
All Vehicles		1811	104	1906	5.7	1.029	45.6	LOS D	36.0	275.4	0.90	1.08	1.32	23.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Burwood Rd												
P1	Full	50	53	30.2	LOS D	0.1	0.1	0.93	0.93	56.8	34.5	0.61
East: Leylands Pde												
P2	Full	50	53	30.2	LOS D	0.1	0.1	0.93	0.93	56.8	34.5	0.61
North: Burwood Rd												

MOVEMENT SUMMARY

**Site: TCS 1329 [Burwood Rd / Leylands Parade - Construction
(Site Folder: PM)]**

Burwood Rd / Leylands Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Burwood Rd														
1	L2	64	0	67	0.0	0.200	20.1	LOS B	3.5	26.5	0.66	0.63	0.66	38.8
2	T1	529	76	557	14.4	* 1.000	69.4	LOS E	34.6	270.2	0.94	1.39	1.67	16.4
3	R2	46	2	48	4.3	1.000	82.7	LOS F	34.6	270.2	0.98	1.52	1.83	19.9
Approach		639	78	673	12.2	1.000	65.4	LOS E	34.6	270.2	0.91	1.33	1.58	18.5
East: Leylands Pde														
4	L2	35	1	37	2.9	0.326	21.8	LOS B	6.6	47.0	0.72	0.63	0.72	36.9
5	T1	201	4	212	2.0	0.326	17.2	LOS B	6.6	47.0	0.72	0.63	0.72	38.7
6	R2	205	4	216	2.0	* 0.694	39.5	LOS C	7.9	55.9	0.99	0.96	1.07	21.7
Approach		441	9	464	2.0	0.694	28.0	LOS B	7.9	55.9	0.84	0.78	0.89	31.0
North: Burwood Rd														
7	L2	48	1	51	2.1	0.524	22.4	LOS B	11.4	87.9	0.78	0.70	0.78	30.9
8	T1	331	42	348	12.7	0.524	17.8	LOS B	11.4	87.9	0.78	0.70	0.78	32.5
9	R2	62	1	65	1.6	0.572	47.9	LOS D	2.7	19.4	1.00	0.78	1.08	23.1
Approach		441	44	464	10.0	0.572	22.5	LOS B	11.4	87.9	0.81	0.71	0.82	30.3
West: Leylands Pde														
10	L2	195	4	205	2.1	0.974	71.6	LOS F	19.8	141.3	1.00	1.32	1.78	18.9
11	T1	129	3	136	2.3	* 0.974	67.2	LOS E	19.8	141.3	1.00	1.32	1.78	23.4
Approach		324	7	341	2.2	0.974	69.8	LOS E	19.8	141.3	1.00	1.32	1.78	20.8
All Vehicles		1845	138	1942	7.5	1.000	47.0	LOS D	34.6	270.2	0.89	1.05	1.27	23.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Burwood Rd												
P1	Full	50	53	35.2	LOS D	0.1	0.1	0.94	0.94	61.8	34.5	0.56
East: Leylands Pde												
P2	Full	50	53	35.2	LOS D	0.1	0.1	0.94	0.94	61.8	34.5	0.56
North: Burwood Rd												

MOVEMENT SUMMARY

Site: TCS 1329 [Burwood Rd / Leylands Parade - TTP (Site Folder: PM)]

Burwood Rd / Leylands Pde

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Burwood Rd														
1	L2	64	0	67	0.0	0.203	20.3	LOS B	4.0	30.9	0.63	0.61	0.63	38.8
2	T1	557	104	586	18.7	* 1.014	81.5	LOS F	43.3	348.7	0.95	1.40	1.66	14.7
3	R2	46	2	48	4.3	1.014	97.5	LOS F	43.3	348.7	1.00	1.54	1.84	17.8
Approach		667	106	702	15.9	1.014	76.7	LOS F	43.3	348.7	0.92	1.33	1.58	16.6
East: Leylands Pde														
4	L2	35	1	37	2.9	0.368	24.7	LOS B	7.6	53.9	0.74	0.64	0.74	35.4
5	T1	201	4	212	2.0	0.368	20.1	LOS B	7.6	53.9	0.74	0.64	0.74	37.3
6	R2	205	4	216	2.0	* 0.720	45.4	LOS D	9.0	63.7	1.00	0.99	1.10	20.1
Approach		441	9	464	2.0	0.720	32.2	LOS C	9.0	63.7	0.86	0.81	0.90	29.4
North: Burwood Rd														
7	L2	48	1	51	2.1	0.566	22.7	LOS B	12.6	98.7	0.75	0.67	0.75	30.7
8	T1	341	52	359	15.2	0.566	18.1	LOS B	12.6	98.7	0.75	0.67	0.75	32.3
9	R2	62	1	65	1.6	0.615	53.3	LOS D	3.1	21.9	1.00	0.80	1.12	21.8
Approach		451	54	475	12.0	0.615	23.4	LOS B	12.6	98.7	0.79	0.69	0.80	29.8
West: Leylands Pde														
10	L2	195	4	205	2.1	0.968	74.3	LOS F	21.3	151.8	1.00	1.26	1.67	18.5
11	T1	129	3	136	2.3	* 0.968	69.9	LOS E	21.3	151.8	1.00	1.26	1.67	22.9
Approach		324	7	341	2.2	0.968	72.6	LOS F	21.3	151.8	1.00	1.26	1.67	20.4
All Vehicles		1883	176	1982	9.3	1.014	52.8	LOS D	43.3	348.7	0.89	1.04	1.25	21.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Burwood Rd												
P1	Full	50	53	40.2	LOS E	0.1	0.1	0.95	0.95	66.8	34.5	0.52
East: Leylands Pde												
P2	Full	50	53	40.2	LOS E	0.1	0.1	0.95	0.95	66.8	34.5	0.52
North: Burwood Rd												

MOVEMENT SUMMARY

Site: TCS 1363 [Fifth Ave / Ninth Ave - Future Base (Site Folder: AM)]

Fifth Ave / Ninth Ave

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 48 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Ninth Ave														
5	T1	133	3	140	2.3	0.135	5.9	LOS A	1.6	11.6	0.52	0.42	0.52	43.8
6	R2	231	8	243	3.5	* 0.558	17.5	LOS B	4.5	32.2	0.92	0.79	0.92	35.5
Approach		364	11	383	3.0	0.558	13.3	LOS A	4.5	32.2	0.77	0.66	0.77	38.0
North: Fifth Ave														
7	L2	185	5	195	2.7	0.235	13.2	LOS A	2.8	20.2	0.64	0.72	0.64	38.1
9	R2	128	5	135	3.9	* 0.452	25.4	LOS B	3.1	22.1	0.94	0.78	0.94	34.7
Approach		313	10	329	3.2	0.452	18.2	LOS B	3.1	22.1	0.77	0.74	0.77	36.4
West: Ninth Ave														
10	L2	99	2	104	2.0	* 0.505	23.8	LOS B	4.0	28.5	0.93	0.78	0.93	36.2
11	T1	289	2	304	0.7	0.505	17.0	LOS B	4.6	32.1	0.89	0.73	0.89	35.1
Approach		388	4	408	1.0	0.505	18.7	LOS B	4.6	32.1	0.90	0.74	0.90	35.4
All Vehicles		1065	25	1121	2.3	0.558	16.7	LOS B	4.6	32.2	0.82	0.71	0.82	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: Ninth Ave												
P2	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
North: Fifth Ave												
P3	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.7	216.2	1.17
West: Ninth Ave												
P4	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
All Pedestrians		150	158	18.4	LOS B	0.1	0.1	0.88	0.88	184.2	215.5	1.17

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1363 [Fifth Ave / Ninth Ave - Construction (Site Folder: AM)]

Fifth Ave / Ninth Ave

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 48 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Ninth Ave														
5	T1	133	3	140	2.3	0.135	5.9	LOS A	1.6	11.6	0.52	0.42	0.52	43.8
6	R2	231	8	243	3.5	* 0.558	17.5	LOS B	4.5	32.2	0.92	0.79	0.92	35.5
Approach		364	11	383	3.0	0.558	13.3	LOS A	4.5	32.2	0.77	0.66	0.77	38.0
North: Fifth Ave														
7	L2	185	5	195	2.7	0.235	13.2	LOS A	2.8	20.2	0.64	0.72	0.64	38.1
9	R2	128	5	135	3.9	* 0.452	25.4	LOS B	3.1	22.1	0.94	0.78	0.94	34.7
Approach		313	10	329	3.2	0.452	18.2	LOS B	3.1	22.1	0.77	0.74	0.77	36.4
West: Ninth Ave														
10	L2	99	2	104	2.0	* 0.505	23.8	LOS B	4.0	28.5	0.93	0.78	0.93	36.2
11	T1	289	2	304	0.7	0.505	17.0	LOS B	4.6	32.1	0.89	0.73	0.89	35.1
Approach		388	4	408	1.0	0.505	18.7	LOS B	4.6	32.1	0.90	0.74	0.90	35.4
All Vehicles		1065	25	1121	2.3	0.558	16.7	LOS B	4.6	32.2	0.82	0.71	0.82	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
East: Ninth Ave												
P2	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
North: Fifth Ave												
P3	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.7	216.2	1.17
West: Ninth Ave												
P4	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
All Pedestrians		150	158	18.4	LOS B	0.1	0.1	0.88	0.88	184.2	215.5	1.17

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1363 [Fifth Ave / Ninth Ave - TTP (Site Folder: AM)]

Fifth Ave / Ninth Ave

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 48 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Ninth Ave														
5	T1	142	12	149	8.5	0.142	4.9	LOS A	1.6	12.0	0.48	0.39	0.48	44.7
6	R2	231	8	243	3.5	* 0.529	16.2	LOS B	4.3	30.8	0.89	0.79	0.89	36.3
Approach		373	20	393	5.4	0.529	11.9	LOS A	4.3	30.8	0.74	0.64	0.74	38.9
North: Fifth Ave														
7	L2	185	5	195	2.7	0.258	14.7	LOS B	3.0	21.8	0.69	0.73	0.69	37.2
9	R2	128	5	135	3.9	* 0.602	28.4	LOS B	3.3	24.0	0.99	0.83	1.09	33.5
Approach		313	10	329	3.2	0.602	20.3	LOS B	3.3	24.0	0.81	0.77	0.85	35.4
West: Ninth Ave														
10	L2	99	2	104	2.0	* 0.567	22.1	LOS B	4.3	31.9	0.90	0.77	0.91	37.1
11	T1	327	40	344	12.2	0.567	15.6	LOS B	4.8	37.0	0.86	0.72	0.87	35.9
Approach		426	42	448	9.9	0.567	17.1	LOS B	4.8	37.0	0.87	0.73	0.88	36.3
All Vehicles		1112	72	1171	6.5	0.602	16.3	LOS B	4.8	37.0	0.81	0.71	0.82	36.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: Ninth Ave												
P2	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
North: Fifth Ave												
P3	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.7	216.2	1.17
West: Ninth Ave												
P4	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
All Pedestrians		150	158	18.4	LOS B	0.1	0.1	0.88	0.88	184.2	215.5	1.17

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1363 [Fifth Ave / Ninth Ave - Future Base (Site Folder: PM)]

Fifth Ave / Ninth Ave

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 48 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Ninth Ave														
5	T1	296	4	312	1.4	0.311	7.2	LOS A	4.2	29.9	0.61	0.52	0.61	42.6
6	R2	245	0	258	0.0	* 0.629	19.8	LOS B	5.0	35.3	0.95	0.83	1.01	34.3
Approach		541	4	569	0.7	0.629	12.9	LOS A	5.0	35.3	0.76	0.66	0.79	38.3
North: Fifth Ave														
7	L2	226	5	238	2.2	0.273	12.8	LOS A	3.4	24.2	0.63	0.72	0.63	38.4
9	R2	183	6	193	3.3	* 0.571	25.1	LOS B	4.4	31.8	0.96	0.81	0.98	34.8
Approach		409	11	431	2.7	0.571	18.3	LOS B	4.4	31.8	0.78	0.76	0.79	36.5
West: Ninth Ave														
10	L2	127	0	134	0.0	* 0.585	26.2	LOS B	4.1	28.4	0.97	0.82	1.02	34.8
11	T1	261	0	275	0.0	0.585	18.1	LOS B	5.0	34.8	0.91	0.76	0.94	34.6
Approach		388	0	408	0.0	0.585	20.7	LOS B	5.0	34.8	0.93	0.78	0.96	34.7
All Vehicles		1338	15	1408	1.1	0.629	16.8	LOS B	5.0	35.3	0.82	0.73	0.84	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: Ninth Ave												
P2	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
North: Fifth Ave												
P3	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.7	216.2	1.17
West: Ninth Ave												
P4	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
All Pedestrians		150	158	18.4	LOS B	0.1	0.1	0.88	0.88	184.2	215.5	1.17

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1363 [Fifth Ave / Ninth Ave - Construction (Site Folder: PM)]

Fifth Ave / Ninth Ave

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 48 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Ninth Ave														
5	T1	296	4	312	1.4	0.311	7.2	LOS A	4.2	29.9	0.61	0.52	0.61	42.6
6	R2	245	0	258	0.0	* 0.629	19.8	LOS B	5.0	35.3	0.95	0.83	1.01	34.3
Approach		541	4	569	0.7	0.629	12.9	LOS A	5.0	35.3	0.76	0.66	0.79	38.3
North: Fifth Ave														
7	L2	226	5	238	2.2	0.273	12.8	LOS A	3.4	24.2	0.63	0.72	0.63	38.4
9	R2	183	6	193	3.3	* 0.571	25.1	LOS B	4.4	31.8	0.96	0.81	0.98	34.8
Approach		409	11	431	2.7	0.571	18.3	LOS B	4.4	31.8	0.78	0.76	0.79	36.5
West: Ninth Ave														
10	L2	127	0	134	0.0	* 0.585	26.2	LOS B	4.1	28.4	0.97	0.82	1.02	34.8
11	T1	261	0	275	0.0	0.585	18.1	LOS B	5.0	34.8	0.91	0.76	0.94	34.6
Approach		388	0	408	0.0	0.585	20.7	LOS B	5.0	34.8	0.93	0.78	0.96	34.7
All Vehicles		1338	15	1408	1.1	0.629	16.8	LOS B	5.0	35.3	0.82	0.73	0.84	36.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: Ninth Ave												
P2	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
North: Fifth Ave												
P3	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.7	216.2	1.17
West: Ninth Ave												
P4	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
All Pedestrians		150	158	18.4	LOS B	0.1	0.1	0.88	0.88	184.2	215.5	1.17

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1363 [Fifth Ave / Ninth Ave - TTP (Site Folder: PM)]

Fifth Ave / Ninth Ave

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 48 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Ninth Ave														
5	T1	330	38	347	11.5	0.366	6.9	LOS A	4.7	36.4	0.61	0.52	0.61	42.9
6	R2	245	0	258	0.0	* 0.604	18.6	LOS B	5.0	34.7	0.94	0.81	0.97	35.0
Approach		575	38	605	6.6	0.604	11.9	LOS A	5.0	36.4	0.75	0.65	0.76	39.0
North: Fifth Ave														
7	L2	226	5	238	2.2	0.285	13.5	LOS A	3.5	25.3	0.66	0.73	0.66	38.0
9	R2	183	6	193	3.3	* 0.642	26.9	LOS B	4.6	33.4	0.98	0.85	1.09	34.1
Approach		409	11	431	2.7	0.642	19.5	LOS B	4.6	33.4	0.80	0.79	0.85	35.9
West: Ninth Ave														
10	L2	127	0	134	0.0	* 0.579	25.1	LOS B	4.1	29.3	0.95	0.81	0.99	35.4
11	T1	273	12	287	4.4	0.579	17.2	LOS B	4.9	35.9	0.89	0.75	0.91	35.0
Approach		400	12	421	3.0	0.579	19.7	LOS B	4.9	35.9	0.91	0.77	0.94	35.1
All Vehicles		1384	61	1457	4.4	0.642	16.4	LOS B	5.0	36.4	0.81	0.72	0.84	36.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: Ninth Ave												
P2	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
North: Fifth Ave												
P3	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.7	216.2	1.17
West: Ninth Ave												
P4	Full	50	53	18.4	LOS B	0.1	0.1	0.88	0.88	184.0	215.2	1.17
All Pedestrians		150	158	18.4	LOS B	0.1	0.1	0.88	0.88	184.2	215.5	1.17

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [CCG1]

Network: N101 [Punchbowl Rd / The Boulevard / South Terrace Future Base (Network Folder: PM)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 113 seconds (CCG User-Given Phase Times)

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
Site: TCS 1744 [Punchbowl Rd / The Boulevard Future Base]														
East: The Boulevard														
4a	L1	480	2.0	480	2.0	0.496	25.5	LOS B	18.1	128.7	0.74	0.79	0.74	8.5
6b	R3	247	1.7	247	1.7	0.832	60.7	LOS E	14.7	104.6	1.00	0.93	1.22	15.7
Approach		727	1.9	727	1.9	0.832	37.5	LOS C	18.1	128.7	0.83	0.84	0.90	12.8
NorthEast: Punchbowl Rd														
24b	L3	91	0.0	91	0.0	0.567	30.3	LOS C	20.3	145.9	0.78	0.71	0.78	26.6
25	T1	827	3.8	827	3.8	0.567	24.2	LOS B	20.3	145.9	0.78	0.71	0.78	25.4
Approach		918	3.4	918	3.4	0.567	24.8	LOS B	20.3	145.9	0.78	0.71	0.78	25.5
SouthWest: Punchbowl Rd														
31	T1	641	3.0	641	3.0	0.477	7.7	LOS A	12.6	90.7	0.39	0.36	0.39	45.6
32a	R1	421	0.0	421	0.0	0.679	35.3	LOS C	15.2	106.1	0.87	0.98	0.87	11.2
Approach		1062	1.8	1062	1.8	0.679	18.7	LOS B	15.2	106.1	0.58	0.61	0.58	28.1
All Vehicles		2707	2.4	2707	2.4	0.832	25.8	LOS B	20.3	145.9	0.72	0.70	0.74	22.4
Site: TCS 1744 [Punchbowl Rd / South Terrace Future Base]														
NorthEast: Punchbowl Rd														
25	T1	843	3.4	843	3.4	0.629	2.8	LOS A	8.5	61.4	0.20	0.19	0.20	55.5
26	R2	452	0.0	452	0.0	*0.808	44.0	LOS D	15.2	106.1	0.93	0.88	1.00	25.6
Approach		1295	2.2	1295	2.2	0.808	17.2	LOS B	15.2	106.1	0.46	0.43	0.48	39.6
NorthWest: South Terrace														
27	L2	625	0.0	625	0.0	0.682	23.8	LOS B	22.5	157.7	0.72	0.81	0.72	33.3
29	R2	128	0.0	128	0.0	*0.974	94.7	LOS F	9.4	65.6	0.94	1.13	1.78	23.0
Approach		754	0.0	754	0.0	0.974	35.9	LOS C	22.5	157.7	0.75	0.86	0.90	29.5
SouthWest: Punchbowl Rd														
30	L2	213	0.0	213	0.0	0.918	64.6	LOS E	22.8	161.3	0.91	1.05	1.30	28.9
31	T1	431	2.9	431	2.9	*0.918	39.5	LOS C	22.8	161.3	0.84	0.80	0.98	25.9
Approach		643	2.0	643	2.0	0.918	47.8	LOS D	22.8	161.3	0.86	0.88	1.08	27.3
All Vehicles		2692	1.5	2692	1.5	0.974	29.8	LOS C	22.8	161.3	0.64	0.66	0.74	32.6

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)

Pedestrian Movement Performance (CCG)										
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE	Prop. Que	Effective Stop	Travel Time	Travel Dist.	Aver. Speed

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [CCG1]

Network: N101 [Punchbowl Rd / The Boulevard / South Terrace Construction (Network Folder: PM)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 113 seconds (CCG User-Given Phase Times)

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
Site: TCS 1744 [Punchbowl Rd / The Boulevard Construction]														
East: The Boulevard														
4a	L1	480	2.0	480	2.0	0.496	25.5	LOS B	18.1	128.7	0.74	0.79	0.74	8.5
6b	R3	251	2.9	251	2.9	0.852	62.7	LOS E	15.3	109.5	1.00	0.94	1.26	15.3
Approach		731	2.3	731	2.3	0.852	38.2	LOS C	18.1	128.7	0.83	0.84	0.92	12.6
NorthEast: Punchbowl Rd														
24b	L3	94	3.4	94	3.4	0.575	30.3	LOS C	20.4	147.8	0.78	0.72	0.78	26.5
25	T1	831	4.2	831	4.2	0.575	24.2	LOS B	20.4	147.8	0.79	0.71	0.79	25.3
Approach		924	4.1	924	4.1	0.575	24.9	LOS B	20.4	147.8	0.78	0.71	0.78	25.5
SouthWest: Punchbowl Rd														
31	T1	644	3.4	644	3.4	0.481	7.8	LOS A	12.8	92.3	0.40	0.36	0.40	45.5
32a	R1	421	0.0	421	0.0	0.682	35.6	LOS C	15.2	106.1	0.87	0.99	0.87	11.1
Approach		1065	2.1	1065	2.1	0.682	18.8	LOS B	15.2	106.1	0.58	0.61	0.58	28.0
All Vehicles		2720	2.8	2720	2.8	0.852	26.1	LOS B	20.4	147.8	0.72	0.71	0.74	22.3
Site: TCS 1744 [Punchbowl Rd / South Terrace Construction]														
NorthEast: Punchbowl Rd														
25	T1	843	3.4	843	3.4	0.629	2.8	LOS A	8.5	61.4	0.20	0.19	0.20	55.5
26	R2	455	0.7	455	0.7	*0.819	44.9	LOS D	15.1	106.1	0.94	0.89	1.02	25.3
Approach		1298	2.4	1298	2.4	0.819	17.6	LOS B	15.1	106.1	0.46	0.43	0.49	39.3
NorthWest: South Terrace														
27	L2	628	0.5	628	0.5	0.688	23.9	LOS B	22.7	159.9	0.72	0.81	0.72	33.3
29	R2	128	0.0	128	0.0	*0.977	95.8	LOS F	9.4	66.1	0.94	1.13	1.79	22.8
Approach		757	0.4	757	0.4	0.977	36.1	LOS C	22.7	159.9	0.76	0.86	0.90	29.4
SouthWest: Punchbowl Rd														
30	L2	213	0.0	213	0.0	0.926	67.3	LOS E	23.3	164.7	0.92	1.06	1.33	28.3
31	T1	431	2.9	431	2.9	*0.926	40.5	LOS C	23.3	164.7	0.84	0.81	0.99	25.6
Approach		643	2.0	643	2.0	0.926	49.4	LOS D	23.3	164.7	0.86	0.89	1.10	26.9
All Vehicles		2698	1.8	2698	1.8	0.977	30.4	LOS C	23.3	164.7	0.64	0.66	0.75	32.3

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)

Pedestrian Movement Performance (CCG)										
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE	Prop. Que	Effective Stop	Travel Time	Travel Dist.	Aver. Speed

CCG MOVEMENT SUMMARY

Common Control Group: CCG1 [CCG1]

Network: N101 [Punchbowl Rd / The Boulevard / South Terrace TTP (Network Folder: PM)]

EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 113 seconds (CCG User-Given Phase Times)

Vehicle Movement Performance (CCG)														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
Site: TCS 1744 [Punchbowl Rd / The Boulevard TTP]														
East: The Boulevard														
4a	L1	545	13.7	545	13.7	0.628	27.5	LOS B	22.5	159.5	0.81	0.83	0.81	7.9
6b	R3	251	2.9	251	2.9	0.852	62.7	LOS E	15.3	109.5	1.00	0.94	1.26	15.3
Approach		796	10.3	796	10.3	0.852	38.6	LOS C	22.5	159.5	0.87	0.86	0.95	12.1
NorthEast: Punchbowl Rd														
24b	L3	94	3.4	94	3.4	0.694	32.1	LOS C	26.7	193.2	0.84	0.77	0.84	25.7
25	T1	831	4.2	831	4.2	0.694	26.4	LOS B	26.7	193.2	0.84	0.77	0.85	24.1
Approach		924	4.1	924	4.1	0.694	27.0	LOS B	26.7	193.2	0.84	0.77	0.85	24.3
SouthWest: Punchbowl Rd														
31	T1	644	3.4	644	3.4	0.481	7.7	LOS A	12.7	91.5	0.39	0.36	0.39	45.6
32a	R1	444	5.2	444	5.2	0.788	44.9	LOS D	15.2	106.1	0.96	1.08	1.02	9.2
Approach		1088	4.2	1088	4.2	0.788	22.9	LOS B	15.2	106.1	0.62	0.65	0.65	24.9
All Vehicles		2808	5.9	2808	5.9	0.852	28.7	LOS C	26.7	193.2	0.77	0.75	0.80	20.7
Site: TCS 1744 [Punchbowl Rd / South Terrace TTP]														
NorthEast: Punchbowl Rd														
25	T1	908	10.3	908	10.3	0.724	5.7	LOS A	14.8	106.1	0.40	0.37	0.40	51.5
26	R2	455	0.7	455	0.7	*0.819	47.6	LOS D	15.1	106.1	0.97	0.90	1.05	24.4
Approach		1363	7.1	1363	7.1	0.819	19.7	LOS B	15.1	106.1	0.59	0.55	0.62	37.8
NorthWest: South Terrace														
27	L2	628	0.5	628	0.5	0.688	23.9	LOS B	22.7	159.9	0.72	0.81	0.72	33.3
29	R2	128	0.0	128	0.0	*0.977	95.8	LOS F	9.4	66.1	0.94	1.13	1.79	22.8
Approach		757	0.4	757	0.4	0.977	36.1	LOS C	22.7	159.9	0.76	0.86	0.90	29.4
SouthWest: Punchbowl Rd														
30	L2	213	0.0	213	0.0	1.012	112.4	LOS F	34.3	242.9	1.00	1.32	1.76	20.8
31	T1	454	7.9	454	7.9	*1.012	59.8	LOS E	34.3	242.9	0.88	0.95	1.21	20.2
Approach		666	5.4	666	5.4	1.012	76.6	LOS F	34.3	242.9	0.92	1.06	1.38	20.5
All Vehicles		2786	4.9	2786	4.9	1.012	37.8	LOS C	34.3	242.9	0.71	0.76	0.88	29.0

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)

Pedestrian Movement Performance (CCG)											
Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE	Prop. Que	Effective Stop	Travel Time	Travel Dist.	Aver. Speed	

MOVEMENT SUMMARY

Site: TCS 1817 [Restwell St / South Terrace / Bankstown City Plaza - AM (Site Folder: General)]

Restwell St / South Terrace / Bankstown City Plaza

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Restwell Street														
1	L2	85	25	89	29.4	0.475	29.8	LOS C	12.8	96.9	0.79	0.79	0.79	25.9
3	R2	558	11	587	2.0	*0.475	29.7	LOS C	13.9	98.9	0.79	0.79	0.79	18.5
Approach		643	36	677	5.6	0.475	29.7	LOS C	13.9	98.9	0.79	0.79	0.79	19.9
North: Local Access Road														
7	L2	3	2	3	66.7	*0.470	56.7	LOS E	3.0	38.6	0.97	0.77	0.97	12.8
9	R2	50	50	53	100.0	0.470	57.4	LOS E	3.0	38.6	0.97	0.77	0.97	19.6
Approach		53	52	56	98.1	0.470	57.4	LOS E	3.0	38.6	0.97	0.77	0.97	19.3
West: Bankstown City Plaza														
11	T1	24	24	25	100.0	*0.468	47.7	LOS D	3.6	47.4	0.95	0.77	0.95	22.2
12	R2	43	43	45	100.0	0.468	51.7	LOS D	3.6	47.4	0.95	0.77	0.95	20.9
Approach		67	67	71	100.0	0.468	50.2	LOS D	3.6	47.4	0.95	0.77	0.95	21.3
All Vehicles		763	155	803	20.3	0.475	33.4	LOS C	13.9	98.9	0.81	0.79	0.81	20.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Restwell Street												
P1	Full	193	203	48.6	LOS E	0.6	0.6	0.94	0.94	72.9	31.5	0.43
East: South Terrace												
P2	Full	10	11	49.2	LOS E	0.0	0.0	0.95	0.95	74.2	32.5	0.44
North: Local Access Road												
P3	Full	69	73	2.6	LOS A	0.0	0.0	0.22	0.22	23.4	27.0	1.15
West: Bankstown City Plaza												
P4	Full	85	89	10.4	LOS B	0.1	0.1	0.61	0.61	35.2	32.2	0.91
All Pedestrians		357	376	30.7	LOS D	0.6	0.6	0.72	0.72	54.4	30.8	0.57

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1817 [Restwell St / South Terrace / Bankstown City Plaza - AM - Construction (Site Folder: General)]

Restwell St / South Terrace / Bankstown City Plaza

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Restwell Street														
1	L2	85	25	89	29.4	0.475	29.8	LOS C	12.8	96.9	0.79	0.79	0.79	25.9
3	R2	558	11	587	2.0	* 0.475	29.7	LOS C	13.9	98.9	0.79	0.79	0.79	18.5
Approach		643	36	677	5.6	0.475	29.7	LOS C	13.9	98.9	0.79	0.79	0.79	19.9
North: Local Access Road														
7	L2	3	2	3	66.7	* 0.470	56.7	LOS E	3.0	38.6	0.97	0.77	0.97	12.8
9	R2	50	50	53	100.0	0.470	57.4	LOS E	3.0	38.6	0.97	0.77	0.97	19.6
Approach		53	52	56	98.1	0.470	57.4	LOS E	3.0	38.6	0.97	0.77	0.97	19.3
West: Bankstown City Plaza														
11	T1	24	24	25	100.0	* 0.468	47.7	LOS D	3.6	47.4	0.95	0.77	0.95	22.2
12	R2	43	43	45	100.0	0.468	51.7	LOS D	3.6	47.4	0.95	0.77	0.95	20.9
Approach		67	67	71	100.0	0.468	50.2	LOS D	3.6	47.4	0.95	0.77	0.95	21.3
All Vehicles		763	155	803	20.3	0.475	33.4	LOS C	13.9	98.9	0.81	0.79	0.81	20.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Restwell Street												
P1	Full	193	203	48.6	LOS E	0.6	0.6	0.94	0.94	72.9	31.5	0.43
East: South Terrace												
P2	Full	10	11	49.2	LOS E	0.0	0.0	0.95	0.95	74.2	32.5	0.44
North: Local Access Road												
P3	Full	69	73	2.6	LOS A	0.0	0.0	0.22	0.22	23.4	27.0	1.15
West: Bankstown City Plaza												
P4	Full	85	89	10.4	LOS B	0.1	0.1	0.61	0.61	35.2	32.2	0.91
All Pedestrians		357	376	30.7	LOS D	0.6	0.6	0.72	0.72	54.4	30.8	0.57

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1817 [Restwell St / South Terrace / Bankstown City Plaza - AM - TTP (Site Folder: General)]

Restwell St / South Terrace / Bankstown City Plaza

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Restwell Street														
1	L2	85	25	89	29.4	0.556	35.1	LOS C	14.2	107.6	0.86	0.82	0.86	24.4
3	R2	562	15	592	2.7	*0.556	34.9	LOS C	15.4	110.3	0.86	0.82	0.86	17.0
Approach		647	40	681	6.2	0.556	34.9	LOS C	15.4	110.3	0.86	0.82	0.86	18.3
North: Local Access Road														
7	L2	3	2	3	66.7	*0.577	57.1	LOS E	4.0	51.2	0.98	0.81	1.03	12.7
9	R2	66	66	69	100.0	0.577	57.8	LOS E	4.0	51.2	0.98	0.81	1.03	19.5
Approach		69	68	73	98.6	0.577	57.8	LOS E	4.0	51.2	0.98	0.81	1.03	19.3
West: Bankstown City Plaza														
11	T1	62	62	65	100.0	*0.562	44.1	LOS D	5.6	72.7	0.95	0.79	0.95	23.1
12	R2	43	43	45	100.0	0.562	48.2	LOS D	5.6	72.7	0.95	0.79	0.95	21.7
Approach		105	105	111	100.0	0.562	45.8	LOS D	5.6	72.7	0.95	0.79	0.95	22.5
All Vehicles		821	213	864	25.9	0.577	38.2	LOS C	15.4	110.3	0.88	0.81	0.89	19.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Restwell Street												
P1	Full	193	203	48.6	LOS E	0.6	0.6	0.94	0.94	72.9	31.5	0.43
East: South Terrace												
P2	Full	10	11	49.2	LOS E	0.0	0.0	0.95	0.95	74.2	32.5	0.44
North: Local Access Road												
P3	Full	69	73	2.8	LOS A	0.1	0.1	0.23	0.23	23.6	27.0	1.14
West: Bankstown City Plaza												
P4	Full	85	89	12.5	LOS B	0.1	0.1	0.67	0.67	37.3	32.2	0.86
All Pedestrians		357	376	31.2	LOS D	0.6	0.6	0.74	0.74	54.9	30.8	0.56

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1817 [Restwell St / South Terrace / Bankstown City Plaza - PM (Site Folder: General)]

Restwell St / South Terrace / Bankstown City Plaza

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Restwell Street														
1	L2	136	43	143	31.6	0.573	24.8	LOS B	17.6	133.9	0.76	0.80	0.76	27.5
3	R2	798	6	840	0.8	* 0.573	25.0	LOS B	19.5	137.6	0.76	0.80	0.76	20.2
Approach		934	49	983	5.2	0.573	25.0	LOS B	19.5	137.6	0.76	0.80	0.76	21.7
North: Local Access Road														
7	L2	6	0	6	0.0	* 0.563	65.1	LOS E	2.2	25.9	1.00	0.79	1.10	11.6
9	R2	29	29	31	100.0	0.563	66.5	LOS E	2.2	25.9	1.00	0.79	1.10	18.2
Approach		35	29	37	82.9	0.563	66.2	LOS E	2.2	25.9	1.00	0.79	1.10	17.3
West: Bankstown City Plaza														
11	T1	31	31	33	100.0	* 0.570	50.8	LOS D	4.1	53.9	0.98	0.81	1.01	21.6
12	R2	42	42	44	100.0	0.570	54.8	LOS D	4.1	53.9	0.98	0.81	1.01	20.3
Approach		73	73	77	100.0	0.570	53.1	LOS D	4.1	53.9	0.98	0.81	1.01	20.9
All Vehicles		1042	151	1097	14.5	0.573	28.3	LOS B	19.5	137.6	0.78	0.80	0.79	21.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Restwell Street												
P1	Full	193	203	48.6	LOS E	0.6	0.6	0.94	0.94	72.9	31.5	0.43
East: South Terrace												
P2	Full	10	11	49.2	LOS E	0.0	0.0	0.95	0.95	74.2	32.5	0.44
North: Local Access Road												
P3	Full	69	73	1.3	LOS A	0.0	0.0	0.16	0.16	22.1	27.0	1.22
West: Bankstown City Plaza												
P4	Full	85	89	8.1	LOS A	0.1	0.1	0.53	0.53	32.9	32.2	0.98
All Pedestrians		357	376	29.9	LOS C	0.6	0.6	0.69	0.69	53.6	30.8	0.58

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1817 [Restwell St / South Terrace / Bankstown City Plaza - PM - Construction (Site Folder: General)]

Restwell St / South Terrace / Bankstown City Plaza

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Restwell Street														
1	L2	136	43	143	31.6	0.573	24.8	LOS B	17.6	133.9	0.76	0.80	0.76	27.5
3	R2	798	6	840	0.8	* 0.573	25.0	LOS B	19.5	137.6	0.76	0.80	0.76	20.2
Approach		934	49	983	5.2	0.573	25.0	LOS B	19.5	137.6	0.76	0.80	0.76	21.7
North: Local Access Road														
7	L2	6	0	6	0.0	* 0.563	65.1	LOS E	2.2	25.9	1.00	0.79	1.10	11.6
9	R2	29	29	31	100.0	0.563	66.5	LOS E	2.2	25.9	1.00	0.79	1.10	18.2
Approach		35	29	37	82.9	0.563	66.2	LOS E	2.2	25.9	1.00	0.79	1.10	17.3
West: Bankstown City Plaza														
11	T1	31	31	33	100.0	* 0.570	50.8	LOS D	4.1	53.9	0.98	0.81	1.01	21.6
12	R2	42	42	44	100.0	0.570	54.8	LOS D	4.1	53.9	0.98	0.81	1.01	20.3
Approach		73	73	77	100.0	0.570	53.1	LOS D	4.1	53.9	0.98	0.81	1.01	20.9
All Vehicles		1042	151	1097	14.5	0.573	28.3	LOS B	19.5	137.6	0.78	0.80	0.79	21.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Restwell Street												
P1	Full	193	203	48.6	LOS E	0.6	0.6	0.94	0.94	72.9	31.5	0.43
East: South Terrace												
P2	Full	10	11	49.2	LOS E	0.0	0.0	0.95	0.95	74.2	32.5	0.44
North: Local Access Road												
P3	Full	69	73	1.3	LOS A	0.0	0.0	0.16	0.16	22.1	27.0	1.22
West: Bankstown City Plaza												
P4	Full	85	89	8.1	LOS A	0.1	0.1	0.53	0.53	32.9	32.2	0.98
All Pedestrians		357	376	29.9	LOS C	0.6	0.6	0.69	0.69	53.6	30.8	0.58

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 1817 [Restwell St / South Terrace / Bankstown City Plaza - PM - TTP (Site Folder: General)]

Restwell St / South Terrace / Bankstown City Plaza

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site User-Given Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Restwell Street														
1	L2	136	43	143	31.6	0.648	28.5	LOS C	19.8	152.9	0.83	0.83	0.83	26.3
3	R2	820	28	863	3.4	* 0.648	28.7	LOS C	21.8	156.9	0.83	0.83	0.83	18.8
Approach		956	71	1006	7.4	0.648	28.7	LOS C	21.8	156.9	0.83	0.83	0.83	20.3
North: Local Access Road														
7	L2	6	0	6	0.0	* 0.627	62.5	LOS E	3.2	39.6	1.00	0.82	1.13	12.0
9	R2	47	47	49	100.0	0.627	63.9	LOS E	3.2	39.6	1.00	0.82	1.13	18.5
Approach		53	47	56	88.7	0.627	63.7	LOS E	3.2	39.6	1.00	0.82	1.13	18.0
West: Bankstown City Plaza														
11	T1	49	49	52	100.0	* 0.662	52.0	LOS D	5.3	69.0	0.99	0.89	1.10	21.5
12	R2	42	42	44	100.0	0.662	56.0	LOS D	5.3	69.0	0.99	0.89	1.10	20.2
Approach		91	91	96	100.0	0.662	53.8	LOS D	5.3	69.0	0.99	0.89	1.10	20.9
All Vehicles		1100	209	1158	19.0	0.662	32.5	LOS C	21.8	156.9	0.85	0.83	0.87	20.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Restwell Street												
P1	Full	193	203	48.6	LOS E	0.6	0.6	0.94	0.94	72.9	31.5	0.43
East: South Terrace												
P2	Full	10	11	49.2	LOS E	0.0	0.0	0.95	0.95	74.2	32.5	0.44
North: Local Access Road												
P3	Full	69	73	1.8	LOS A	0.0	0.0	0.18	0.18	22.6	27.0	1.20
West: Bankstown City Plaza												
P4	Full	85	89	9.1	LOS A	0.1	0.1	0.57	0.57	33.9	32.2	0.95
All Pedestrians		357	376	30.2	LOS D	0.6	0.6	0.71	0.71	53.9	30.8	0.57

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 2789 [Joseph St / Georges Av - Future Base (Site Folder: AM)]

Joseph St / Georges Av

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Joseph St														
1	L2	26	2	27	7.7	0.870	33.7	LOS C	38.6	286.8	0.94	0.96	1.06	40.5
2	T1	2339	166	2462	7.1	*0.870	27.1	LOS B	38.7	287.1	0.91	0.93	1.04	42.4
3	R2	173	8	182	4.6	0.659	29.2	LOS C	5.1	37.3	0.99	0.82	1.04	38.6
Approach		2538	176	2672	6.9	0.870	27.3	LOS B	38.7	287.1	0.91	0.93	1.04	42.0
East: George Ave														
4	L2	76	6	80	7.9	0.303	34.2	LOS C	4.9	36.0	0.85	0.74	0.85	35.2
5	T1	208	8	219	3.8	0.523	34.8	LOS C	7.0	50.8	0.92	0.77	0.92	32.3
6	R2	8	1	8	12.5	0.523	41.1	LOS C	7.0	50.8	0.95	0.78	0.95	29.4
Approach		292	15	307	5.1	0.523	34.8	LOS C	7.0	50.8	0.91	0.76	0.91	33.0
North: Joseph St														
7	L2	28	0	29	0.0	0.772	34.4	LOS C	21.8	162.6	0.94	0.87	0.99	34.2
8	T1	1485	122	1563	8.2	0.772	27.9	LOS B	22.0	165.0	0.93	0.86	0.98	41.9
9	R2	72	2	76	2.8	*0.629	54.8	LOS D	3.6	25.5	1.00	0.80	1.11	25.5
Approach		1585	124	1668	7.8	0.772	29.2	LOS C	22.0	165.0	0.93	0.86	0.99	40.8
West: Georges Av														
10	L2	91	3	96	3.3	0.307	36.8	LOS C	4.8	34.2	0.86	0.77	0.86	32.2
11	T1	157	3	165	1.9	*0.706	42.2	LOS C	8.2	58.0	0.97	0.85	1.06	29.5
12	R2	49	1	52	2.0	0.706	48.6	LOS D	8.2	58.0	1.00	0.87	1.11	33.4
Approach		297	7	313	2.4	0.706	41.6	LOS C	8.2	58.0	0.94	0.83	1.00	30.9
All Vehicles		4712	322	4960	6.8	0.870	29.3	LOS C	38.7	287.1	0.92	0.89	1.01	40.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: George Ave												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
North: Joseph St												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	213.2	226.1	1.06
All		100	105	39.3	LOS D	0.1	0.1	0.94	0.94	209.0	220.7	1.06

MOVEMENT SUMMARY

Site: TCS 2789 [Joseph St / Georges Av - Construction (Site Folder: AM)]

Joseph St / Georges Av

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Joseph St														
1	L2	26	2	27	7.7	0.870	33.7	LOS C	38.6	286.8	0.94	0.96	1.06	40.5
2	T1	2339	166	2462	7.1	*0.870	27.1	LOS B	38.7	287.1	0.91	0.93	1.04	42.4
3	R2	173	8	182	4.6	0.659	29.2	LOS C	5.1	37.3	0.99	0.82	1.04	38.6
Approach		2538	176	2672	6.9	0.870	27.3	LOS B	38.7	287.1	0.91	0.93	1.04	42.0
East: George Ave														
4	L2	76	6	80	7.9	0.303	34.2	LOS C	4.9	36.0	0.85	0.74	0.85	35.2
5	T1	208	8	219	3.8	0.523	34.8	LOS C	7.0	50.8	0.92	0.77	0.92	32.3
6	R2	8	1	8	12.5	0.523	41.1	LOS C	7.0	50.8	0.95	0.78	0.95	29.4
Approach		292	15	307	5.1	0.523	34.8	LOS C	7.0	50.8	0.91	0.76	0.91	33.0
North: Joseph St														
7	L2	28	0	29	0.0	0.772	34.4	LOS C	21.8	162.6	0.94	0.87	0.99	34.2
8	T1	1485	122	1563	8.2	0.772	27.9	LOS B	22.0	165.0	0.93	0.86	0.98	41.9
9	R2	72	2	76	2.8	*0.629	54.8	LOS D	3.6	25.5	1.00	0.80	1.11	25.5
Approach		1585	124	1668	7.8	0.772	29.2	LOS C	22.0	165.0	0.93	0.86	0.99	40.8
West: Georges Av														
10	L2	91	3	96	3.3	0.307	36.8	LOS C	4.8	34.2	0.86	0.77	0.86	32.2
11	T1	157	3	165	1.9	*0.706	42.2	LOS C	8.2	58.0	0.97	0.85	1.06	29.5
12	R2	49	1	52	2.0	0.706	48.6	LOS D	8.2	58.0	1.00	0.87	1.11	33.4
Approach		297	7	313	2.4	0.706	41.6	LOS C	8.2	58.0	0.94	0.83	1.00	30.9
All Vehicles		4712	322	4960	6.8	0.870	29.3	LOS C	38.7	287.1	0.92	0.89	1.01	40.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: George Ave												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
North: Joseph St												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	213.2	226.1	1.06
All		100	105	39.3	LOS D	0.1	0.1	0.94	0.94	209.0	220.7	1.06

MOVEMENT SUMMARY

Site: TCS 2789 [Joseph St / Georges Av - TTP (Site Folder: AM)]

Joseph St / Georges Av

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Joseph St														
1	L2	26	2	27	7.7	0.874	34.4	LOS C	39.2	291.7	0.94	0.97	1.07	40.2
2	T1	2345	172	2468	7.3	*0.874	27.8	LOS B	39.3	292.1	0.91	0.94	1.05	42.0
3	R2	173	8	182	4.6	0.709	30.8	LOS C	5.4	39.2	1.00	0.84	1.11	37.8
Approach		2544	182	2678	7.2	0.874	28.1	LOS B	39.3	292.1	0.92	0.94	1.06	41.6
East: George Ave														
4	L2	76	6	80	7.9	0.305	34.2	LOS C	4.9	36.2	0.85	0.74	0.85	35.2
5	T1	208	8	219	3.8	0.526	35.4	LOS C	7.0	51.0	0.93	0.77	0.93	32.1
6	R2	8	1	8	12.5	0.526	41.9	LOS C	7.0	51.0	0.96	0.78	0.96	29.1
Approach		292	15	307	5.1	0.526	35.3	LOS C	7.0	51.0	0.91	0.76	0.91	32.9
North: Joseph St														
7	L2	28	0	29	0.0	0.760	33.0	LOS C	21.4	160.5	0.93	0.85	0.96	34.8
8	T1	1491	128	1569	8.6	0.760	26.5	LOS B	21.7	162.8	0.91	0.84	0.96	42.8
9	R2	80	10	84	12.5	*0.770	57.7	LOS E	4.1	32.0	1.00	0.87	1.32	24.8
Approach		1599	138	1683	8.6	0.770	28.2	LOS B	21.7	162.8	0.92	0.84	0.97	41.4
West: Georges Av														
10	L2	101	13	106	12.9	0.318	35.5	LOS C	4.8	36.4	0.84	0.77	0.84	32.8
11	T1	157	3	165	1.9	*0.731	43.1	LOS D	8.6	61.5	0.98	0.86	1.09	29.2
12	R2	49	1	52	2.0	0.731	49.3	LOS D	8.6	61.5	1.00	0.88	1.13	33.1
Approach		307	17	323	5.5	0.731	41.6	LOS C	8.6	61.5	0.94	0.84	1.02	30.9
All Vehicles		4742	352	4992	7.4	0.874	29.4	LOS C	39.3	292.1	0.92	0.89	1.02	40.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: George Ave												
P2	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	204.8	215.2	1.05
North: Joseph St												
P3	Full	50	53	39.3	LOS D	0.1	0.1	0.94	0.94	213.2	226.1	1.06
All		100	105	39.3	LOS D	0.1	0.1	0.94	0.94	209.0	220.7	1.06

MOVEMENT SUMMARY

Site: TCS 2789 [Joseph St / Georges Av - Future Base (Site Folder: PM)]

Joseph St / Georges Av

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Joseph St														
1	L2	61	0	64	0.0	0.623	23.5	LOS B	23.5	169.8	0.73	0.68	0.73	47.6
2	T1	1753	72	1845	4.1	0.623	16.9	LOS B	23.5	170.6	0.71	0.65	0.71	49.7
3	R2	94	2	99	2.1	*0.374	33.7	LOS C	3.4	24.6	0.94	0.77	0.94	36.6
Approach		1908	74	2008	3.9	0.623	17.9	LOS B	23.5	170.6	0.73	0.66	0.73	48.7
East: George Ave														
4	L2	184	5	194	2.7	0.476	38.6	LOS C	11.0	78.4	0.87	0.79	0.87	33.8
5	T1	259	3	273	1.2	*0.822	50.5	LOS D	13.7	96.7	0.97	0.94	1.14	27.1
6	R2	20	0	21	0.0	0.822	59.0	LOS E	13.7	96.7	1.00	0.97	1.21	24.7
Approach		463	8	487	1.7	0.822	46.2	LOS D	13.7	96.7	0.93	0.88	1.03	29.6
North: Joseph St														
7	L2	31	1	33	3.2	*0.862	42.1	LOS C	39.4	283.7	0.97	0.96	1.07	30.9
8	T1	1998	67	2103	3.4	0.862	35.4	LOS C	39.7	286.0	0.95	0.94	1.05	37.8
9	R2	125	1	132	0.8	*0.785	65.1	LOS E	7.6	53.5	1.00	0.88	1.23	23.0
Approach		2154	69	2267	3.2	0.862	37.3	LOS C	39.7	286.0	0.95	0.94	1.06	36.6
West: Georges Av														
10	L2	83	0	87	0.0	0.312	45.6	LOS D	5.6	39.2	0.88	0.77	0.88	28.9
11	T1	169	2	178	1.2	0.715	52.2	LOS D	9.4	66.7	0.98	0.84	1.05	26.6
12	R2	28	1	29	3.6	0.715	58.8	LOS E	9.4	66.7	1.00	0.86	1.10	30.1
Approach		280	3	295	1.1	0.715	50.9	LOS D	9.4	66.7	0.95	0.82	1.01	27.6
All Vehicles		4805	154	5058	3.2	0.862	31.2	LOS C	39.7	286.0	0.86	0.81	0.92	39.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: George Ave												
P2	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	214.8	215.2	1.00
North: Joseph St												
P3	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	223.2	226.1	1.01
All		100	105	49.3	LOS E	0.2	0.2	0.95	0.95	219.0	220.7	1.01

MOVEMENT SUMMARY

Site: TCS 2789 [Joseph St / Georges Av - Construction (Site Folder: PM)]

Joseph St / Georges Av

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Joseph St														
1	L2	61	0	64	0.0	0.623	23.5	LOS B	23.5	169.8	0.73	0.68	0.73	47.6
2	T1	1753	72	1845	4.1	0.623	16.9	LOS B	23.5	170.6	0.71	0.65	0.71	49.7
3	R2	94	2	99	2.1	*0.374	33.7	LOS C	3.4	24.6	0.94	0.77	0.94	36.6
Approach		1908	74	2008	3.9	0.623	17.9	LOS B	23.5	170.6	0.73	0.66	0.73	48.7
East: George Ave														
4	L2	184	5	194	2.7	0.476	38.6	LOS C	11.0	78.4	0.87	0.79	0.87	33.8
5	T1	259	3	273	1.2	*0.822	50.5	LOS D	13.7	96.7	0.97	0.94	1.14	27.1
6	R2	20	0	21	0.0	0.822	59.0	LOS E	13.7	96.7	1.00	0.97	1.21	24.7
Approach		463	8	487	1.7	0.822	46.2	LOS D	13.7	96.7	0.93	0.88	1.03	29.6
North: Joseph St														
7	L2	31	1	33	3.2	*0.862	42.1	LOS C	39.4	283.7	0.97	0.96	1.07	30.9
8	T1	1998	67	2103	3.4	0.862	35.4	LOS C	39.7	286.0	0.95	0.94	1.05	37.8
9	R2	125	1	132	0.8	*0.785	65.1	LOS E	7.6	53.5	1.00	0.88	1.23	23.0
Approach		2154	69	2267	3.2	0.862	37.3	LOS C	39.7	286.0	0.95	0.94	1.06	36.6
West: Georges Av														
10	L2	83	0	87	0.0	0.312	45.6	LOS D	5.6	39.2	0.88	0.77	0.88	28.9
11	T1	169	2	178	1.2	0.715	52.2	LOS D	9.4	66.7	0.98	0.84	1.05	26.6
12	R2	28	1	29	3.6	0.715	58.8	LOS E	9.4	66.7	1.00	0.86	1.10	30.1
Approach		280	3	295	1.1	0.715	50.9	LOS D	9.4	66.7	0.95	0.82	1.01	27.6
All Vehicles		4805	154	5058	3.2	0.862	31.2	LOS C	39.7	286.0	0.86	0.81	0.92	39.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: George Ave												
P2	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	214.8	215.2	1.00
North: Joseph St												
P3	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	223.2	226.1	1.01
All		100	105	49.3	LOS E	0.2	0.2	0.95	0.95	219.0	220.7	1.01

MOVEMENT SUMMARY

Site: TCS 2789 [Joseph St / Georges Av - TTP (Site Folder: PM)]

Joseph St / Georges Av

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 110 seconds (Site Practical Cycle Time)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Joseph St														
1	L2	61	0	64	0.0	0.628	23.6	LOS B	23.7	171.9	0.73	0.68	0.73	47.6
2	T1	1761	80	1854	4.5	0.628	16.9	LOS B	23.7	172.7	0.72	0.65	0.72	49.6
3	R2	94	2	99	2.1	* 0.352	33.3	LOS C	3.4	24.6	0.93	0.76	0.93	36.7
Approach		1916	82	2017	4.3	0.628	18.0	LOS B	23.7	172.7	0.73	0.66	0.73	48.6
East: George Ave														
4	L2	184	5	194	2.7	0.503	40.4	LOS C	11.4	81.5	0.89	0.80	0.89	33.2
5	T1	259	3	273	1.2	* 0.867	54.5	LOS D	14.1	99.7	0.98	0.98	1.22	26.0
6	R2	20	0	21	0.0	0.867	64.0	LOS E	14.1	99.7	1.00	1.03	1.31	23.6
Approach		463	8	487	1.7	0.867	49.3	LOS D	14.1	99.7	0.94	0.91	1.09	28.7
North: Joseph St														
7	L2	31	1	33	3.2	* 0.875	44.0	LOS D	41.0	296.5	0.98	0.98	1.10	30.2
8	T1	2006	75	2112	3.7	0.875	37.4	LOS C	41.4	298.8	0.95	0.96	1.08	36.9
9	R2	137	13	144	9.5	* 0.855	68.8	LOS E	8.7	65.9	1.00	0.94	1.37	22.2
Approach		2174	89	2288	4.1	0.875	39.4	LOS C	41.4	298.8	0.96	0.96	1.10	35.6
West: Georges Av														
10	L2	93	10	98	10.8	0.338	45.4	LOS D	5.8	43.3	0.88	0.78	0.88	28.9
11	T1	169	2	178	1.2	0.776	55.0	LOS D	10.1	71.7	0.98	0.88	1.12	25.9
12	R2	28	1	29	3.6	0.776	61.7	LOS E	10.1	71.7	1.00	0.90	1.17	29.2
Approach		290	13	305	4.5	0.776	52.6	LOS D	10.1	71.7	0.95	0.85	1.05	27.0
All Vehicles		4843	192	5098	4.0	0.875	32.7	LOS C	41.4	298.8	0.86	0.83	0.95	38.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
East: George Ave												
P2	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	214.8	215.2	1.00
North: Joseph St												
P3	Full	50	53	49.3	LOS E	0.2	0.2	0.95	0.95	223.2	226.1	1.01
All		100	105	49.3	LOS E	0.2	0.2	0.95	0.95	219.0	220.7	1.01

MOVEMENT SUMMARY

Site: TCS 2816 [Beamish Street / Amy Street Future Base (Site Folder: AM)]

Beamish Street / Amy Street

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Beamish St														
1	L2	72	1	76	1.4	* 0.481	10.1	LOS A	10.9	81.5	0.52	0.50	0.52	35.6
2	T1	481	45	506	9.4	0.481	6.7	LOS A	10.9	81.5	0.52	0.50	0.52	30.0
Approach		553	46	582	8.3	0.481	7.1	LOS A	10.9	81.5	0.52	0.50	0.52	31.3
North: Beamish St														
8	T1	511	45	538	8.8	0.404	3.8	LOS A	7.5	56.4	0.39	0.35	0.39	33.9
9	R2	3	0	3	0.0	0.404	7.4	LOS A	7.5	56.4	0.39	0.35	0.39	37.2
Approach		514	45	541	8.8	0.404	3.8	LOS A	7.5	56.4	0.39	0.35	0.39	33.9
West: Amy St														
10	L2	34	0	36	0.0	* 0.308	45.3	LOS D	1.4	10.1	0.99	0.72	0.99	22.5
Approach		34	0	36	0.0	0.308	45.3	LOS D	1.4	10.1	0.99	0.72	0.99	22.5
All Vehicles		1101	91	1159	8.3	0.481	6.8	LOS A	10.9	81.5	0.47	0.43	0.47	31.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Beamish St												
P1	Full	180	189	34.5	LOS D	0.4	0.4	0.93	0.93	55.7	27.5	0.49
North: Beamish St												
P3	Full	120	126	34.4	LOS D	0.3	0.3	0.93	0.93	55.6	27.5	0.49
West: Amy St												
P4	Full	354	373	3.1	LOS A	0.2	0.2	0.28	0.28	25.8	29.5	1.14
All Pedestrians		654	688	17.5	LOS B	0.4	0.4	0.58	0.58	39.5	28.6	0.72

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

**Site: TCS 2816 [Beamish Street / Amy Street Construction
(Site Folder: AM)]**

Beamish Street / Amy Street

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Beamish St														
1	L2	72	1	76	1.4	* 0.481	10.1	LOS A	10.9	81.5	0.52	0.50	0.52	35.6
2	T1	481	45	506	9.4	0.481	6.7	LOS A	10.9	81.5	0.52	0.50	0.52	30.0
Approach		553	46	582	8.3	0.481	7.1	LOS A	10.9	81.5	0.52	0.50	0.52	31.3
North: Beamish St														
8	T1	511	45	538	8.8	0.404	3.8	LOS A	7.5	56.4	0.39	0.35	0.39	33.9
9	R2	3	0	3	0.0	0.404	7.4	LOS A	7.5	56.4	0.39	0.35	0.39	37.2
Approach		514	45	541	8.8	0.404	3.8	LOS A	7.5	56.4	0.39	0.35	0.39	33.9
West: Amy St														
10	L2	34	0	36	0.0	* 0.308	45.3	LOS D	1.4	10.1	0.99	0.72	0.99	22.5
Approach		34	0	36	0.0	0.308	45.3	LOS D	1.4	10.1	0.99	0.72	0.99	22.5
All Vehicles		1101	91	1159	8.3	0.481	6.8	LOS A	10.9	81.5	0.47	0.43	0.47	31.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Beamish St												
P1	Full	180	189	34.5	LOS D	0.4	0.4	0.93	0.93	55.7	27.5	0.49
North: Beamish St												
P3	Full	120	126	34.4	LOS D	0.3	0.3	0.93	0.93	55.6	27.5	0.49
West: Amy St												
P4	Full	354	373	3.1	LOS A	0.2	0.2	0.28	0.28	25.8	29.5	1.14
All Pedestrians		654	688	17.5	LOS B	0.4	0.4	0.58	0.58	39.5	28.6	0.72

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 2816 [Beamish Street / Amy Street TTP (Site Folder: AM)]

Beamish Street / Amy Street

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Beamish St														
1	L2	72	1	76	1.4	* 0.501	10.2	LOS A	11.3	86.5	0.53	0.50	0.53	35.5
2	T1	494	58	520	11.7	0.501	6.8	LOS A	11.3	86.5	0.53	0.50	0.53	29.8
Approach		566	59	596	10.4	0.501	7.3	LOS A	11.3	86.5	0.53	0.50	0.53	31.2
North: Beamish St														
8	T1	549	83	578	15.1	0.459	4.1	LOS A	8.6	67.7	0.41	0.37	0.41	33.6
9	R2	3	0	3	0.0	0.459	7.6	LOS A	8.6	67.7	0.41	0.37	0.41	37.1
Approach		552	83	581	15.0	0.459	4.1	LOS A	8.6	67.7	0.41	0.37	0.41	33.6
West: Amy St														
10	L2	34	0	36	0.0	* 0.308	45.3	LOS D	1.4	10.1	0.99	0.72	0.99	22.5
Approach		34	0	36	0.0	0.308	45.3	LOS D	1.4	10.1	0.99	0.72	0.99	22.5
All Vehicles		1152	142	1213	12.3	0.501	6.9	LOS A	11.3	86.5	0.49	0.45	0.49	31.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Beamish St												
P1	Full	180	189	34.5	LOS D	0.4	0.4	0.93	0.93	55.7	27.5	0.49
North: Beamish St												
P3	Full	120	126	34.4	LOS D	0.3	0.3	0.93	0.93	55.6	27.5	0.49
West: Amy St												
P4	Full	354	373	3.1	LOS A	0.2	0.2	0.28	0.28	25.8	29.5	1.14
All Pedestrians		654	688	17.5	LOS B	0.4	0.4	0.58	0.58	39.5	28.6	0.72

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 2816 [Beamish Street / Amy Street Future Base (Site Folder: PM)]

Beamish Street / Amy Street

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Beamish St														
1	L2	105	32	111	30.5	* 0.631	16.9	LOS B	17.3	126.4	0.74	0.69	0.74	32.0
2	T1	505	1	532	0.2	0.631	13.3	LOS A	17.3	126.4	0.74	0.69	0.74	24.3
Approach		610	33	642	5.4	0.631	14.0	LOS A	17.3	126.4	0.74	0.69	0.74	26.6
North: Beamish St														
8	T1	554	33	583	6.0	0.504	8.3	LOS A	12.2	89.8	0.58	0.52	0.58	28.8
9	R2	6	0	6	0.0	0.504	11.8	LOS A	12.2	89.8	0.58	0.52	0.58	34.7
Approach		560	33	589	5.9	0.504	8.3	LOS A	12.2	89.8	0.58	0.52	0.58	28.9
West: Amy St														
10	L2	142	0	149	0.0	* 0.585	40.1	LOS C	5.8	40.4	0.99	0.80	1.00	23.7
Approach		142	0	149	0.0	0.585	40.1	LOS C	5.8	40.4	0.99	0.80	1.00	23.7
All Vehicles		1312	66	1381	5.0	0.631	14.4	LOS A	17.3	126.4	0.70	0.63	0.70	26.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Beamish St												
P1	Full	180	189	27.4	LOS C	0.4	0.4	0.83	0.83	48.6	27.5	0.57
North: Beamish St												
P3	Full	120	126	27.4	LOS C	0.2	0.2	0.83	0.83	48.5	27.5	0.57
West: Amy St												
P4	Full	354	373	5.7	LOS A	0.3	0.3	0.38	0.38	28.4	29.5	1.04
All Pedestrians		654	688	15.7	LOS B	0.4	0.4	0.59	0.59	37.7	28.6	0.76

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

**Site: TCS 2816 [Beamish Street / Amy Street Construction
(Site Folder: PM)]**

Beamish Street / Amy Street

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Beamish St														
1	L2	105	32	111	30.5	* 0.631	16.9	LOS B	17.3	126.4	0.74	0.69	0.74	32.0
2	T1	505	1	532	0.2	0.631	13.3	LOS A	17.3	126.4	0.74	0.69	0.74	24.3
Approach		610	33	642	5.4	0.631	14.0	LOS A	17.3	126.4	0.74	0.69	0.74	26.6
North: Beamish St														
8	T1	554	33	583	6.0	0.504	8.3	LOS A	12.2	89.8	0.58	0.52	0.58	28.8
9	R2	6	0	6	0.0	0.504	11.8	LOS A	12.2	89.8	0.58	0.52	0.58	34.7
Approach		560	33	589	5.9	0.504	8.3	LOS A	12.2	89.8	0.58	0.52	0.58	28.9
West: Amy St														
10	L2	142	0	149	0.0	* 0.585	40.1	LOS C	5.8	40.4	0.99	0.80	1.00	23.7
Approach		142	0	149	0.0	0.585	40.1	LOS C	5.8	40.4	0.99	0.80	1.00	23.7
All Vehicles		1312	66	1381	5.0	0.631	14.4	LOS A	17.3	126.4	0.70	0.63	0.70	26.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Beamish St												
P1	Full	180	189	27.4	LOS C	0.4	0.4	0.83	0.83	48.6	27.5	0.57
North: Beamish St												
P3	Full	120	126	27.4	LOS C	0.2	0.2	0.83	0.83	48.5	27.5	0.57
West: Amy St												
P4	Full	354	373	5.7	LOS A	0.3	0.3	0.38	0.38	28.4	29.5	1.04
All Pedestrians		654	688	15.7	LOS B	0.4	0.4	0.59	0.59	37.7	28.6	0.76

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 2816 [Beamish Street / Amy Street TTP (Site Folder: PM)]

Beamish Street / Amy Street

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 80 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Beamish St														
1	L2	105	32	111	30.5	* 0.698	16.0	LOS B	19.1	149.4	0.75	0.70	0.75	32.5
2	T1	561	57	591	10.2	0.698	12.4	LOS A	19.1	149.4	0.75	0.70	0.75	25.0
Approach		666	89	701	13.4	0.698	13.0	LOS A	19.1	149.4	0.75	0.70	0.75	27.0
North: Beamish St														
8	T1	566	45	596	8.0	0.507	7.3	LOS A	11.9	88.7	0.55	0.50	0.55	29.7
9	R2	6	0	6	0.0	0.507	10.9	LOS A	11.9	88.7	0.55	0.50	0.55	35.2
Approach		572	45	602	7.9	0.507	7.4	LOS A	11.9	88.7	0.55	0.50	0.55	29.8
West: Amy St														
10	L2	142	0	149	0.0	* 0.715	44.1	LOS D	6.2	43.1	1.00	0.89	1.16	22.8
Approach		142	0	149	0.0	0.715	44.1	LOS D	6.2	43.1	1.00	0.89	1.16	22.8
All Vehicles		1380	134	1453	9.7	0.715	13.9	LOS A	19.1	149.4	0.69	0.64	0.71	26.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Beamish St												
P1	Full	180	189	29.1	LOS C	0.4	0.4	0.86	0.86	50.3	27.5	0.55
North: Beamish St												
P3	Full	120	126	29.1	LOS C	0.2	0.2	0.85	0.85	50.2	27.5	0.55
West: Amy St												
P4	Full	354	373	5.0	LOS A	0.3	0.3	0.36	0.36	27.7	29.5	1.07
All Pedestrians		654	688	16.0	LOS B	0.4	0.4	0.59	0.59	38.0	28.6	0.75

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

**Site: TCS 3340 [New Canterbury Rd / Frazer St - Future Base
(Site Folder: AM)]**

New Canterbury Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: New Canterbury Rd														
2	T1	846	44	891	5.2	0.520	6.3	LOS A	14.3	102.3	0.47	0.45	0.47	50.9
3	R2	306	6	322	2.0	* 0.520	20.1	LOS B	14.3	102.3	0.73	0.79	0.73	38.8
Approach		1152	50	1213	4.3	0.520	9.9	LOS A	14.3	102.3	0.54	0.54	0.54	47.1
East: Frazer St														
4	L2	82	8	86	9.8	0.098	18.5	LOS B	2.1	15.9	0.53	0.70	0.53	37.9
6	R2	68	1	72	1.5	* 0.355	51.8	LOS D	3.4	23.9	0.97	0.76	0.97	27.8
Approach		150	9	158	6.0	0.355	33.6	LOS C	3.4	23.9	0.73	0.73	0.73	32.0
North: New Canterbury Rd														
7	L2	129	2	136	1.6	0.140	18.2	LOS B	3.3	23.5	0.54	0.71	0.54	42.0
8	T1	364	24	383	6.6	* 0.709	28.6	LOS C	15.3	113.5	0.86	0.76	0.88	34.5
Approach		493	26	519	5.3	0.709	25.9	LOS B	15.3	113.5	0.78	0.75	0.79	36.5
All Vehicles		1795	85	1889	4.7	0.709	16.3	LOS B	15.3	113.5	0.62	0.61	0.62	41.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: New Canterbury Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	209.8	215.2	1.03
East: Frazer St												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
All Pedestrians		100	105	44.3	LOS E	0.1	0.1	0.94	0.94	208.5	213.6	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

**Site: TCS 3340 [New Canterbury Rd / Frazer St - Construction
(Site Folder: AM)]**

New Canterbury Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV veh/h	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: New Canterbury Rd														
2	T1	846	44	891	5.2	0.520	6.3	LOS A	14.3	102.3	0.47	0.45	0.47	50.9
3	R2	306	6	322	2.0	* 0.520	20.1	LOS B	14.3	102.3	0.73	0.79	0.73	38.8
Approach		1152	50	1213	4.3	0.520	9.9	LOS A	14.3	102.3	0.54	0.54	0.54	47.1
East: Frazer St														
4	L2	82	8	86	9.8	0.098	18.5	LOS B	2.1	15.9	0.53	0.70	0.53	37.9
6	R2	68	1	72	1.5	* 0.355	51.8	LOS D	3.4	23.9	0.97	0.76	0.97	27.8
Approach		150	9	158	6.0	0.355	33.6	LOS C	3.4	23.9	0.73	0.73	0.73	32.0
North: New Canterbury Rd														
7	L2	129	2	136	1.6	0.140	18.2	LOS B	3.3	23.5	0.54	0.71	0.54	42.0
8	T1	364	24	383	6.6	* 0.709	28.6	LOS C	15.3	113.5	0.86	0.76	0.88	34.5
Approach		493	26	519	5.3	0.709	25.9	LOS B	15.3	113.5	0.78	0.75	0.79	36.5
All Vehicles		1795	85	1889	4.7	0.709	16.3	LOS B	15.3	113.5	0.62	0.61	0.62	41.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input	Dem.	Aver.	Level of	AVERAGE BACK OF		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
		Vol. ped/h	Flow ped/h	Delay sec	Service	[Ped ped	Dist] m					
South: New Canterbury Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	209.8	215.2	1.03
East: Frazer St												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
All Pedestrians		100	105	44.3	LOS E	0.1	0.1	0.94	0.94	208.5	213.6	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 3340 [New Canterbury Rd / Frazer St - TTP (Site Folder: AM)]

New Canterbury Rd / Frazer St

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 100 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: New Canterbury Rd														
2	T1	846	44	891	5.2	0.575	5.9	LOS A	16.3	119.3	0.47	0.45	0.47	51.6
3	R2	363	63	382	17.4	* 0.575	22.5	LOS B	13.5	107.1	0.76	0.87	0.76	36.8
Approach		1209	107	1273	8.9	0.575	10.9	LOS A	16.3	119.3	0.56	0.57	0.56	46.2
East: Frazer St														
4	L2	82	8	86	9.8	0.094	17.5	LOS B	2.0	15.2	0.51	0.69	0.51	38.6
6	R2	68	1	72	1.5	* 0.355	51.8	LOS D	3.4	23.9	0.97	0.76	0.97	27.8
Approach		150	9	158	6.0	0.355	33.0	LOS C	3.4	23.9	0.72	0.72	0.72	32.2
North: New Canterbury Rd														
7	L2	129	2	136	1.6	0.146	19.3	LOS B	3.5	24.5	0.56	0.71	0.56	41.3
8	T1	364	24	383	6.6	* 0.753	32.1	LOS C	16.4	121.3	0.89	0.81	0.95	32.8
Approach		493	26	519	5.3	0.753	28.8	LOS C	16.4	121.3	0.80	0.79	0.85	35.0
All Vehicles		1852	142	1949	7.7	0.753	17.4	LOS B	16.4	121.3	0.64	0.64	0.65	41.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: New Canterbury Rd												
P1	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	209.8	215.2	1.03
East: Frazer St												
P2	Full	50	53	44.3	LOS E	0.1	0.1	0.94	0.94	207.3	211.9	1.02
All Pedestrians		100	105	44.3	LOS E	0.1	0.1	0.94	0.94	208.5	213.6	1.02

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: TCS 4074 [Restwell Street / Raymond Street - Future Base (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Restwell Street														
1	L2	194	0	204	0.0	0.458	21.7	LOS B	4.5	31.2	0.90	0.78	0.90	21.9
2	T1	333	32	351	9.6	* 0.900	32.5	LOS C	11.2	85.1	1.00	1.27	1.64	14.8
Approach		527	32	555	6.1	0.900	28.5	LOS C	11.2	85.1	0.96	1.09	1.36	17.3
East: Raymond St														
4	L2	103	2	108	1.9	0.119	10.6	LOS A	1.4	10.1	0.56	0.65	0.56	30.8
5	T1	210	0	221	0.0	* 0.810	27.6	LOS B	6.2	43.1	1.00	1.03	1.39	23.8
6	R2	63	4	66	6.3	0.271	26.2	LOS B	1.6	11.5	0.93	0.74	0.93	22.3
Approach		376	6	396	1.6	0.810	22.7	LOS B	6.2	43.1	0.87	0.88	1.08	25.0
North: Restwell Street														
8	T1	39	39	41	100.0	0.191	18.6	LOS B	0.9	11.5	0.85	0.65	0.85	20.3
Approach		39	39	41	100.0	0.191	18.6	LOS B	0.9	11.5	0.85	0.65	0.85	20.3
West: Greenfield Parade														
10	L2	373	0	393	0.0	* 0.881	32.4	LOS C	12.0	84.2	1.00	1.20	1.51	19.0
Approach		373	0	393	0.0	0.881	32.4	LOS C	12.0	84.2	1.00	1.20	1.51	19.0
All Vehicles		1315	77	1384	5.9	0.900	27.7	LOS B	12.0	85.1	0.94	1.05	1.31	20.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Restwell Street												
P1	Full	46	48	17.7	LOS B	0.1	0.1	0.84	0.84	42.3	32.0	0.76
East: Raymond St												
P2	Full	80	84	17.7	LOS B	0.1	0.1	0.84	0.84	41.5	31.0	0.75
North: Restwell Street												
P3	Full	1	1	16.0	LOS B	0.0	0.0	0.80	0.80	37.2	27.5	0.74
West: Greenfield Parade												
P4	Full	50	53	16.8	LOS B	0.1	0.1	0.82	0.82	37.6	27.0	0.72
P4S	Slip/	50	53	7.3	LOS A	0.0	0.0	0.54	0.54	26.0	24.3	0.93

MOVEMENT SUMMARY

Site: TCS 4074 [Restwell Street / Raymond Street - Construction (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Restwell Street														
1	L2	194	0	204	0.0	0.458	21.7	LOS B	4.5	31.2	0.90	0.78	0.90	21.9
2	T1	333	32	351	9.6	* 0.900	32.5	LOS C	11.2	85.1	1.00	1.27	1.64	14.8
Approach		527	32	555	6.1	0.900	28.5	LOS C	11.2	85.1	0.96	1.09	1.36	17.3
East: Raymond St														
4	L2	103	2	108	1.9	0.119	10.6	LOS A	1.4	10.1	0.56	0.65	0.56	30.8
5	T1	210	0	221	0.0	* 0.810	27.6	LOS B	6.2	43.1	1.00	1.03	1.39	23.8
6	R2	71	12	75	16.9	0.335	26.7	LOS B	1.8	14.3	0.94	0.75	0.94	22.1
Approach		384	14	404	3.6	0.810	22.9	LOS B	6.2	43.1	0.87	0.88	1.08	24.9
North: Restwell Street														
8	T1	39	39	41	100.0	0.191	18.6	LOS B	0.9	11.5	0.85	0.65	0.85	20.3
Approach		39	39	41	100.0	0.191	18.6	LOS B	0.9	11.5	0.85	0.65	0.85	20.3
West: Greenfield Parade														
10	L2	373	0	393	0.0	* 0.881	32.4	LOS C	12.0	84.2	1.00	1.20	1.51	19.0
Approach		373	0	393	0.0	0.881	32.4	LOS C	12.0	84.2	1.00	1.20	1.51	19.0
All Vehicles		1323	85	1393	6.4	0.900	27.7	LOS B	12.0	85.1	0.94	1.05	1.31	20.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Restwell Street												
P1	Full	46	48	17.7	LOS B	0.1	0.1	0.84	0.84	42.3	32.0	0.76
East: Raymond St												
P2	Full	80	84	17.7	LOS B	0.1	0.1	0.84	0.84	41.5	31.0	0.75
North: Restwell Street												
P3	Full	1	1	16.0	LOS B	0.0	0.0	0.80	0.80	37.2	27.5	0.74
West: Greenfield Parade												
P4	Full	50	53	16.8	LOS B	0.1	0.1	0.82	0.82	37.6	27.0	0.72
P4S	Slip/	50	53	7.3	LOS A	0.0	0.0	0.54	0.54	26.0	24.3	0.93

MOVEMENT SUMMARY

Site: TCS 4074 [Restwell Street / Raymond Street - TTP (Site Folder: AM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Restwell Street														
1	L2	194	0	204	0.0	0.458	21.7	LOS B	4.5	31.2	0.90	0.78	0.90	21.9
2	T1	333	32	351	9.6	* 0.900	32.5	LOS C	11.2	85.1	1.00	1.27	1.64	14.8
Approach		527	32	555	6.1	0.900	28.5	LOS C	11.2	85.1	0.96	1.09	1.36	17.3
East: Raymond St														
4	L2	103	2	108	1.9	0.119	10.6	LOS A	1.4	10.1	0.56	0.65	0.56	30.8
5	T1	210	0	221	0.0	* 0.810	27.6	LOS B	6.2	43.1	1.00	1.03	1.39	23.8
6	R2	84	25	88	29.8	0.444	27.4	LOS B	2.2	19.1	0.96	0.77	0.96	21.8
Approach		397	27	418	6.8	0.810	23.2	LOS B	6.2	43.1	0.88	0.87	1.08	24.7
North: Restwell Street														
8	T1	39	39	41	100.0	0.191	18.6	LOS B	0.9	11.5	0.85	0.65	0.85	20.3
Approach		39	39	41	100.0	0.191	18.6	LOS B	0.9	11.5	0.85	0.65	0.85	20.3
West: Greenfield Parade														
10	L2	373	0	393	0.0	* 0.881	32.4	LOS C	12.0	84.2	1.00	1.20	1.51	19.0
Approach		373	0	393	0.0	0.881	32.4	LOS C	12.0	84.2	1.00	1.20	1.51	19.0
All Vehicles		1336	98	1406	7.3	0.900	27.7	LOS B	12.0	85.1	0.94	1.04	1.31	20.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Restwell Street												
P1	Full	46	48	17.7	LOS B	0.1	0.1	0.84	0.84	42.3	32.0	0.76
East: Raymond St												
P2	Full	80	84	17.7	LOS B	0.1	0.1	0.84	0.84	41.5	31.0	0.75
North: Restwell Street												
P3	Full	1	1	16.0	LOS B	0.0	0.0	0.80	0.80	37.2	27.5	0.74
West: Greenfield Parade												
P4	Full	50	53	16.8	LOS B	0.1	0.1	0.82	0.82	37.6	27.0	0.72
P4S	Slip/	50	53	7.3	LOS A	0.0	0.0	0.54	0.54	26.0	24.3	0.93

MOVEMENT SUMMARY

Site: TCS 4074 [Restwell Street / Raymond Street - Future Base (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Restwell Street														
1	L2	186	0	196	0.0	0.335	23.5	LOS B	5.2	36.5	0.81	0.76	0.81	21.1
2	T1	252	26	265	10.3	* 0.953	54.7	LOS D	12.7	97.0	1.00	1.38	1.82	10.4
Approach		438	26	461	5.9	0.953	41.4	LOS C	12.7	97.0	0.92	1.12	1.39	13.9
East: Raymond St														
4	L2	261	2	275	0.8	0.237	9.5	LOS A	4.1	28.7	0.46	0.64	0.46	31.6
5	T1	408	0	429	0.0	* 0.964	56.0	LOS D	21.7	151.6	1.00	1.44	1.74	16.8
6	R2	116	7	122	6.0	0.305	28.8	LOS C	3.6	26.2	0.87	0.77	0.87	21.3
Approach		785	9	826	1.1	0.964	36.5	LOS C	21.7	151.6	0.80	1.07	1.19	20.3
North: Restwell Street														
8	T1	36	36	38	100.0	0.227	29.0	LOS C	1.2	15.6	0.90	0.68	0.90	15.9
Approach		36	36	38	100.0	0.227	29.0	LOS C	1.2	15.6	0.90	0.68	0.90	15.9
West: Greenfield Parade														
10	L2	535	0	563	0.0	* 0.965	58.5	LOS E	29.4	205.5	1.00	1.36	1.68	13.1
Approach		535	0	563	0.0	0.965	58.5	LOS E	29.4	205.5	1.00	1.36	1.68	13.1
All Vehicles		1794	71	1888	4.0	0.965	44.1	LOS D	29.4	205.5	0.89	1.16	1.38	16.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Restwell Street												
P1	Full	46	48	23.3	LOS C	0.1	0.1	0.82	0.82	47.9	32.0	0.67
East: Raymond St												
P2	Full	80	84	26.7	LOS C	0.1	0.1	0.87	0.87	50.5	31.0	0.61
North: Restwell Street												
P3	Full	1	1	17.9	LOS B	0.0	0.0	0.71	0.71	39.0	27.5	0.70
West: Greenfield Parade												
P4	Full	50	53	25.8	LOS C	0.1	0.1	0.86	0.86	46.5	27.0	0.58
P4S	Slip/	50	53	9.8	LOS A	0.1	0.1	0.53	0.53	28.5	24.3	0.85

MOVEMENT SUMMARY

Site: TCS 4074 [Restwell Street / Raymond Street - Construction (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Restwell Street														
1	L2	186	0	196	0.0	0.335	23.5	LOS B	5.2	36.5	0.81	0.76	0.81	21.1
2	T1	252	26	265	10.3	* 0.953	54.7	LOS D	12.7	97.0	1.00	1.38	1.82	10.4
Approach		438	26	461	5.9	0.953	41.4	LOS C	12.7	97.0	0.92	1.12	1.39	13.9
East: Raymond St														
4	L2	261	2	275	0.8	0.237	9.5	LOS A	4.1	28.7	0.46	0.64	0.46	31.6
5	T1	408	0	429	0.0	* 0.964	56.0	LOS D	21.7	151.6	1.00	1.44	1.74	16.8
6	R2	124	15	131	12.1	0.344	29.2	LOS C	3.9	29.8	0.88	0.77	0.88	21.2
Approach		793	17	835	2.1	0.964	36.5	LOS C	21.7	151.6	0.81	1.07	1.18	20.3
North: Restwell Street														
8	T1	36	36	38	100.0	0.227	29.0	LOS C	1.2	15.6	0.90	0.68	0.90	15.9
Approach		36	36	38	100.0	0.227	29.0	LOS C	1.2	15.6	0.90	0.68	0.90	15.9
West: Greenfield Parade														
10	L2	535	0	563	0.0	* 0.965	58.5	LOS E	29.4	205.5	1.00	1.36	1.68	13.1
Approach		535	0	563	0.0	0.965	58.5	LOS E	29.4	205.5	1.00	1.36	1.68	13.1
All Vehicles		1802	79	1897	4.4	0.965	44.1	LOS D	29.4	205.5	0.89	1.16	1.37	16.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Restwell Street												
P1	Full	46	48	23.3	LOS C	0.1	0.1	0.82	0.82	47.9	32.0	0.67
East: Raymond St												
P2	Full	80	84	26.7	LOS C	0.1	0.1	0.87	0.87	50.5	31.0	0.61
North: Restwell Street												
P3	Full	1	1	17.9	LOS B	0.0	0.0	0.71	0.71	39.0	27.5	0.70
West: Greenfield Parade												
P4	Full	50	53	25.8	LOS C	0.1	0.1	0.86	0.86	46.5	27.0	0.58
P4S	Slip/	50	53	9.8	LOS A	0.1	0.1	0.53	0.53	28.5	24.3	0.85

MOVEMENT SUMMARY

Site: TCS 4074 [Restwell Street / Raymond Street - TTP (Site Folder: PM)]

New Site

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 70 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Restwell Street														
1	L2	186	0	196	0.0	0.335	23.5	LOS B	5.2	36.5	0.81	0.76	0.81	21.1
2	T1	252	26	265	10.3	* 0.953	54.7	LOS D	12.7	97.0	1.00	1.38	1.82	10.4
Approach		438	26	461	5.9	0.953	41.4	LOS C	12.7	97.0	0.92	1.12	1.39	13.9
East: Raymond St														
4	L2	261	2	275	0.8	0.237	9.5	LOS A	4.1	28.7	0.46	0.64	0.46	31.6
5	T1	408	0	429	0.0	* 0.964	56.0	LOS D	21.7	151.6	1.00	1.44	1.74	16.8
6	R2	186	77	196	41.4	0.663	33.2	LOS C	6.6	62.7	0.96	0.86	1.05	19.9
Approach		855	79	900	9.2	0.964	36.9	LOS C	21.7	151.6	0.83	1.07	1.20	20.1
North: Restwell Street														
8	T1	36	36	38	100.0	0.227	29.0	LOS C	1.2	15.6	0.90	0.68	0.90	15.9
Approach		36	36	38	100.0	0.227	29.0	LOS C	1.2	15.6	0.90	0.68	0.90	15.9
West: Greenfield Parade														
10	L2	535	0	563	0.0	* 0.965	58.5	LOS E	29.4	205.5	1.00	1.36	1.68	13.1
Approach		535	0	563	0.0	0.965	58.5	LOS E	29.4	205.5	1.00	1.36	1.68	13.1
All Vehicles		1864	141	1962	7.6	0.965	44.0	LOS D	29.4	205.5	0.90	1.16	1.38	16.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Restwell Street												
P1	Full	46	48	23.3	LOS C	0.1	0.1	0.82	0.82	47.9	32.0	0.67
East: Raymond St												
P2	Full	80	84	26.7	LOS C	0.1	0.1	0.87	0.87	50.5	31.0	0.61
North: Restwell Street												
P3	Full	1	1	17.9	LOS B	0.0	0.0	0.71	0.71	39.0	27.5	0.70
West: Greenfield Parade												
P4	Full	50	53	25.8	LOS C	0.1	0.1	0.86	0.86	46.5	27.0	0.58
P4S	Slip/	50	53	9.8	LOS A	0.1	0.1	0.53	0.53	28.5	24.3	0.85

MOVEMENT SUMMARY

Site: TCS 4408 [French Ave / Chapel Rd - Future Base (Site Folder: AM)]

French Ave / Chapel Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	16	0	17	0.0	0.088	11.8	LOS A	0.6	4.4	0.65	0.55	0.65	39.6
2	T1	258	23	272	8.9	* 0.439	7.3	LOS A	3.0	22.7	0.74	0.64	0.74	40.0
3	R2	42	1	44	2.4	0.439	13.0	LOS A	3.0	22.7	0.76	0.66	0.76	37.8
Approach		316	24	333	7.6	0.439	8.3	LOS A	3.0	22.7	0.74	0.64	0.74	39.6
East: French Ave														
4	L2	39	2	41	5.1	0.139	17.1	LOS B	0.6	4.1	0.88	0.71	0.88	28.5
5	T1	57	2	60	3.5	* 0.305	12.1	LOS A	1.4	9.7	0.89	0.71	0.89	34.6
6	R2	37	0	39	0.0	0.305	16.7	LOS B	1.4	9.7	0.89	0.71	0.89	32.0
Approach		133	4	140	3.0	0.305	14.9	LOS B	1.4	9.7	0.89	0.71	0.89	32.2
North: Chapel Rd														
7	L2	15	0	16	0.0	0.308	12.5	LOS A	2.3	17.5	0.72	0.61	0.72	40.0
8	T1	315	33	332	10.5	0.308	7.0	LOS A	2.3	17.5	0.72	0.62	0.72	40.5
9	R2	51	1	54	2.0	0.308	12.6	LOS A	1.9	14.5	0.72	0.64	0.72	39.1
Approach		381	34	401	8.9	0.308	8.0	LOS A	2.3	17.5	0.72	0.62	0.72	40.3
West: French Ave														
10	L2	30	1	32	3.3	0.105	17.0	LOS B	0.4	3.1	0.88	0.70	0.88	30.9
11	T1	68	1	72	1.5	0.236	11.8	LOS A	1.1	7.9	0.88	0.68	0.88	35.8
12	R2	11	0	12	0.0	0.236	16.4	LOS B	1.1	7.9	0.88	0.68	0.88	33.7
Approach		109	2	115	1.8	0.236	13.7	LOS A	1.1	7.9	0.88	0.68	0.88	34.2
All Vehicles		939	64	988	6.8	0.439	9.7	LOS A	3.0	22.7	0.77	0.65	0.77	37.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23
East: French Ave												
P2	Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23

MOVEMENT SUMMARY

Site: TCS 4408 [French Ave / Chapel Rd - Construction (Site Folder: AM)]

French Ave / Chapel Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 30 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	16	0	17	0.0	0.088	11.8	LOS A	0.6	4.4	0.65	0.55	0.65	39.6
2	T1	258	23	272	8.9	* 0.439	7.3	LOS A	3.0	22.7	0.74	0.64	0.74	40.0
3	R2	42	1	44	2.4	0.439	13.0	LOS A	3.0	22.7	0.76	0.66	0.76	37.8
Approach		316	24	333	7.6	0.439	8.3	LOS A	3.0	22.7	0.74	0.64	0.74	39.6
East: French Ave														
4	L2	39	2	41	5.1	0.139	17.1	LOS B	0.6	4.1	0.88	0.71	0.88	28.5
5	T1	57	2	60	3.5	* 0.305	12.1	LOS A	1.4	9.7	0.89	0.71	0.89	34.6
6	R2	37	0	39	0.0	0.305	16.7	LOS B	1.4	9.7	0.89	0.71	0.89	32.0
Approach		133	4	140	3.0	0.305	14.9	LOS B	1.4	9.7	0.89	0.71	0.89	32.2
North: Chapel Rd														
7	L2	15	0	16	0.0	0.308	12.5	LOS A	2.3	17.5	0.72	0.61	0.72	40.0
8	T1	315	33	332	10.5	0.308	7.0	LOS A	2.3	17.5	0.72	0.62	0.72	40.5
9	R2	51	1	54	2.0	0.308	12.6	LOS A	1.9	14.5	0.72	0.64	0.72	39.1
Approach		381	34	401	8.9	0.308	8.0	LOS A	2.3	17.5	0.72	0.62	0.72	40.3
West: French Ave														
10	L2	30	1	32	3.3	0.105	17.0	LOS B	0.4	3.1	0.88	0.70	0.88	30.9
11	T1	68	1	72	1.5	0.236	11.8	LOS A	1.1	7.9	0.88	0.68	0.88	35.8
12	R2	11	0	12	0.0	0.236	16.4	LOS B	1.1	7.9	0.88	0.68	0.88	33.7
Approach		109	2	115	1.8	0.236	13.7	LOS A	1.1	7.9	0.88	0.68	0.88	34.2
All Vehicles		939	64	988	6.8	0.439	9.7	LOS A	3.0	22.7	0.77	0.65	0.77	37.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23
East: French Ave												
P2	Full	50	53	9.6	LOS A	0.0	0.0	0.80	0.80	175.2	215.2	1.23

MOVEMENT SUMMARY

Site: TCS 4408 [French Ave / Chapel Rd - TTP (Site Folder: AM)]

French Ave / Chapel Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	16	0	17	0.0	0.075	10.7	LOS A	0.7	5.1	0.52	0.47	0.52	41.1
2	T1	274	39	288	14.2	0.374	6.1	LOS A	3.3	25.6	0.60	0.55	0.60	42.1
3	R2	42	1	44	2.4	*0.374	11.7	LOS A	3.3	25.6	0.62	0.56	0.62	39.5
Approach		332	40	349	12.0	0.374	7.0	LOS A	3.3	25.6	0.60	0.54	0.60	41.6
East: French Ave														
4	L2	39	2	41	5.1	0.155	21.8	LOS B	0.8	5.5	0.90	0.71	0.90	25.6
5	T1	57	2	60	3.5	*0.353	17.0	LOS B	1.8	13.2	0.92	0.73	0.92	31.3
6	R2	37	0	39	0.0	0.353	21.6	LOS B	1.8	13.2	0.92	0.73	0.92	28.5
Approach		133	4	140	3.0	0.353	19.7	LOS B	1.8	13.2	0.91	0.73	0.91	28.9
North: Chapel Rd														
7	L2	15	0	16	0.0	0.251	11.3	LOS A	2.5	19.4	0.58	0.50	0.58	41.6
8	T1	329	47	346	14.3	0.251	5.8	LOS A	2.5	19.4	0.58	0.52	0.58	42.7
9	R2	51	1	54	2.0	0.251	11.3	LOS A	2.1	15.9	0.58	0.55	0.58	40.6
Approach		395	48	416	12.2	0.251	6.7	LOS A	2.5	19.4	0.58	0.52	0.58	42.3
West: French Ave														
10	L2	30	1	32	3.3	0.117	21.6	LOS B	0.6	4.1	0.90	0.70	0.90	28.0
11	T1	68	1	72	1.5	0.271	16.6	LOS B	1.5	10.7	0.90	0.70	0.90	32.3
12	R2	11	0	12	0.0	0.271	21.1	LOS B	1.5	10.7	0.90	0.70	0.90	30.1
Approach		109	2	115	1.8	0.271	18.4	LOS B	1.5	10.7	0.90	0.70	0.90	30.9
All Vehicles		969	94	1020	9.7	0.374	9.9	LOS A	3.3	25.6	0.67	0.58	0.67	37.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20
East: French Ave												
P2	Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20

MOVEMENT SUMMARY

Site: TCS 4408 [French Ave / Chapel Rd - Future Base (Site Folder: PM)]

French Ave / Chapel Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	89	0	94	0.0	0.138	10.3	LOS A	1.3	9.4	0.51	0.61	0.51	38.6
2	T1	472	36	497	7.6	* 0.688	9.2	LOS A	8.7	64.6	0.79	0.76	0.85	37.1
3	R2	76	0	80	0.0	0.688	15.1	LOS B	8.7	64.6	0.81	0.77	0.88	35.6
Approach		637	36	671	5.7	0.688	10.1	LOS A	8.7	64.6	0.75	0.74	0.81	37.1
East: French Ave														
4	L2	48	0	51	0.0	0.218	23.0	LOS B	1.0	6.8	0.93	0.72	0.93	25.1
5	T1	64	0	67	0.0	* 0.465	18.5	LOS B	2.2	15.4	0.96	0.76	0.96	30.4
6	R2	41	1	43	2.4	0.465	23.0	LOS B	2.2	15.4	0.96	0.76	0.96	27.5
Approach		153	1	161	0.7	0.465	21.1	LOS B	2.2	15.4	0.95	0.75	0.95	28.1
North: Chapel Rd														
7	L2	44	0	46	0.0	0.479	11.6	LOS A	5.9	43.6	0.65	0.59	0.65	41.0
8	T1	527	34	555	6.5	0.479	7.2	LOS A	5.9	43.6	0.69	0.62	0.69	40.0
9	R2	109	0	115	0.0	0.479	17.2	LOS B	3.8	27.1	0.83	0.74	0.83	33.8
Approach		680	34	716	5.0	0.479	9.1	LOS A	5.9	43.6	0.71	0.64	0.71	38.6
West: French Ave														
10	L2	53	0	56	0.0	0.240	23.1	LOS B	1.1	7.5	0.94	0.73	0.94	27.3
11	T1	60	0	63	0.0	0.423	18.3	LOS B	2.0	13.8	0.95	0.75	0.95	30.5
12	R2	36	0	38	0.0	0.423	22.9	LOS B	2.0	13.8	0.95	0.75	0.95	28.3
Approach		149	0	157	0.0	0.423	21.1	LOS B	2.0	13.8	0.94	0.74	0.94	28.8
All Vehicles		1619	71	1704	4.4	0.688	11.7	LOS A	8.7	64.6	0.77	0.70	0.79	35.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20
East: French Ave												
P2	Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20

MOVEMENT SUMMARY

Site: TCS 4408 [French Ave / Chapel Rd - Construction (Site Folder: PM)]

French Ave / Chapel Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 40 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	89	0	94	0.0	0.138	10.3	LOS A	1.3	9.4	0.51	0.61	0.51	38.6
2	T1	472	36	497	7.6	* 0.688	9.2	LOS A	8.7	64.6	0.79	0.76	0.85	37.1
3	R2	76	0	80	0.0	0.688	15.1	LOS B	8.7	64.6	0.81	0.77	0.88	35.6
Approach		637	36	671	5.7	0.688	10.1	LOS A	8.7	64.6	0.75	0.74	0.81	37.1
East: French Ave														
4	L2	48	0	51	0.0	0.218	23.0	LOS B	1.0	6.8	0.93	0.72	0.93	25.1
5	T1	64	0	67	0.0	* 0.465	18.5	LOS B	2.2	15.4	0.96	0.76	0.96	30.4
6	R2	41	1	43	2.4	0.465	23.0	LOS B	2.2	15.4	0.96	0.76	0.96	27.5
Approach		153	1	161	0.7	0.465	21.1	LOS B	2.2	15.4	0.95	0.75	0.95	28.1
North: Chapel Rd														
7	L2	44	0	46	0.0	0.479	11.6	LOS A	5.9	43.6	0.65	0.59	0.65	41.0
8	T1	527	34	555	6.5	0.479	7.2	LOS A	5.9	43.6	0.69	0.62	0.69	40.0
9	R2	109	0	115	0.0	0.479	17.2	LOS B	3.8	27.1	0.83	0.74	0.83	33.8
Approach		680	34	716	5.0	0.479	9.1	LOS A	5.9	43.6	0.71	0.64	0.71	38.6
West: French Ave														
10	L2	53	0	56	0.0	0.240	23.1	LOS B	1.1	7.5	0.94	0.73	0.94	27.3
11	T1	60	0	63	0.0	0.423	18.3	LOS B	2.0	13.8	0.95	0.75	0.95	30.5
12	R2	36	0	38	0.0	0.423	22.9	LOS B	2.0	13.8	0.95	0.75	0.95	28.3
Approach		149	0	157	0.0	0.423	21.1	LOS B	2.0	13.8	0.94	0.74	0.94	28.8
All Vehicles		1619	71	1704	4.4	0.688	11.7	LOS A	8.7	64.6	0.77	0.70	0.79	35.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time	Travel Dist.	Aver. Speed
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20
East: French Ave												
P2	Full	50	53	14.5	LOS B	0.1	0.1	0.85	0.85	180.0	215.2	1.20

MOVEMENT SUMMARY

Site: TCS 4408 [French Ave / Chapel Rd - TTP (Site Folder: PM)]

French Ave / Chapel Rd

Site Category: (None)

Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 50 seconds (Site Optimum Cycle Time - Minimum Delay)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
		[Total veh/h	HV] veh/h	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Chapel Rd														
1	L2	89	0	94	0.0	0.124	9.3	LOS A	1.4	9.9	0.41	0.56	0.41	39.9
2	T1	490	54	516	11.0	* 0.622	7.4	LOS A	9.0	68.0	0.68	0.65	0.68	39.8
3	R2	76	0	80	0.0	0.622	13.2	LOS A	9.0	68.0	0.71	0.65	0.71	37.8
Approach		655	54	689	8.2	0.622	8.3	LOS A	9.0	68.0	0.64	0.64	0.64	39.5
East: French Ave														
4	L2	48	0	51	0.0	0.272	29.0	LOS C	1.2	8.7	0.96	0.73	0.96	22.2
5	T1	64	0	67	0.0	* 0.594	25.2	LOS B	2.9	20.2	0.99	0.82	1.10	26.9
6	R2	41	1	43	2.4	0.594	29.8	LOS C	2.9	20.2	0.99	0.82	1.10	23.9
Approach		153	1	161	0.7	0.594	27.6	LOS B	2.9	20.2	0.98	0.79	1.06	24.7
North: Chapel Rd														
7	L2	44	0	46	0.0	0.433	10.4	LOS A	6.0	44.9	0.53	0.49	0.53	42.7
8	T1	547	54	576	9.9	0.433	5.9	LOS A	6.0	44.9	0.57	0.54	0.57	42.2
9	R2	109	0	115	0.0	0.433	15.1	LOS B	4.2	30.4	0.70	0.68	0.70	35.7
Approach		700	54	737	7.7	0.433	7.7	LOS A	6.0	44.9	0.59	0.56	0.59	40.7
West: French Ave														
10	L2	53	0	56	0.0	0.300	29.1	LOS C	1.4	9.7	0.96	0.74	0.96	24.4
11	T1	60	0	63	0.0	0.533	24.7	LOS B	2.6	18.0	0.98	0.79	1.03	27.2
12	R2	36	0	38	0.0	0.533	29.3	LOS C	2.6	18.0	0.98	0.79	1.03	24.8
Approach		149	0	157	0.0	0.533	27.4	LOS B	2.6	18.0	0.98	0.77	1.00	25.6
All Vehicles		1657	109	1744	6.6	0.622	11.5	LOS A	9.0	68.0	0.68	0.63	0.69	35.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Site tab).

Vehicle movement LOS values are based on average delay per movement.

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

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

Queue Model: SIDRA Standard.

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

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

* Critical Movement (Signal Timing)

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol. ped/h	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
						[Ped ped	Dist] m					
South: Chapel Rd												
P1	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	184.9	215.2	1.16
East: French Ave												
P2	Full	50	53	19.4	LOS B	0.1	0.1	0.88	0.88	184.9	215.2	1.16

Appendix C – Temporary Transport Management Plan October School Holidays 2022

Temporary Transport Management Plan

Sydenham to Bankstown Line October 2022 shutdown

October School Holidays
2022

transport.nsw.gov.au

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Executive Summary

The Sydney Metro City & Southwest will upgrade all 10 stations between Sydenham and Bankstown to meet current accessibility standards before converting the T3 Bankstown Line to Metro operations. This upgrade will include various construction activities that require the temporary closure of part or all of the rail line.

Stations between Sydenham and Birrong, along the T3 Bankstown Line, will be temporarily closed between **2am Saturday 24 September to 2am Monday 10 October 2022** due to Sydney Metro upgrade works.

The shutdown is needed to allow construction to take place on Sydney Metro, which will extend from Sydney's North West, under Sydney Harbour through new underground city stations to Bankstown.

Frequent bus services will replace trains between the closed stations during this period.

A Temporary Transport Plan has been successfully delivered across holiday periods in 2019, 2020, 2021 and 2022. Shutdowns of the T3 Bankstown Line are strategically planned to reduce the impact on customers by taking place during school holiday periods when demand across the network is typically at least 15% lower than during the school term. This planned shutdown has been cross-examined with Advanced Analytics and Insights' forecasting tool, which outlines the projected patronage demand for the period.

Transport Plan

Planned Rail Shutdown

To enable work to take occur between 24 September to 9 October 2022 (inclusive), the T3 Bankstown Line will be closed.

Between 24 September to 7 October 2022, the T3 Bankstown Line will be closed between Birrong and Sydenham, and between the 8 October to 9 October stations will be closed between Birrong and Sydenham as well as Birrong to Cabramatta. This extension between Birrong to Cabramatta is part of the regular weekend trackwork planned by Sydney Trains.

Sydenham will remain open during the closure as an interchange station between trains and replacement bus services. Trains will continue to operate west of Birrong Station and along the City Circle line between the 24 September to 7 October 2022. Between 8 to 9 October stations between Birrong and Cabramatta will also be closed with Cabramatta Station remained open during this weekend.

During the NRL grand final day on Sunday 02 October 2022, extra bus services added to the standard weekend timetable. In addition, the standby buses will be effectively deployed by the bus marshals where required, to cover the additional passenger demand caused by the NRL grand final.

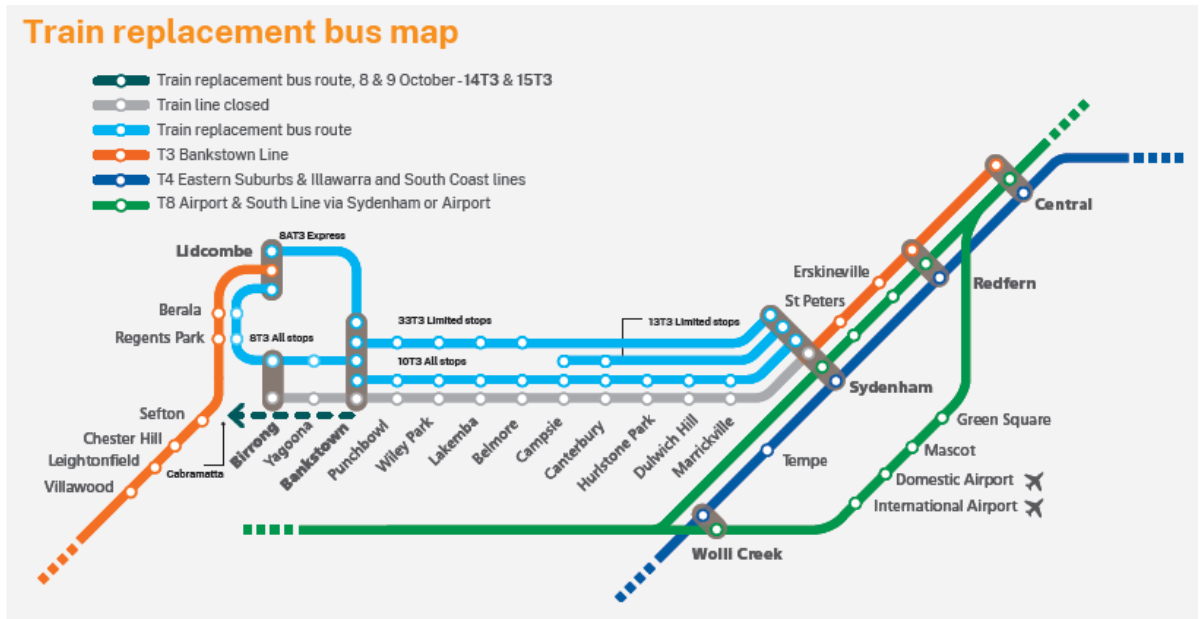


Figure 1: Replacement and alternative services – Sat 24 September to Sunday 9 October 2022: TfNSW

Key features of the Temporary Transport Plan

- Frequent, all stops bus services connecting closed stations along the T3 Bankstown Line (Further detail in Appendix A).
- Express and limited stop services during peak and off-peak periods for trips towards Sydenham.

- Low floor accessible buses will be provided on the majority of services.
- Bus marshals will also be available during the busiest parts of the day to assist customers with accessibility needs.

Network Infrastructure

Bus Stop and Shelters

To ensure bus services' safe and efficient operation, layover and temporary bus space details have been provided to the relevant Council's Local Traffic Committees (Appendix D). The Council's Local Traffic Committees have previously publicly endorsed these plans for previous TTPs.

A site visit will be conducted in September to assess the lighting in place at each location. Temporary lighting towers will be installed at bus stops where existing lighting levels have been deemed to be low.

Appendix B outlines the location of bus stops and the facilities in place during the shutdown. It also details the locations where temporary lighting towers will be used during the shutdown. Any additional lighting will be directed towards customer areas (bus stops). Any environmental impacts will be assessed and lighting direction will be changed if there is an impact on surrounding dwellings.

Temporary Bus Stops will utilise existing awnings, or additional cover (marquees) will be provided. During the closure, there will be support staff around train stations, including customer service staff (Appendix F), bus marshals and traffic controllers, to help customers plan their journey and to guide them to their alternative bus or train service.

Existing Facilities at Interchange Stations

During the closure key interchange stations are Sydenham, Regents Park and Lidcombe. All stations have extensive facilities including lifts and wheelchair accessibility.

- Sydenham Station: Lifts and wheelchair accessibility. Complete stop information (<https://transportnsw.info/stop?q=10101326#/>)
- Regents Park Station: Lifts and wheelchair accessible. Complete stop information (<https://transportnsw.info/stop?q=214310#/>)
- Lidcombe Station: Lifts and wheelchair accessible. Complete stop information (<https://transportnsw.info/stop?q=214110#/>)

Network Plan

Network Management

Key corridors including Illawarra Road, Canterbury Road, The Boulevarde, Sydenham Road and intersections along each route, have been assessed to determine any temporary changes required to allow buses to operate while maintaining traffic flow for other road users.

Due to the period of operation, there is a reduction in traffic demands. There is no requirement for Traffic Control Sites (TCS) to be modified. However, Network Operations specialists will be monitoring and adjusting traffic signal operations across the area in real-time to optimise the performance of the road network.

The temporary bus replacement routes have been planned to allow express bus routes to use main road corridors (e.g. Canterbury Road). In contrast, all station buses will predominantly use local roads to access stations. This decision reduces the impact on the network and gives customers greater flexibility during the planned shutdown.

To reduce the impact on the local community Sydney Metro and Customer Journey Planning (TFNSW) are working together to mitigate any impacts expected from construction activities. Ongoing meetings in the form of a Traffic Coordination Group and a Traffic & Transport Liaison Group form the collaborative approach to mitigating the impact on the community and ensuring Metro Construction works remain on track.

Network Performance Monitoring

During the planned shutdown crews will be rostered across the AM/PM peak to monitor and assist with the clearance of any incidents and manage unusual congestion on key replacement bus corridors. Network Operations specialists will monitor and adjust traffic signal operations (SCATS) across the area in real-time to optimise the performance of the road network.

A dedicated Transport Commander will patrol the network.

Dedicated tow-trucks will be on-call to manage the Canterbury Road corridor and at critical interchanges at Sydenham, Campsie and Bankstown, clearing incidents and vehicles illegally parked.

Walking and Cycling

Sydenham to Bankstown Walking and Cycling Strategy

Sydney Metro developed the Sydenham to Bankstown Walking and Cycling Strategy, to identify opportunities and works to connect stations with the surrounding communities, by connecting to or enhancing existing pedestrian and cyclist paths.

The strategy aims to encourage walking and cycling as a first/last mile transport mode and to expand the functional metro station catchment areas to maximise the percentage of customers who access metro stations through sustainable modes. The walking and cycling strategy also identifies opportunities and works to improve east-west pedestrian and cyclist facilities between Sydenham and Bankstown.

The Strategy was finalised in 2021 and provided to Inner West Council and Canterbury Bankstown Council to inform the planning of their Active Transport networks. To support the TTP, widening of the footpath at Railway Parade at Sydenham was completed. Existing bike parking will be available at stations along the alignment with 36 bike parking spaces at Sydenham and 24 bike parking spaces at Bankstown. Similarly, existing walking and cycling facilities will be utilised during the shutdown.

The Sydenham to Bankstown Walking and Cycling Strategy identifies works to be delivered by Sydney Metro and 'complementary infrastructure' items to be provided by other parties, such as local councils. Improved east-west walking and cycling connections will be delivered by Sydney Metro as part of the Sydney Metro City & Southwest project as required under Condition E53 of the project approval. These connections are still being developed and subject to change. Any walking and cycling works proposed during the October shutdown on behalf of Sydney Metro would be those incorporated into the station delivery packages, including station plazas, connecting footpaths and interchange facilities.

Several other infrastructure options are also identified that could be delivered by stakeholders as part of other projects or considered for further investigation. The Sydney Metro City & Southwest project will safeguard opportunities for stakeholders to deliver these other infrastructure options in the future.

As part of the trip planning, walking and cycling options are provided on the [Transportnsw.info](https://transport.nsw.gov.au) website as well as replacement bus services, making it easy for customers to plan their walking or cycling route. The [Transportnsw.info](https://transportnsw.info) website also provides information for customers on facilities available at each station, including cycle parking.

Walking and Cycling management during the Possession

During the October Possession, temporary restrictions and disruptions to pedestrian and cycling access may occur. Under the Sydney Metro City and Southwest, Sydenham to Bankstown Upgrade Condition of Approval E52, safe pedestrian and cyclist access will be maintained around construction sites during the October Possession.

In circumstances where pedestrian and cyclist access is restricted or removed due to construction activities, an alternate route which complies with the relevant standards will be provided and signposted.

In addition, Sydney Metro's Construction Contractors would undertake condition surveys to confirm changes to routes proposed to be used by pedestrians and/or cyclists are suitable (e.g. suitably paved and well lit), with identified modification requirements discussed with the Inner West and/or Canterbury-Bankstown councils and implemented prior to the use of the routes.

Under Sydney Metro City and Southwest Sydenham to Bankstown Upgrade Revised Environmental Mitigation Measure TC7, where existing cycle facilities (e.g. bike parking) would be temporarily unavailable at a station during the October possession, suitable replacement facilities would be provided while the facility is unavailable.

Customer Engagement and Information

Customer Analysis

From the analysis of historical opal data, the school holiday periods see a reduction in patronage demand, particularly during the AM peak period where demand is typically concentrated in a smaller timeframe.

In addition, a rail line closure during a school holiday period benefits the bus procurement arrangements with a reduced demand on the bus fleet due to no school-based operations.

The available school holidays of July, October and December/January were reviewed against historical opal demand, known special events and the approved Sydney Trains Annual Works Program for viability. There is minimal change in overall or peak period demand across the three school holiday periods with the determination due to the impact on major special events and the Sydney Trains Annual Works Program.

Timetable development

The timetables for the TTP were developed based on the following items:

- Determining the expected patronage demand
- Assuming all bus services carrying passengers at capacity i.e. without any seats/capacity restrictions
- Effectively using and applying the lessons learnt from the July 2022 TTP.

Patronage demand

The Advanced Analytics and Insights team in TfNSW developed a forecasting tool using the historical patronage demands. This tool used for determining the expected patronage during the September/October 2022 school holiday period. The forecasting tool uses a machine learning model which utilises historical opal tap-on/tap-off data to forecast the patronage volumes for future years. The tool forecasts the volumes for all five modes of transport (Bus, Ferry, Light Rail, Road and Train). The predicted values from the forecasting tool are categorised into the following three groups:

1. Upper-band prediction
2. Model prediction (Average)
3. Lower-band prediction

For predicting the expected patronage usage along the T3 Bankstown Line, the 'Upper-band prediction' values were utilised as the preferred range of data best to indicate the highest number of patronage predictions. The forecasting tool predicted that the overall train patronage demand would be 27 percent (27.19%) lower than the 2019 patronage volumes for the same school holiday period in October (pre-pandemic levels). The reduction percentage is directly in relation to current patronage demand due to the impact of Covid-19 on customers and the community.

Unrestricted bus capacity

As of 30 April 2022, TfNSW has lifted capacity restrictions on all modes of public transport. As such it was assumed that all TTP buses will carry 54 passengers per bus. The number of buses required per passenger demand was calculated using this capacity.

July 2022 TTP Supply vs Demand

The passenger volume data captured through bus marshals were compared against the supply during the TTP. The analysis showed that there was extra supply of buses during the AM peak and PM peak periods. As such, some reductions applied to the peak hours in the September/October TTP timetables.

Stakeholder Engagement

A comprehensive stakeholder management plan has been implemented to inform and engage transport customers, businesses and the local community before the Sydenham to Bankstown Line shutdown.

Meetings commenced in August and will continue until late September. These meetings include Council, Local MPs, Community & Business Groups, Health and Education facilities. The in-depth schedule of engagement is attached (Appendix F).

In addition, local residents have been informed of proposed parking changes via:

- Letter box drop notification
- Station signage posters
- Online website

Customer Information

A mix of channels will be used to make customers aware of the shutdown and the alternative transport options including:

At station and on mode:

- Station Posters
- Information Screens
- Guard Announcements
- Customer brochures (Appendix A).

Websites:

- transportnsw.info
- mysydney.nsw.gov.au
- sydneymetro.info

Apps:

- Opal Travel App
- Third party Apps (e.g. Tripview, NextThere)

Social Media:

- Twitter
- Facebook

Stakeholder Communication:

- Community notifications
- Stakeholder emails
- Multi-lingual customer brochures
- Newsletter content

Wayfinding and Customer service

To assist customers with wayfinding and navigating their way to rail replacement buses and alternative train services, a comprehensive wayfinding and customer service strategy has been developed. This includes:

- Wayfinding signage at stations and bus stops
- Guard announcements at open stations
- During the busiest parts of the day, bus marshals, station staff, and additional customer service staff assist customers with accessible needs (Appendix A).
- Customer service street teams will also inform customers about the closure prior to the shutdown and assist commuters with information on the location of bus stops.

Appendix F details starting locations for customer service staff during the shutdown in and around each station. This will be monitored during the shutdown and amended based on operational requirements and feedback.

Appendices

Appendix A – Replacement Buses on T3 Bankstown Line Customer Brochure

Appendix B - Temporary Bus Stop Infrastructure Assessment

Appendix C – Temporary Transport Plan Bus Routes

Appendix D – Bus Stop & Layover locations including Temporary Parking Changes

Appendix E – Stakeholder Consultation List

Appendix F – Customer Information Staffing Locations

Appendix A – Replacement Buses on T3 Bankstown Line Customer Brochure



Trackwork

Saturday 24 September
– Sunday 9 October

Buses replace trains on
the T3 Bankstown Line

You must wear a face mask on public transport.
Information was correct at the time of print.

Allow extra travel time and plan ahead at
transportnsw.info



Frequently asked questions

Do I need an Opal card to use the replacement buses?

You will need a valid Opal card, American Express, Mastercard or Visa card to pay for travel on train replacement buses.

Will stations remain open even though trains won't be running?

Some train stations on the T3 Bankstown Line between Sydenham and Birrong will be closed completely during the 16 day period, including concourses and toilet facilities within stations. Sydenham station and their facilities will remain open.

Trackwork for rail upgrade

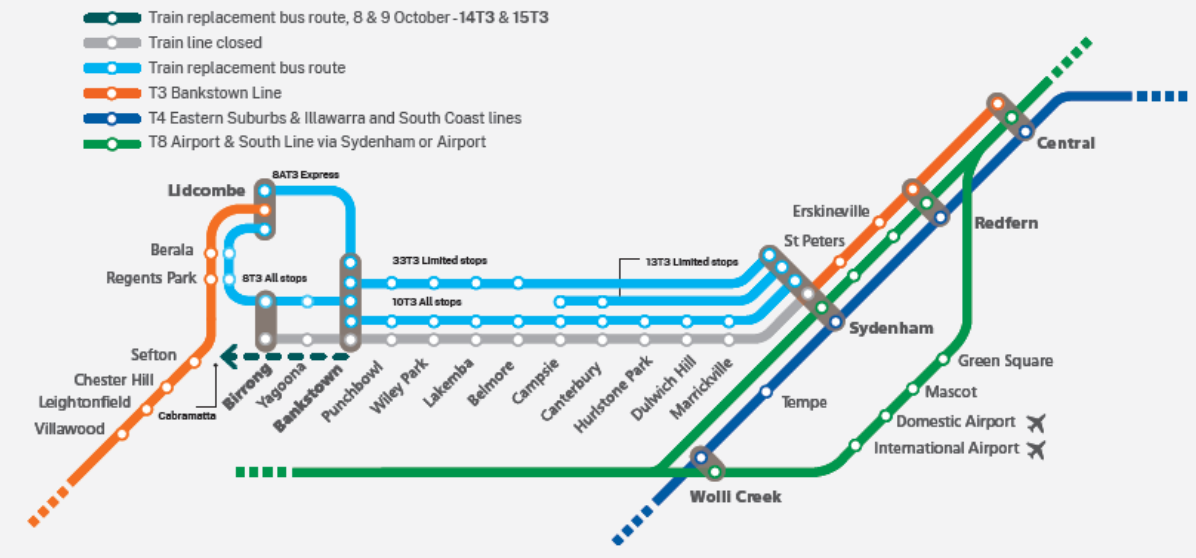
Replacement buses and alternative services

T3 Bankstown Line

- Buses replace trains between Lidcombe and Sydenham via Bankstown
- Trains run to a changed timetable between Liverpool and City via Regents Park, stopping at all stations between Cabramatta and Lidcombe from 24 September to 7 October
- For travel between Sydenham and Bankstown, use replacement bus routes:
 - 10T3 – All stops between Sydenham and Bankstown
 - 33T3 – Limited stops: Sydenham to Belmore, then all stops to Bankstown

- 13T3 – Limited stops: Sydenham to Canterbury, then Campsie
- For travel between Bankstown and Lidcombe, use replacement bus routes:
 - 8T3 – All stops between Bankstown and Lidcombe
 - 8AT3 – Express: Bankstown and Lidcombe
- On **Saturday 8 and Sunday 9 October**, buses also replace trains between Bankstown and Cabramatta. Use replacement bus routes:
 - 14T3 – All stops between Bankstown and Cabramatta
 - 15T3 – Express: Bankstown and Cabramatta

Train replacement bus map



Appendix B - Temporary Bus Stop Infrastructure Assessment

Route	Direction	Stop	Station	TSN	STOP_NAME
10T3	Inbound	1	Bankstown Station	2200343	Bankstown Station, Stand G
10T3	Inbound	2	Punchbowl Station	2196295	The Boulevarde opp Broadway
10T3	Inbound	3	Wiley Park Station	219526	The Boulevarde after King Georges Rd
10T3	Inbound	4	Lakemba Station	219518	Lakemba Station, The Boulevarde
10T3	Inbound	5	Belmore Station	219226	Bridge Rd opp Canterbury League Club
10T3	Inbound	6	Campsie Station	219417	Campsie Station, Beamish St, Stand C
10T3	Inbound	7	Canterbury Station	219321	Canterbury Station, Canterbury Rd, Stand E
10T3	Inbound	8	Hurlstone Park Station	219312	Floss St opp Hurlstone Park Station
10T3	Inbound	9	Dulwich Hill Station	220433	Dulwich Hill Station, Dudley St
10T3	Inbound	10	Marrickville Station	2204102	Illawarra Rd opp Marrickville Station
10T3	Inbound	11	Sydenham Station	220450	Sydenham Station, Railway Pde, Stand E
10T3	Outbound	1	Sydenham Station	2204125	Sydenham Station, Railway Pde, Stand C
10T3	Outbound	2	Marrickville Station	2204101	Marrickville Station, Illawarra Rd
10T3	Outbound	3	Dulwich Hill Station	220432	Dudley St opp Dulwich Hill Station
10T3	Outbound	4	Hurlstone Park Station	219311	Hurlstone Park Station, Floss St
10T3	Outbound	5	Canterbury Station	219377	Canterbury Rd at Tincombe St
10T3	Outbound	6	Campsie Station	219411	Campsie Station, Beamish St, Stand B
10T3	Outbound	7	Belmore Station	219227	Canterbury League Club, Bridge Rd
10T3	Outbound	8	Lakemba Station	219527	The Boulevarde opp Lakemba Station
10T3	Outbound	9	Wiley Park Station	2195109	The Boulevarde opp Wiley Park Station
10T3	Outbound	10	Punchbowl Station	2196242	Punchbowl Station, The Boulevarde
10T3	Outbound	11	Bankstown Station	220018	Restwell St at Stewart Lane
13T3	Inbound	1	Campsie Station	219416	Campsie Station, South Pde, Stand E
13T3	Inbound	2	Canterbury Station	219321	Canterbury Station, Canterbury Rd, Stand E
13T3	Inbound	3	Sydenham Station	220450	Sydenham Station, Railway Pde, Stand E
13T3	Outbound	1	Sydenham Station	2204125	Sydenham Station, Railway Pde, Stand C
13T3	Outbound	2	Canterbury Station	219377	Canterbury Rd at Tincombe St
13T3	Outbound	3	Campsie Station	219413	ANZAC Mall, Beamish St
33T3	Inbound	1	Bankstown Station	2200343	Bankstown Station, Stand G
33T3	Inbound	2	Punchbowl Station	2196295	The Boulevarde opp Broadway
33T3	Inbound	3	Wiley Park Station	219526	The Boulevarde after King Georges Rd
33T3	Inbound	4	Lakemba Station	219518	Lakemba Station, The Boulevarde
33T3	Inbound	5	Belmore Station	219226	Bridge Rd opp Canterbury League Club
33T3	Inbound	6	Sydenham Station	220450	Sydenham Station, Railway Pde, Stand E
33T3	Outbound	1	Sydenham Station	2204125	Sydenham Station, Railway Pde, Stand C
33T3	Outbound	2	Belmore Station	219227	Canterbury League Club, Bridge Rd
33T3	Outbound	3	Lakemba Station	219527	The Boulevarde opp Lakemba Station
33T3	Outbound	4	Wiley Park Station	2195109	The Boulevarde opp Wiley Park Station
33T3	Outbound	5	Punchbowl Station	2196242	Punchbowl Station, The Boulevarde
33T3	Outbound	6	Bankstown Station	220018	Restwell St at Stewart Lane
8AT3	Inbound	1	Lidcombe Station	2141286	Lidcombe Station, Church St
8AT3	Inbound	2	Bankstown Station	2200373	Bankstown Station, Stand C
8AT3	Outbound	1	Bankstown Station	220080	Bankstown Station, Stand J
8AT3	Outbound	2	Lidcombe Station	214197	Lidcombe Station, Railway St, Stand C
8T3	Inbound	1	Lidcombe Station	2141286	Lidcombe Station, Church St
8T3	Inbound	2	Berala Station	2141275	Campbell St opp Berala Station
8T3	Inbound	3	Regents Park Station	214321	Amy St opp Regents Park Library
8T3	Inbound	4	Birrong Station	214376	Birrong Station, Hudson Pde
8T3	Inbound	5	Yagoona Station	219911	Yagoona Station, Hume Hwy
8T3	Inbound	6	Bankstown Station	2200373	Bankstown Station, Stand C
8T3	Outbound	1	Bankstown Station	220080	Bankstown Station, Stand J
8T3	Outbound	2	Yagoona Station	219915	Hume Hwy opp Yagoona Station
8T3	Outbound	3	Birrong Station	214376	Birrong Station, Hudson Pde
8T3	Outbound	4	Regents Park Station	214341	Regents Park Library, Amy St
8T3	Outbound	5	Berala Station	2141276	Berala Station, Campbell St
8T3	Outbound	6	Lidcombe Station	214197	Lidcombe Station, Railway St, Stand C

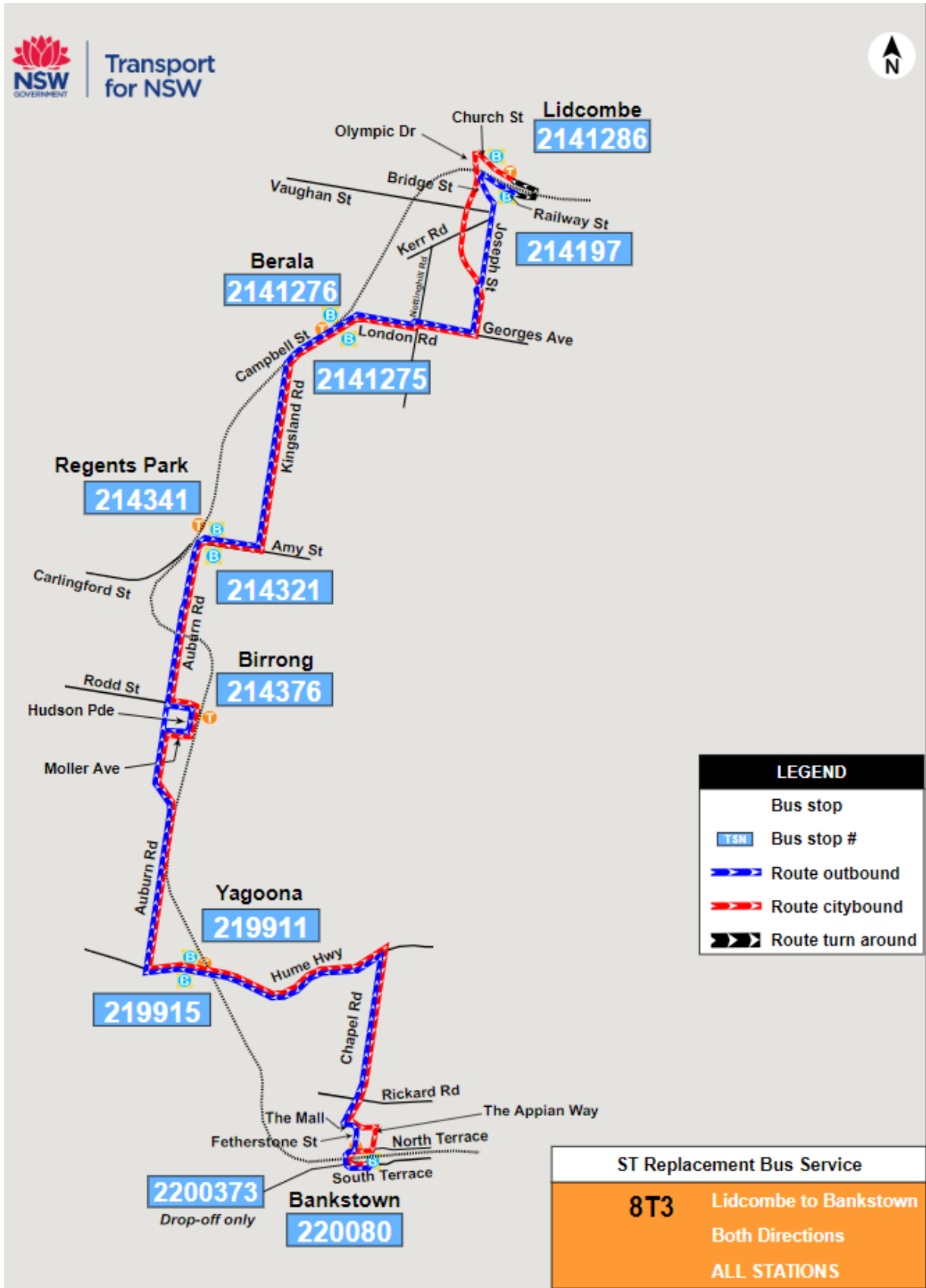
TRANSPORT

Train Station	Bus stop TSN	Bus Stop Location	Shelter Required	Awning	Existing Bus Stop Shelter	Marquee Provided	Additional Lighting Required	CCTV Required
Bankstown	2200343	Bankstown Station, Stand G	Yes	No	Yes	Yes 2 x (6m x 3m) & 1 x (3m x 3m)	Lighting Required	Bus Interchange - Yes
Belmore	219226	Bridge Rd before Belmore Rd	Yes	No	No	Yes x 1 (6m x 3m)	No	No
Belmore	219227	Bridge Rd after Belmore Rd	Yes	No	No	Yes 1 x (6m x 3m)	No	No
Berala	2141275	Berala Station, Campbell St	No	No	Yes	No	Lighting Required	No
Berala	2141276	Berala Station, Campbell St	No	Yes	No	No	No	No
Birrong	214376	Birrong Station, Hudson Pde	Yes	No	No	1 x (6m x 3m)	Lighting Required	No
Campsie	219417	Campsie Station, Beamish St, Stand C	No	Yes	No	No	No	No
Campsie	219411	Campsie Station, Beamish St, Stand B	Yes	Yes	No	No	No	No
Campsie	219416	South Pde After Beamish St	Yes	No	No	Yes 1 x (6m x 2m)	Lighting Required	Duke St - Yes
Campsie	219413	Beamish St before Anzac Mall	No	No	No	No	No	No
Canterbury	219321	Opp Canterbury Station, Canterbury Rd	Yes	No	No	Yes 1 x (6m x 2m)	No	No
Canterbury	219377	Canterbury Station, near Tincombe St	Yes	Yes	No	Yes 1 x (6m x 2m)	No	No
Dulwich Hill	220433	Dulwich Hill Station, Dudley St	No	No	Yes	Yes 1 x (6m x 3m)	Lighting Required	No
Dulwich Hill	220432	Dudley St opp Dulwich Hill Station	Yes	No	No	No	No	No
Hurlstone Park	2193115	Crinan St Hurlstone Park Station	No	No	Yes	Yes 1 x (3m x 3m)	No	No
Hurlstone Park	2193116	Hurlstone Park Station, Crinan St	No	No	Yes	No	No	No

TRANSPORT

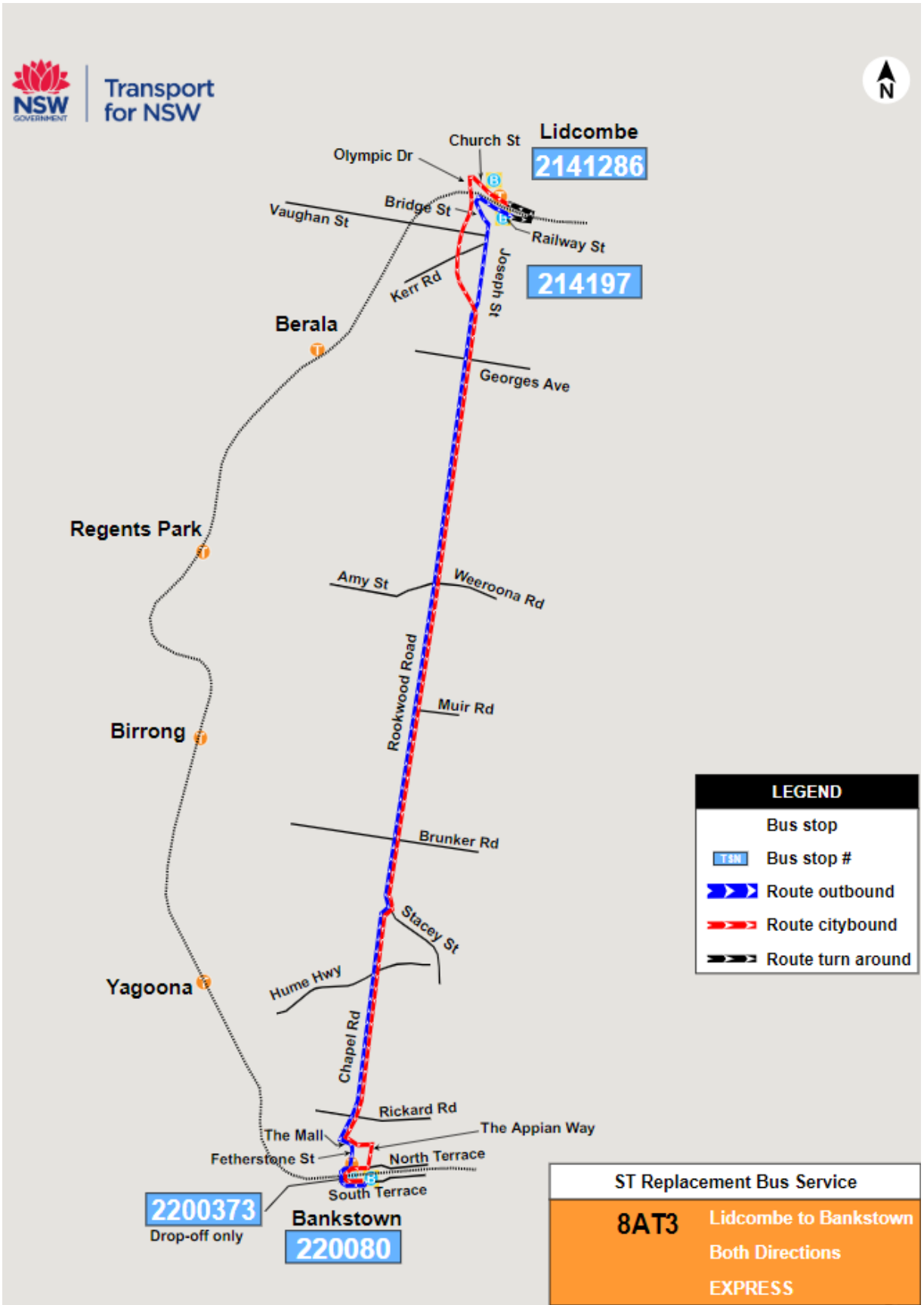
Train Station	Bus stop TSN	Bus Stop Location	Shelter Required	Awning	Existing Bus Stop Shelter	Marquee Provided	Additional Lighting Required	CCTV Required
Lakemba	219518	Lakemba Station, The Boulevarde	Yes	No	Yes x 1	Yes 1 x (6m x 3m)	No	No
Lakemba	219527	The Boulevarde opp Lakemba Station	Yes	Yes	No	No	No	No
Lidcombe	2141286	Lidcombe Station, Church St	Yes	No	No	Yes 1 x (9m x 3m)	Lighting Required	Church St - Yes
Lidcombe	214197	Lidcombe Station, Railway St	No	Yes	Yes	No	No	No
Marrickville	2204102	Illawarra Rd opp Marrickville Station	No	Yes	No	No	No	No
Marrickville	2204101	Marrickville Station, Illawarra Rd	Yes	Yes	No	No	No	No
Punchbowl	2196282	The Boulevarde opp Broadway	No	Yes	No	Yes 1 x (3m x 3m)	Lighting Required	No
Punchbowl	2196281	Punchbowl Station, The Boulevarde	No	Yes	No	No	No	No
Regents Park	214321	Regents Park Station, Amy St	No	No	Yes	No	No	Amy St - Yes
Regents Park	214341	Regents Park Station, Amy St	No	Yes	No	No	No	No
Sydenham	220450	Sydenham Station, Railway Pde, Stand C	No	No	No	Yes 2 x (6m x 3m) &	Yes 1 x Railway Pde Stand C	No
Sydenham	2204125	Railway Pde Before Gleeson Ave	Yes	Yes	No	Yes 1 x (3m x 3m)	Yes 1 x Lighting at Lower Railway Pde	Lower Railway Pde - Yes
Wiley Park	219526	The Boulevarde after King Georges Rd	Yes	No	No	Yes 1 x (6m x 2m)	No	No
Wiley Park	2195109	The Boulevarde opp Wiley Park Station	Yes	No	Yes	Yes 1 x (6m x 2m)	No	No
Yagoona	219911	Yagoona Station, Hume Hwy	No	No	Yes	No	No	No
Yagoona	219915	Yagoona Station, Hume Hwy	No	Yes	No	No	No	No


Appendix C – Temporary Transport Plan Bus Routes




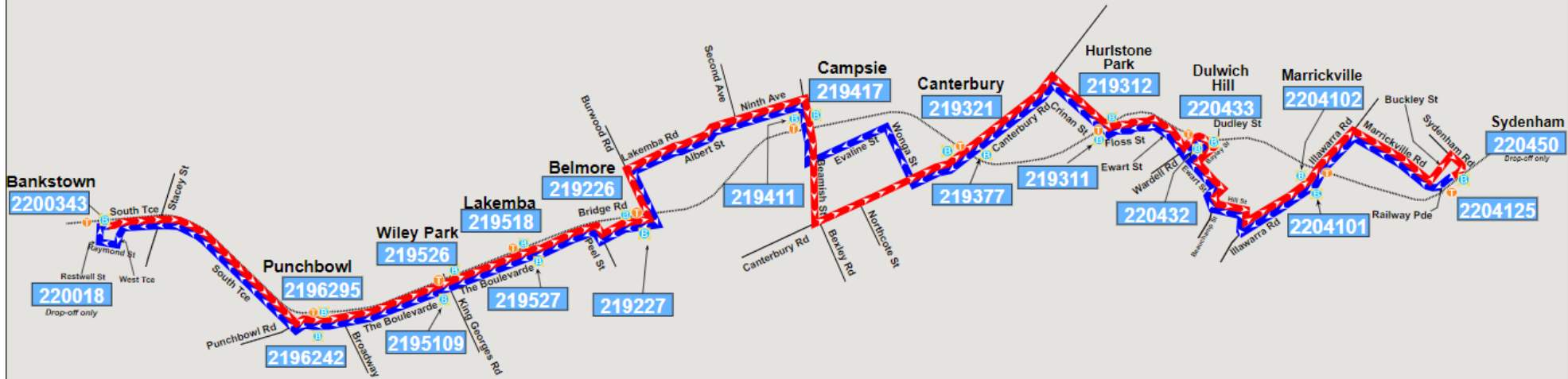


Transport for NSW



 **ST Replacement Bus Service**

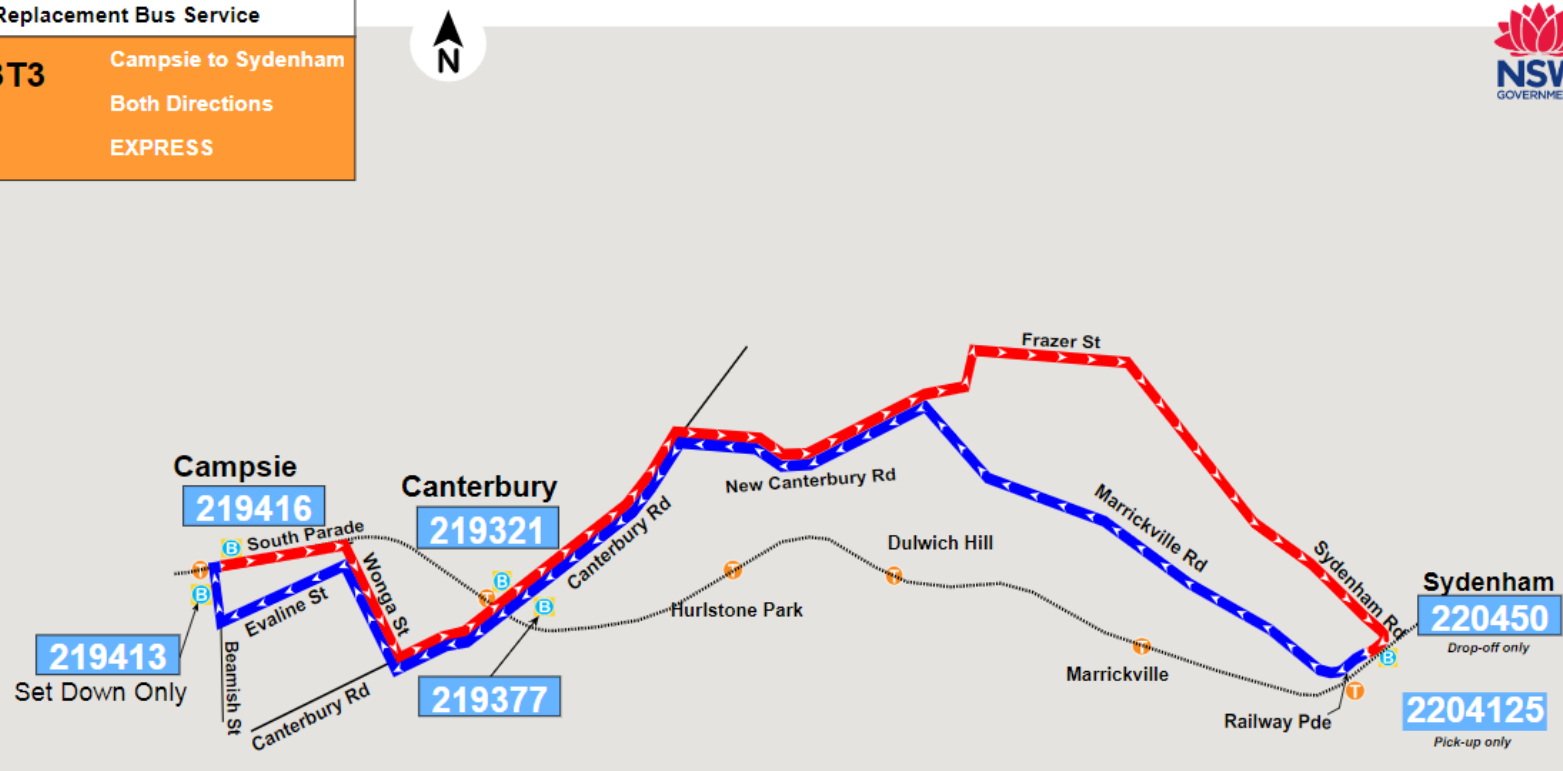
 **10T3** Bankstown to Sydenham
Both Directions
ALL STATIONS




LEGEND

-  Bus stop
-  Bus stop #
-  Route outbound
-  Route citybound
-  Route turn around

	ST Replacement Bus Service
	13T3
	Campsie to Sydenham
	Both Directions
	EXPRESS



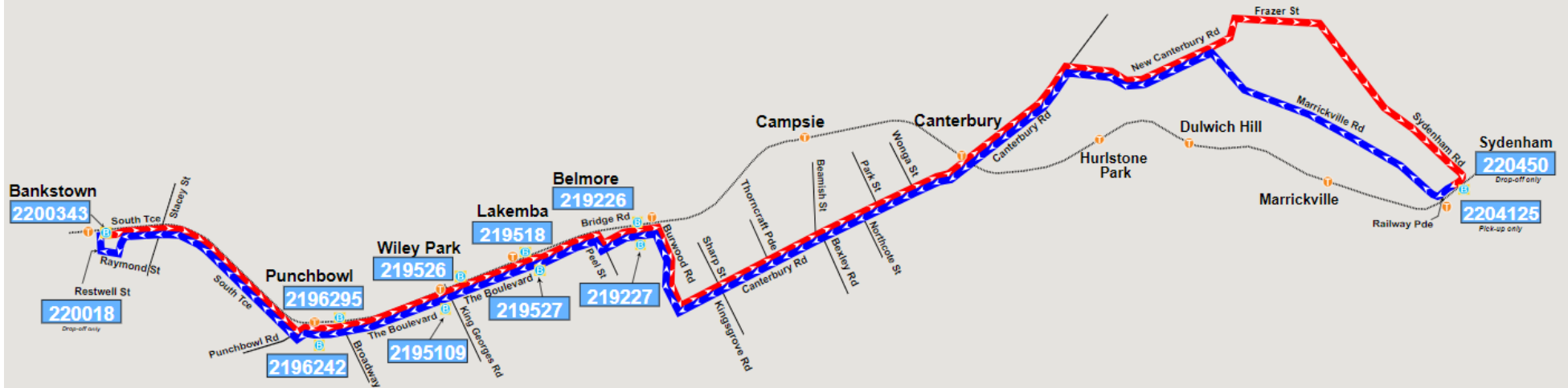
LEGEND	
	Bus stop
	Bus stop #
	Route outbound
	Route citybound
	Route turn around

 **ST Replacement Bus Service**






B 33T3 Bankstown to Sydenham
Both Directions
LIMITED STOPS



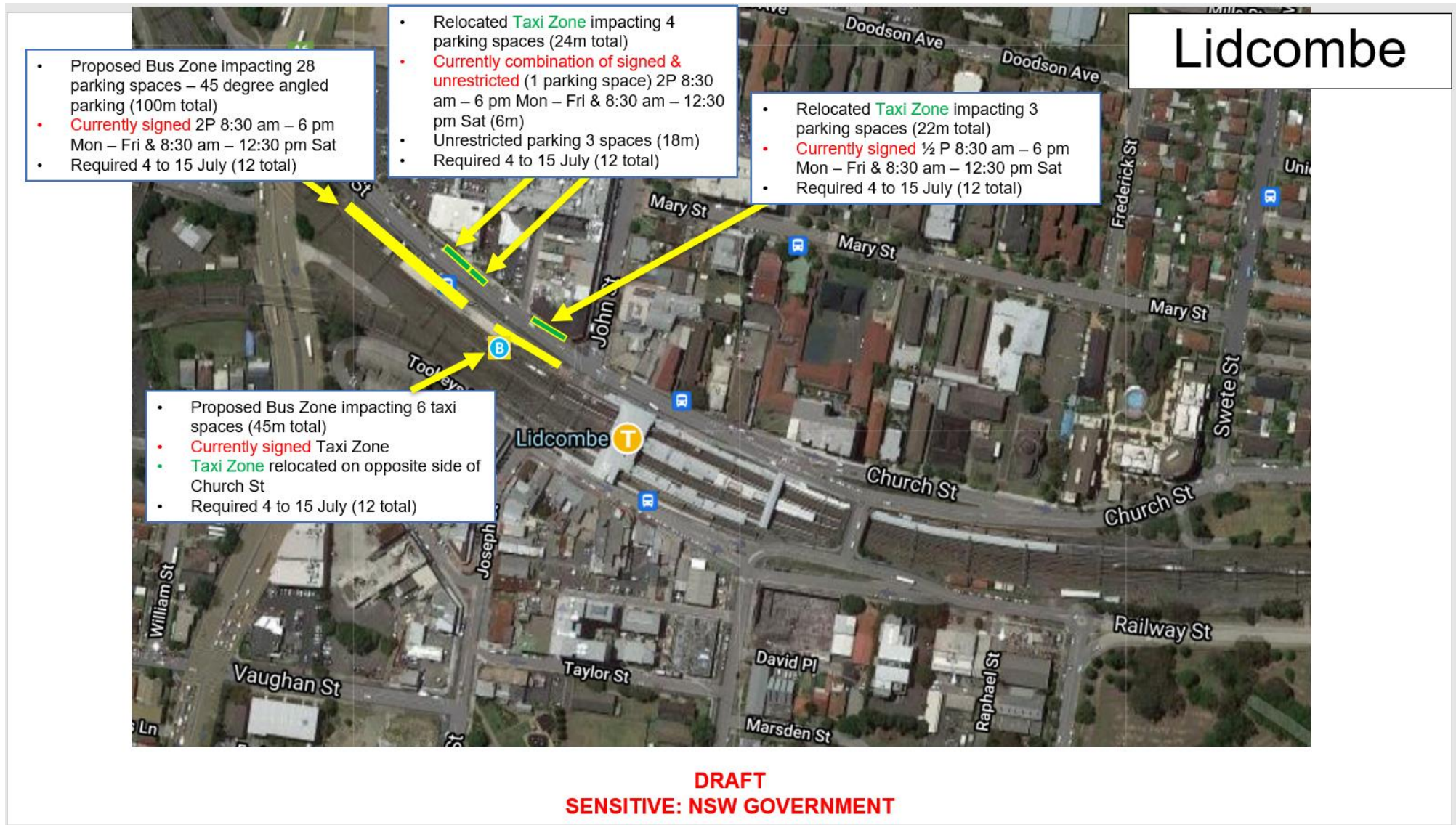
Transport
for NSW



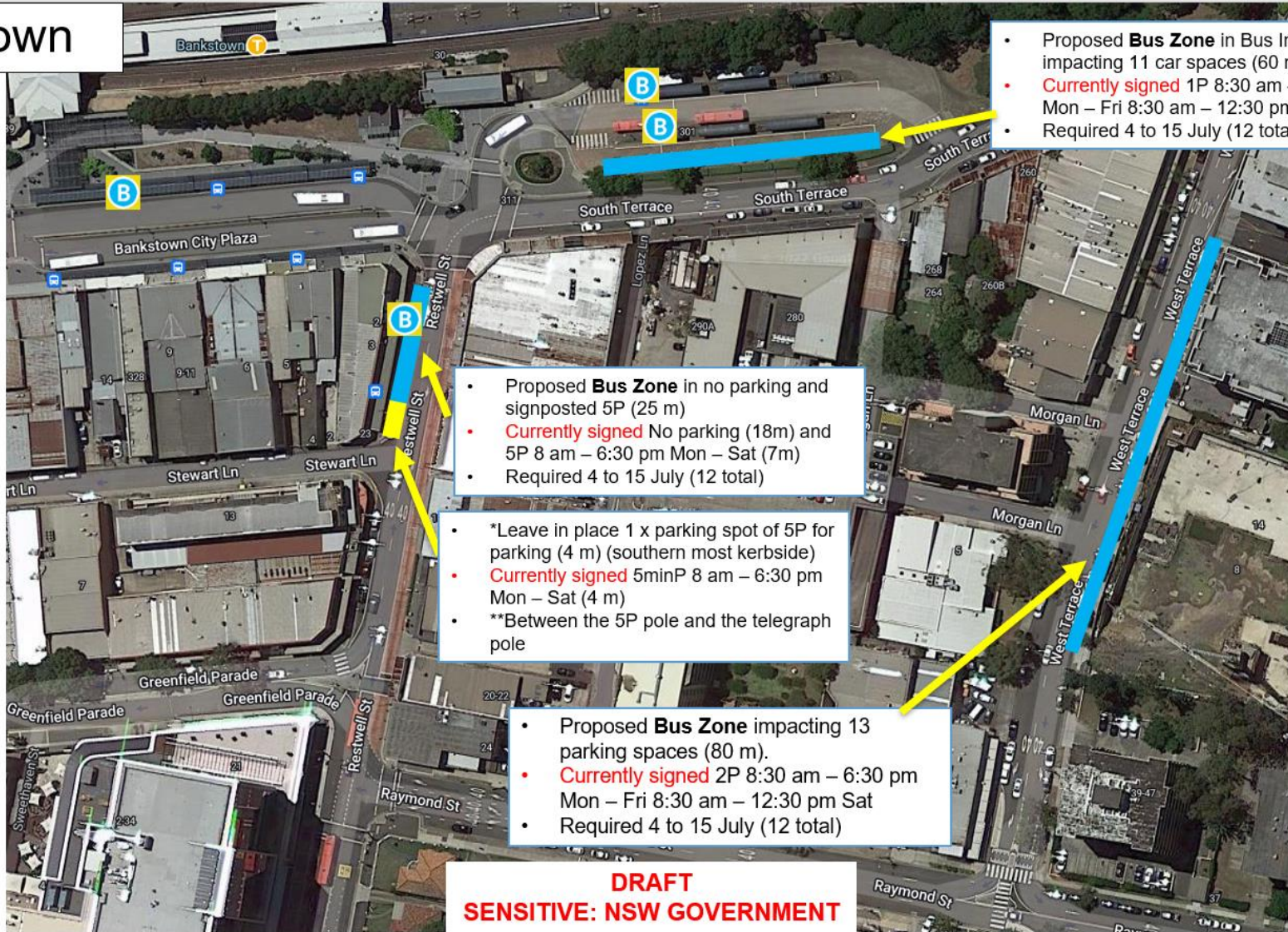
LEGEND

-  Bus stop
-  Bus stop #
-  Route outbound
-  Route citybound
-  Route turn around

Appendix D – Bus Stop & Layover locations including Temporary Parking Changes



Bankstown



- Proposed **Bus Zone** in Bus Interchange impacting 11 car spaces (60 m)
- **Currently signed** 1P 8:30 am – 6:30 pm Mon – Fri 8:30 am – 12:30 pm Sat
- Required 4 to 15 July (12 total)

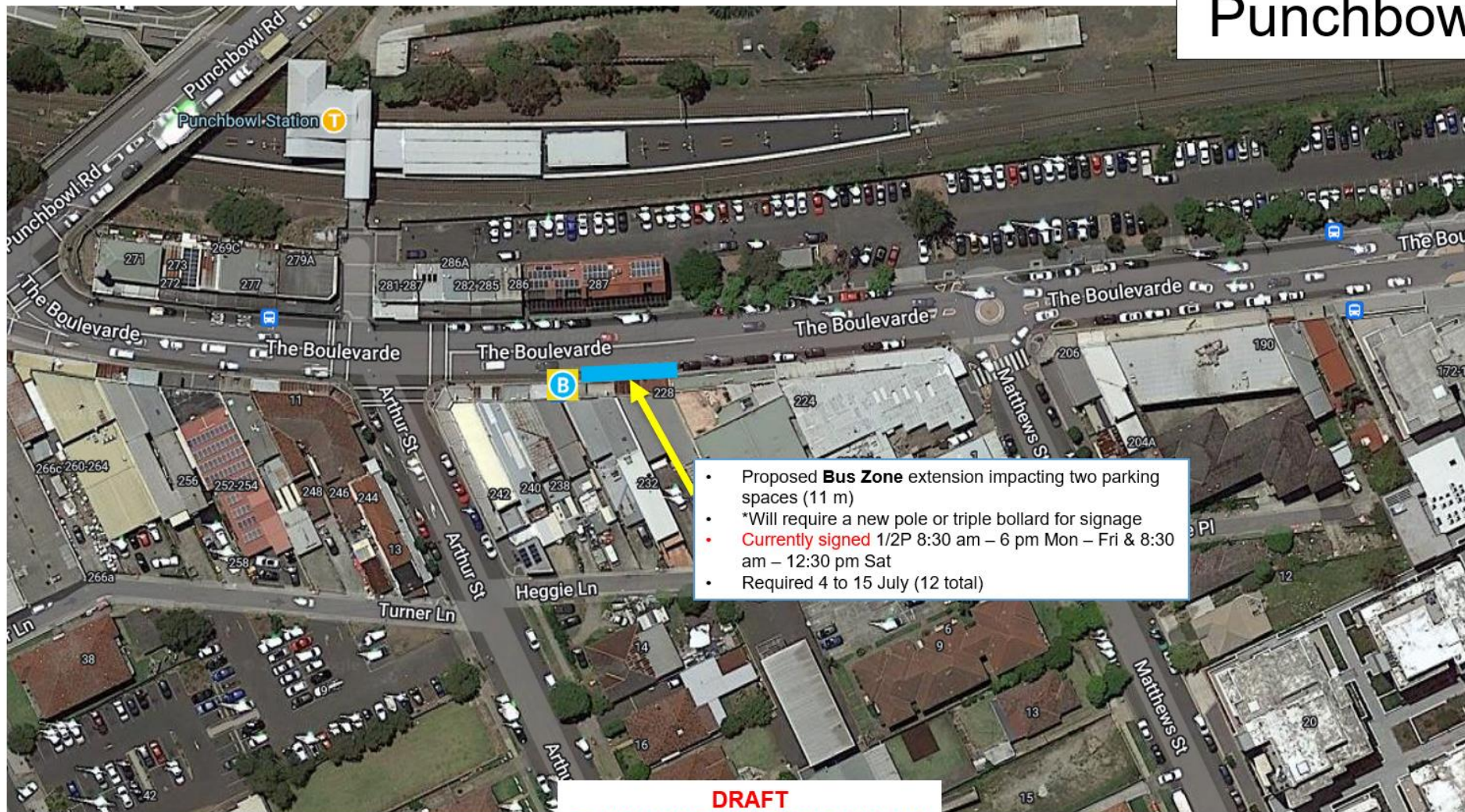
- Proposed **Bus Zone** in no parking and signposted 5P (25 m)
- **Currently signed** No parking (18m) and 5P 8 am – 6:30 pm Mon – Sat (7m)
- Required 4 to 15 July (12 total)

- *Leave in place 1 x parking spot of 5P for parking (4 m) (southern most kerbside)
- **Currently signed** 5minP 8 am – 6:30 pm Mon – Sat (4 m)
- **Between the 5P pole and the telegraph pole

- Proposed **Bus Zone** impacting 13 parking spaces (80 m).
- **Currently signed** 2P 8:30 am – 6:30 pm Mon – Fri 8:30 am – 12:30 pm Sat
- Required 4 to 15 July (12 total)

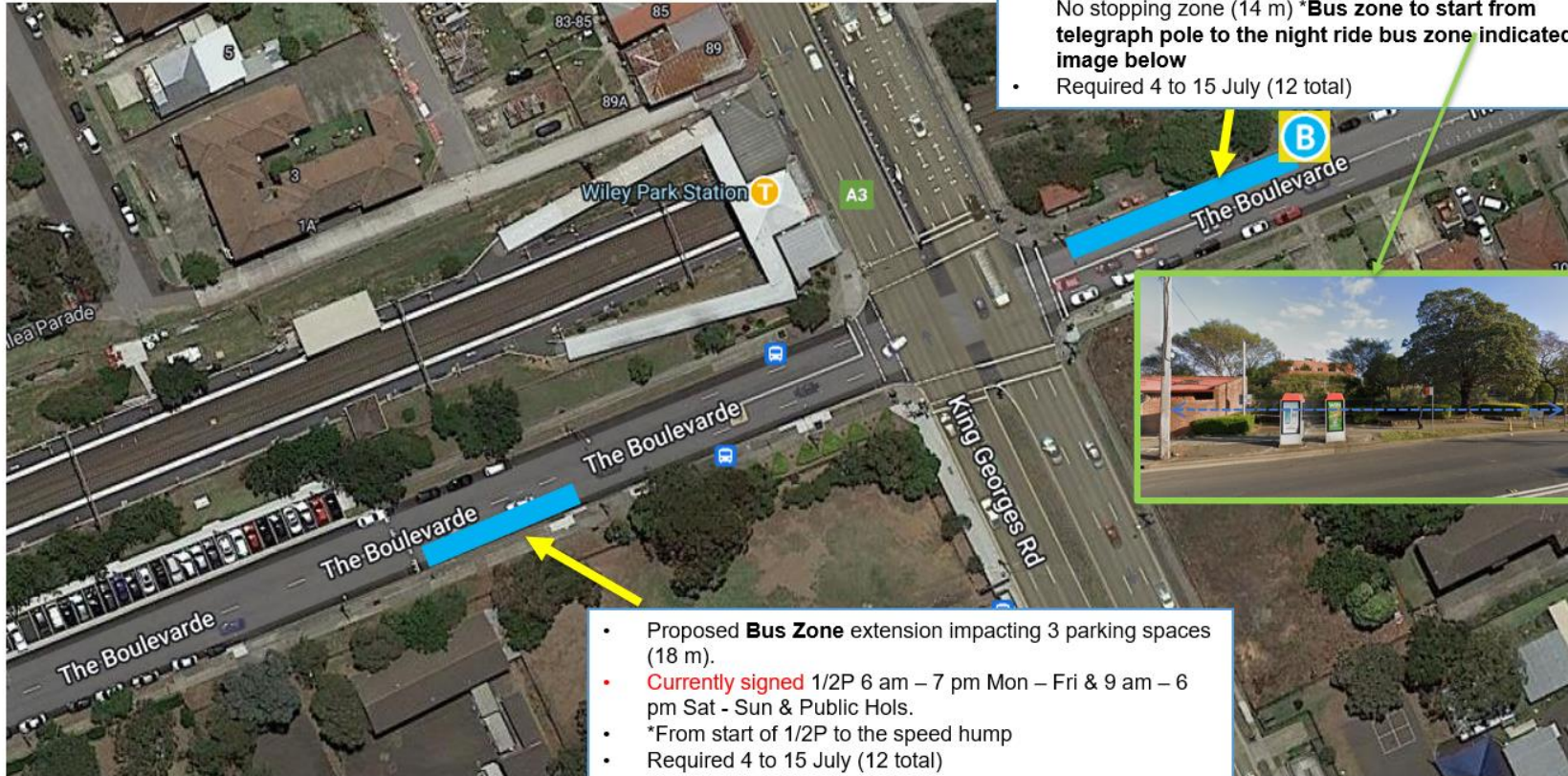
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SENSITIVE: NSW GOVERNMENT

Punchbowl



DRAFT
SENSITIVE: NSW GOVERNMENT

Wiley Park

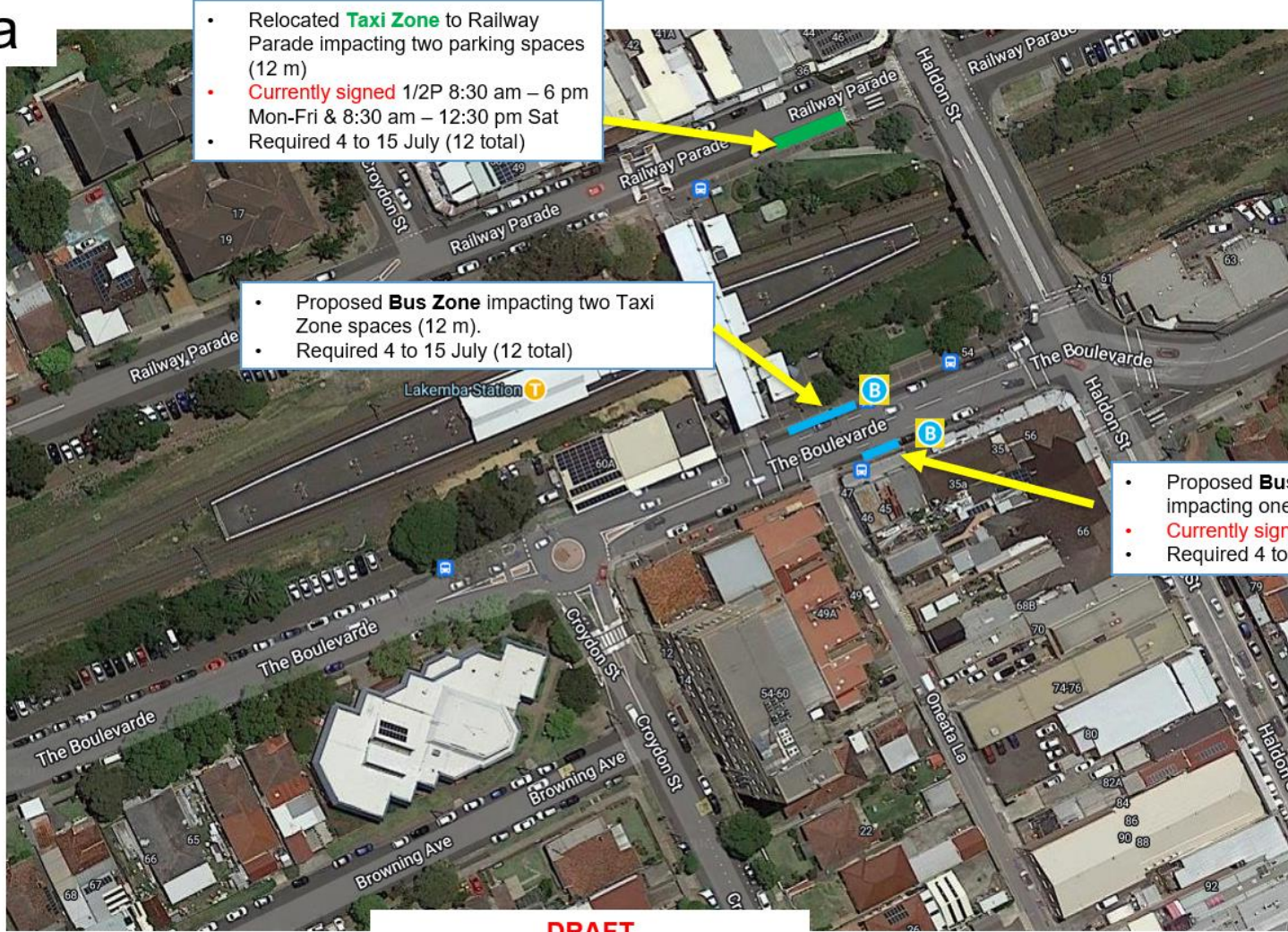


- Proposed **Bus Zone** impacting three parking spaces and no stopping zone (32 m total).
- **Currently signed** 1/2P 6 am – 7 pm Mon – Fri & 9 am – 6 pm Sat - Sun & Public Hols (18 m)
No stopping zone (14 m) ***Bus zone to start from telegraph pole to the night ride bus zone indicated in image below**
- Required 4 to 15 July (12 total)

- Proposed **Bus Zone** extension impacting 3 parking spaces (18 m).
- **Currently signed** 1/2P 6 am – 7 pm Mon – Fri & 9 am – 6 pm Sat - Sun & Public Hols.
- *From start of 1/2P to the speed hump
- Required 4 to 15 July (12 total)

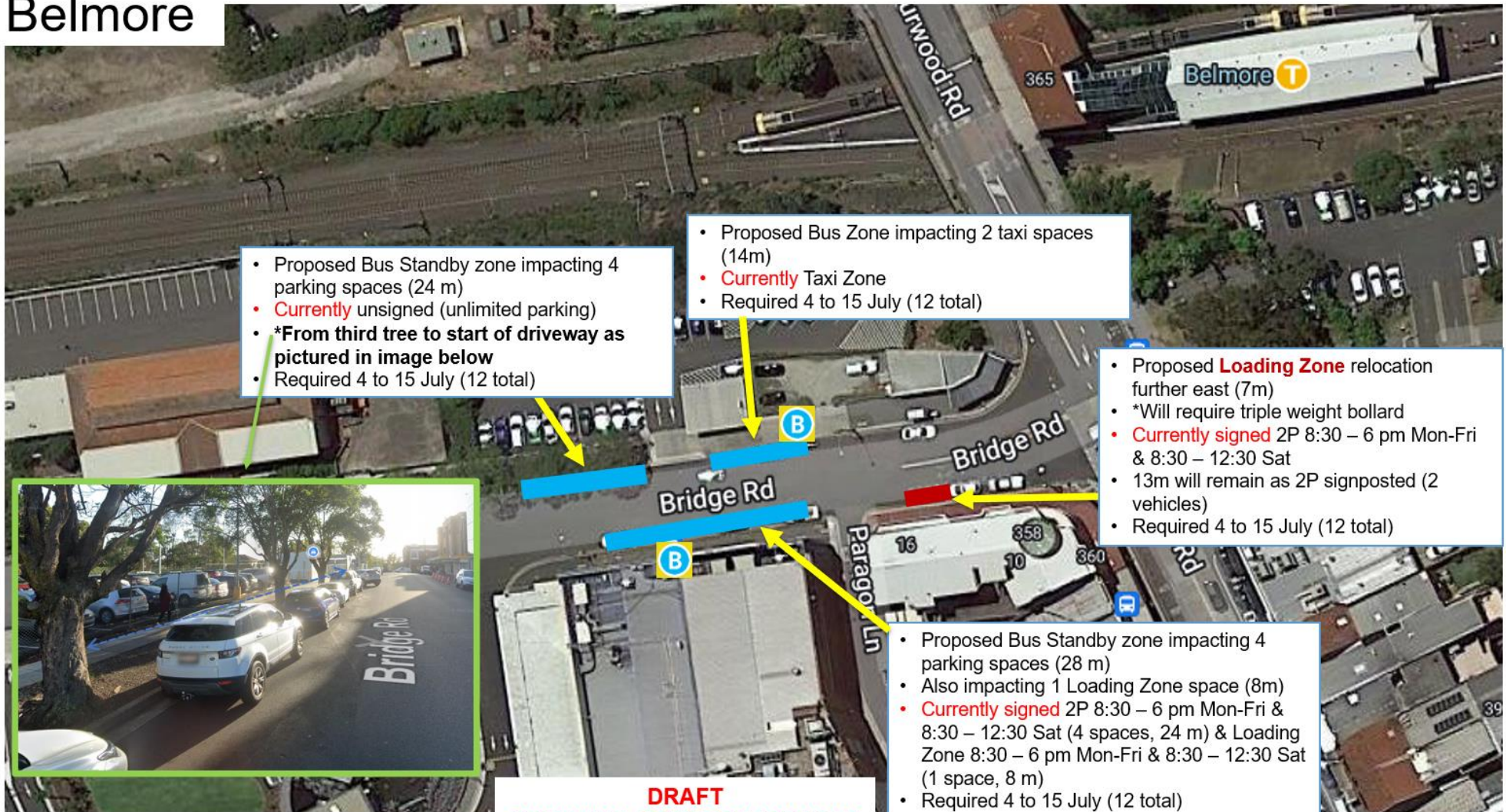
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SENSITIVE: NSW GOVERNMENT

Lakemba



DRAFT
SENSITIVE: NSW GOVERNMENT

Belmore



- Proposed Bus Standby zone impacting 4 parking spaces (24 m)
- **Currently** unsigned (unlimited parking)
- ***From third tree to start of driveway as pictured in image below**
- Required 4 to 15 July (12 total)

- Proposed Bus Zone impacting 2 taxi spaces (14m)
- **Currently** Taxi Zone
- Required 4 to 15 July (12 total)

- Proposed **Loading Zone** relocation further east (7m)
- ***Will require triple weight bollard**
- **Currently signed** 2P 8:30 – 6 pm Mon-Fri & 8:30 – 12:30 Sat
- 13m will remain as 2P signposted (2 vehicles)
- Required 4 to 15 July (12 total)



- Proposed Bus Standby zone impacting 4 parking spaces (28 m)
- Also impacting 1 Loading Zone space (8m)
- **Currently signed** 2P 8:30 – 6 pm Mon-Fri & 8:30 – 12:30 Sat (4 spaces, 24 m) & Loading Zone 8:30 – 6 pm Mon-Fri & 8:30 – 12:30 Sat (1 space, 8 m)
- Required 4 to 15 July (12 total)

DRAFT
SENSITIVE: NSW GOVERNMENT

Campsie



- Proposed Bus Zone impacting fourteen parking spaces (85 m).
- **Currently signed** unrestricted parking
- Required 2 to 15 July (14 total)

- Proposed Bus Standby Zone impacting four parking spaces (24 m).
- **Currently signed** unrestricted parking
- Required 2 to 15 July (14 total)

- Proposed Bus Zone impacting three parking spaces (21 m).
- **Currently** unrestricted parking (3 spaces)
- Required 2 to 15 July (14 total)

- Proposed Bus Zone impacting eight parking spaces (58 m).
- **Currently signed** No Parking 8:30 – 9:30 am & 2:30 – 3:30 PM School Days (11 m); unrestricted parking (47 m)
- Required 2 to 15 July (14 total)

- Proposed Bus Zone impacting six parking spaces (40 m).
- **Currently signed** No Parking 8:30 – 9:30 am & 2:30 – 3:30 PM School Days
- Required 2 to 15 July (14 total)

- Extend existing Bus Zone impacting three parking spaces (17 m).
- **Currently signed** 1/2P 8:30am - 9.30pm Mon - Sun AND Loading Zone 6:30am - 8:30am Mon – Sun
- Required 2 to 15 July (14 total)

DRAFT
SENSITIVE: NSW GOVERNMENT

Canterbury



- Proposed Bus Zone impacting nine parking spaces (56 m).
- **Currently signed** Clearway 6 am – 7 pm Mon-Fri & 9 am – 6 pm Sat-Sun & Public Holidays
- Required 4 to 15 July (12 total)

Hurlstone Park



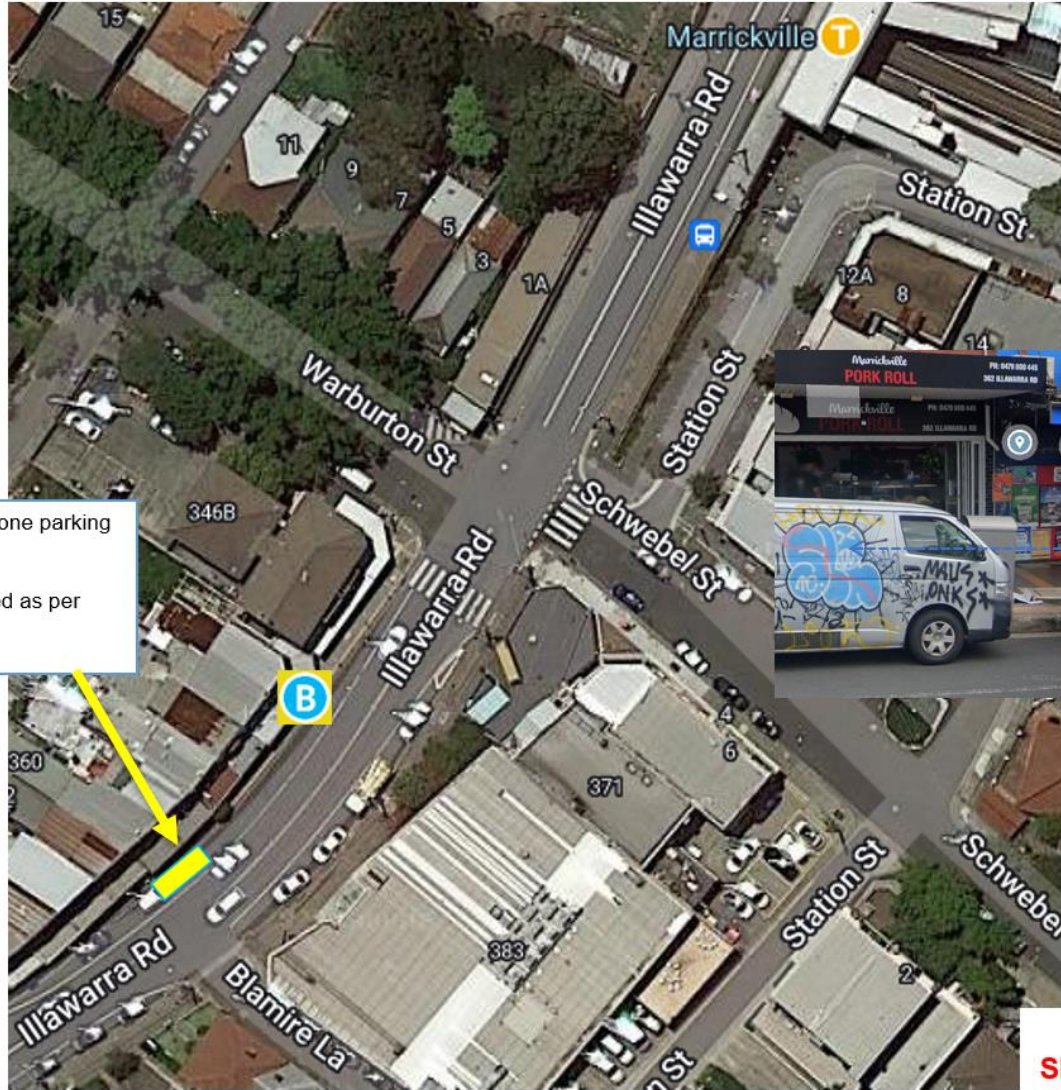
DRAFT
SENSITIVE: NSW GOVERNMENT

Dulwich Hill



Marrickville

- Proposed Bus Zone extension impacting one parking space (7 m).
- **Currently signed** 1P 8:30 am – 6 pm
- Triple based weight bollard will be required as per image
- Required 4 to 15 July (12 total)



**DRAFT
SENSITIVE: NSW GOVERNMENT**

Sydenham

- Proposed Bus Zone impacting 46 parking spaces (122 m).
- **Currently signed** All-day parking
- Required 4 to 15 July (12 total)

- Proposed Bus Zone impacting eleven parking spaces (32 m).
- **Currently signed** 4P 8:30 am – 6 pm Mon - Fri
- Required 4 to 15 July (12 total)

- Proposed Bus Zone impacting nine parking spaces (58 m).
- **Currently signed** unrestricted parking
- Required 4 to 15 July (12 total)

- Proposed Bus Zone Extension impacting fourteen parking spaces (50 m).
- **Currently signed** unrestricted parking
- Rear to kerb parking
- Required 4 to 15 July (12 total)

- Proposed Bus Zone impacting three parking spaces (18 m).
- **Currently signed** 2P 8 am – 10 pm Mon - Fri
- Required 4 to 15 July (12 total)

- Proposed Bus Zone Extension impacting two parking spaces (12 m).
- **Currently signed** 1P 9 am – 3:30 pm Mon – Fri and No Parking 6 am – 9 am & 3:30 pm – 6:30 pm
- *Picture above of proposed bus zone extension*
- Required 4 to 15 July (12 total)

DRAFT
SENSITIVE: NSW GOVERNMENT



Appendix E – Stakeholder Consultation List

Engagement and Communications schedule – Sydenham to Bankstown Temporary Transport Plan October 2022 (TTP)

Timing	Stakeholder group	Approach	Tool
6 weeks out	Minister’s Office (MO)	<ul style="list-style-type: none"> Brief MO on TTP (train plan, bus plan and high level customer communications strategy) 	<ul style="list-style-type: none"> Email
6 weeks out	Local Councils <ul style="list-style-type: none"> Canterbury Bankstown Inner West Cumberland 	<ul style="list-style-type: none"> Initial briefing on TTP and proposed parking changes 	<ul style="list-style-type: none"> Slide pack
	Local Councils <ul style="list-style-type: none"> City of Sydney 	<ul style="list-style-type: none"> Initial briefing on TTP and proposed parking changes 	<ul style="list-style-type: none"> Email
6 weeks out	Residents and businesses	<ul style="list-style-type: none"> Media release inviting community to have their say on parking changes 	<ul style="list-style-type: none"> Media release
6 weeks out	Residents and local business within the LGAs of: <ul style="list-style-type: none"> Canterbury Bankstown Inner West Cumberland 	<ul style="list-style-type: none"> Raise awareness and collate feedback on the proposed kerbside changes 	<ul style="list-style-type: none"> Letter box drop notification Online website Collate feedback, and prepare Traffic Committee submissions
3 weeks out	Sydney Airport including Airlines	<ul style="list-style-type: none"> Provide stakeholders with information about the TTP program 	<ul style="list-style-type: none"> Briefing – slide pack

TRANSPORT

			<ul style="list-style-type: none"> • Provide copies of the brochure at later date • Provide content for distribution to travellers via established airport and airline channels at later date
6 weeks out	Minister’s Office (MO)	<ul style="list-style-type: none"> • Email MO proposed engagement & marketing plan 	<ul style="list-style-type: none"> • Powerpoint Pack
6 weeks out	Accessible Transport Advisory Committee (ATAC)	<ul style="list-style-type: none"> • Provide stakeholders with Accessible information regarding TTP • Share briefing pack with ATAC forum members 	<ul style="list-style-type: none"> • Briefing pack via Sean Webber • Provide copies of the brochure (accessible copies)
4 weeks out	Emergency Services	<ul style="list-style-type: none"> • Provide stakeholders with Accessible information regarding TTP • 	<ul style="list-style-type: none"> • Powerpoint presentation
4 weeks out	Point 2 Point industry (Inc. NSW Taxi Council, Uber, Ola etc.)	<ul style="list-style-type: none"> • Raise awareness of the proposed temporary kerbside changes impacting taxi ranks at Lakemba and Belmore Stations • Present at P2P forum 	<ul style="list-style-type: none"> • Present and P2P forum • Forward copies of the brochure • Email contacts with the taxi changes • Signage for taxi zone impacts
4 weeks out	Residents and local businesses near Central Station	<ul style="list-style-type: none"> • Provide businesses & residents an overview of parking changes (3 days only) 	<ul style="list-style-type: none"> • Letterbox drop
4 weeks out	Customers and community	<ul style="list-style-type: none"> • Media release to raise awareness • Share proposed bus routes 	<ul style="list-style-type: none"> • Media release • Website update (MySydney) • Customer brochure

TRANSPORT

<p>4 weeks out</p>	<p>Local MPs</p> <ul style="list-style-type: none"> • MP for Summer Hill • MP for Canterbury • MP for Lakemba • MP for Bankstown 	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program • Offer a briefing – Minister’s Office to confirm • Overview of the engagement undertaken with local businesses for kerbside changes 	<ul style="list-style-type: none"> • Slide pack (if briefing required) • Email • Customer brochure
<p>4 weeks out</p>	<p>Local Councils</p> <ul style="list-style-type: none"> • Mayor for Bankstown • Mayor for Inner West 	<ul style="list-style-type: none"> • Provide stakeholders with further information about the TTP program • Offer a briefing - Minister’s Office to confirm (for Mayor/councillor briefings) • Overview of the engagement undertaken with local businesses for kerbside changes 	<ul style="list-style-type: none"> • Slide pack (if briefing required) • Email • Customer brochure
<p>4 weeks out</p>	<p>Business Associations</p> <ul style="list-style-type: none"> • Canterbury Bankstown Chamber of Commerce • Belmore Shopkeepers Association • Australia Arab Business Council • Marrickville Business Association • Marrickville Chamber of Commerce • Dulwich Hill Urban Centre Committee 	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program • Overview of the engagement undertaken with local businesses for kerbside changes 	<ul style="list-style-type: none"> • Send emails and offer briefings • Briefing – slide pack • Provide copies of the brochure (translated) • Provide content for distribution to members
<p>4 weeks out</p>	<p>Health</p> <ul style="list-style-type: none"> • NSW Health • Bankstown Hospital • Canterbury Hospital 	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program 	<ul style="list-style-type: none"> • Send emails and offer briefings • Briefing – slide pack • Provide copies of translated brochures

	<ul style="list-style-type: none"> • Medical Centres 		<ul style="list-style-type: none"> • Provide content for distribution to members
4 weeks out	<p>Education</p> <p>(Western Sydney University, Sydney University, University of NSW, Macquarie University, Wollongong University, and TAFE Bankstown, Padstow, Campsie, Petersham, Ultimo)</p>	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program to ensure students and staff are informed of the changes. 	<ul style="list-style-type: none"> • Send email with a copy of the customer brochure • Prepare content for Uni to distribute
4 weeks out	<p>Event organisers</p>	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program • Share information with event organisers to ensure getting to and from events is communicated to event goers 	<ul style="list-style-type: none"> • Send emails • Provide copies of the brochure • Coordinate with TMC to distribute, and advise stakeholders using existing communications channels
4 weeks out	<p>Culturally and Linguistic Diverse Communities</p> <ul style="list-style-type: none"> • Ethnic Communities' Council of NSW • Bankstown Multicultural Youth Services • Workers with Youth Network • The Multicultural Network • Islamic Radio Network 	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program 	<ul style="list-style-type: none"> • Send emails • Provide copies of the brochure + translated brochures • Provide content for distribution to members
4 weeks out	<p>Shopping Centres</p>	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program 	<ul style="list-style-type: none"> • Send emails • Provide copies of the brochure

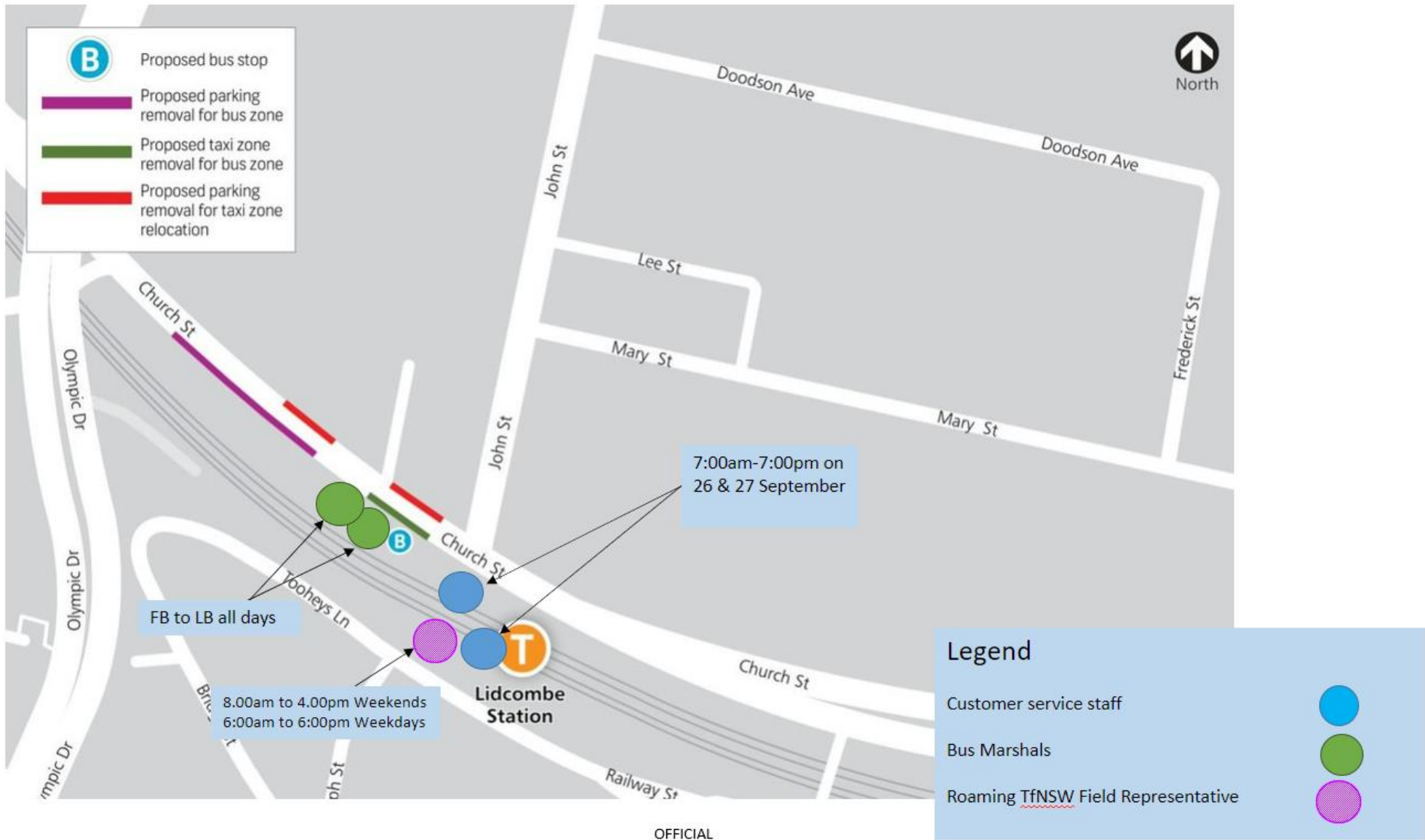
TRANSPORT

	<ul style="list-style-type: none"> • Bankstown Centro • Roselands Centro 		<ul style="list-style-type: none"> • Provide content for distribution to staff and customers
4 weeks out	<p>Hotels</p> <ul style="list-style-type: none"> • Travelodge Hotel Bankstown • Gardenvue Hotel • Rydges Bankstown • Cambridge Lodge • Campsie Hotel • Station House Hotel • Oasis on Beamish • Wiley Park Hotel • Lakemba Hotel 	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program 	<ul style="list-style-type: none"> • Send emails • Provide copies of the brochure • Provide content for distribution to staff and customers
4 weeks out	<p>Clubs and sporting facilities</p> <ul style="list-style-type: none"> • Bankstown RSL Club • Bankstown Sports Club • Bankstown - Canterbury Bull Dogs 	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program 	<ul style="list-style-type: none"> • Send emails • Provide copies of the brochure • Provide content for distribution to staff and customers
4 weeks out	<p>Places of Worship (refer to stakeholder list)</p>	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program 	<ul style="list-style-type: none"> • Send emails • Provide copies of the brochure • Provide content for distribution to staff and customers
4 weeks out	<p>Aged care facilities (refer to stakeholder list)</p>	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program 	<ul style="list-style-type: none"> • Send emails • Provide copies of the brochure • Provide content for distribution to staff and customers

TRANSPORT

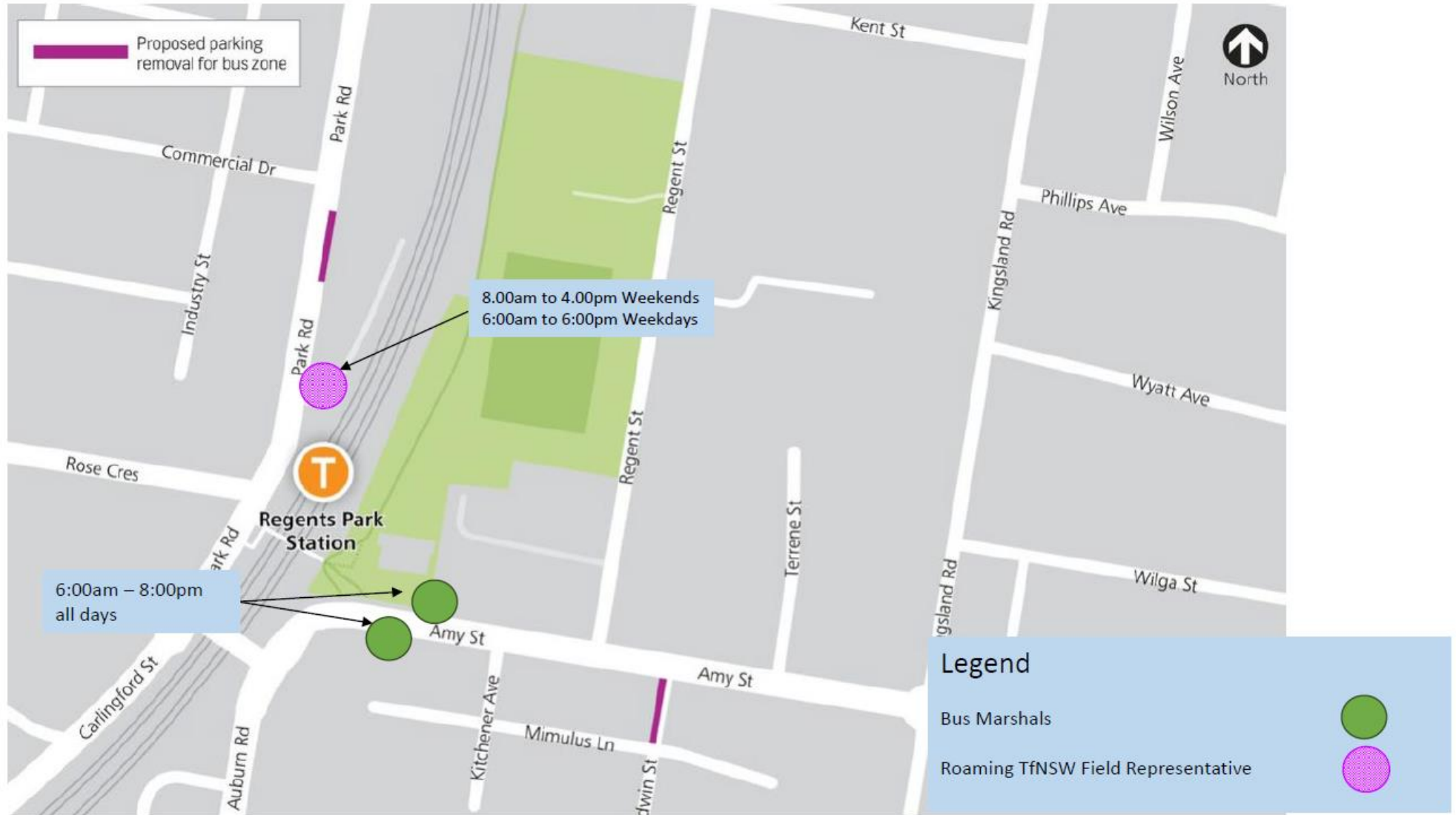
<p>4 weeks out</p>	<p>Community Centres (via council community services)</p> <ul style="list-style-type: none"> • Bankstown Community Services Centre • Bankstown Senior Citizens' Centre 	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program 	<ul style="list-style-type: none"> • Send emails • Provide copies of the brochure • Provide content for distribution to staff and customers
<p>4 weeks out</p>	<p>Corporate audience</p>	<ul style="list-style-type: none"> • Provide stakeholders with information about the TTP program 	<ul style="list-style-type: none"> • Send newsletter (TDM Newsflash) • Provide copies of the brochure • Provide content for distribution to staff and customers
<p>2 weeks out</p>	<p>Customers and local residents</p>	<ul style="list-style-type: none"> • Customer communication marketing campaign is live • Proactive local media commences 	<ul style="list-style-type: none"> • Transport Info news story • Trip Planner live • Social posts • Print ads • Station posters • Announcements • Trackwork notifications • Sydney Metro construction notification (TBC date) • Street teams at stations to raise awareness prior to the shutdown • Media release • Hard copy brochures

Appendix F – Customer Information Staffing Locations



Berala Station



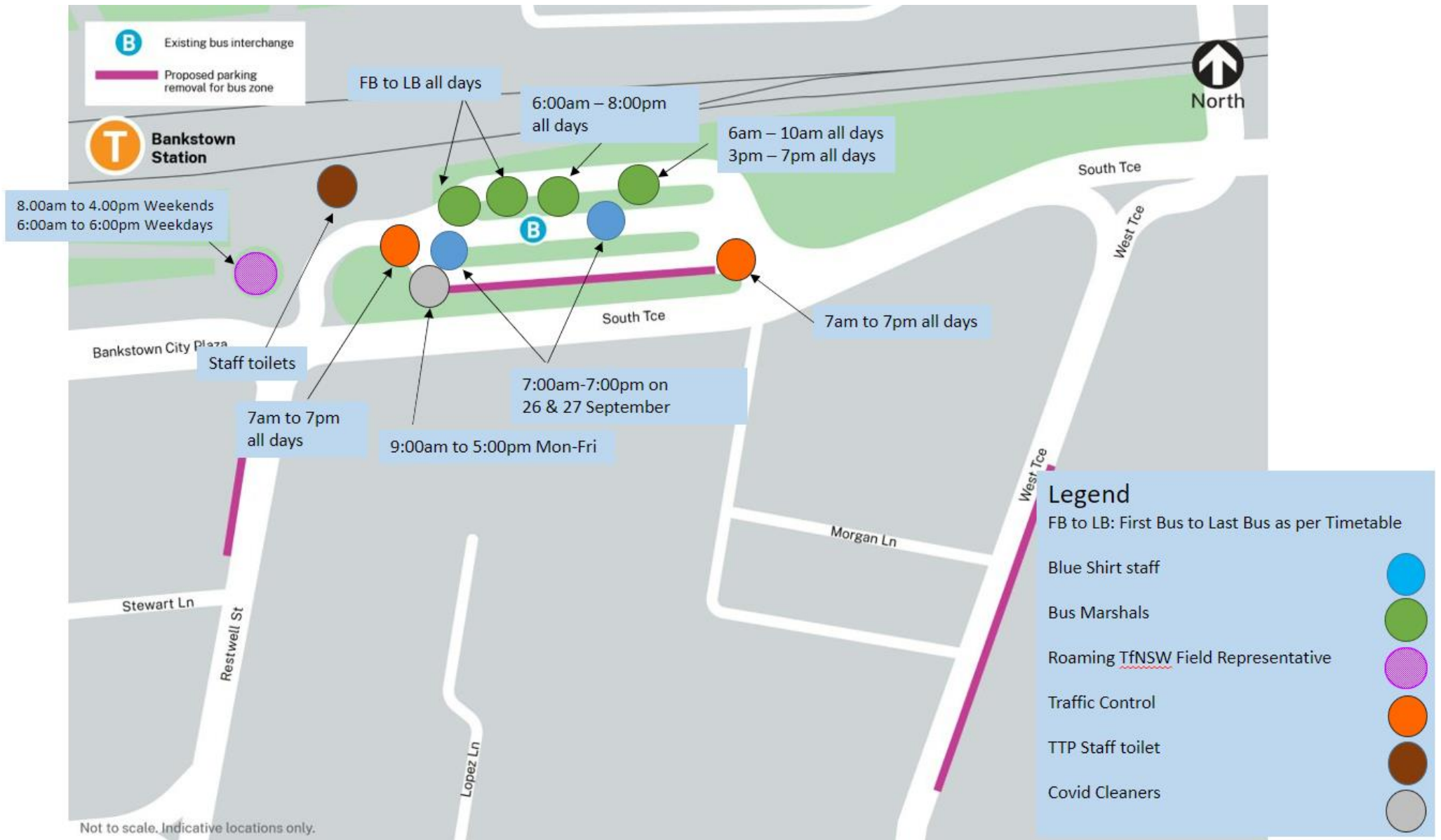


Birrong Station



Yagoona Station





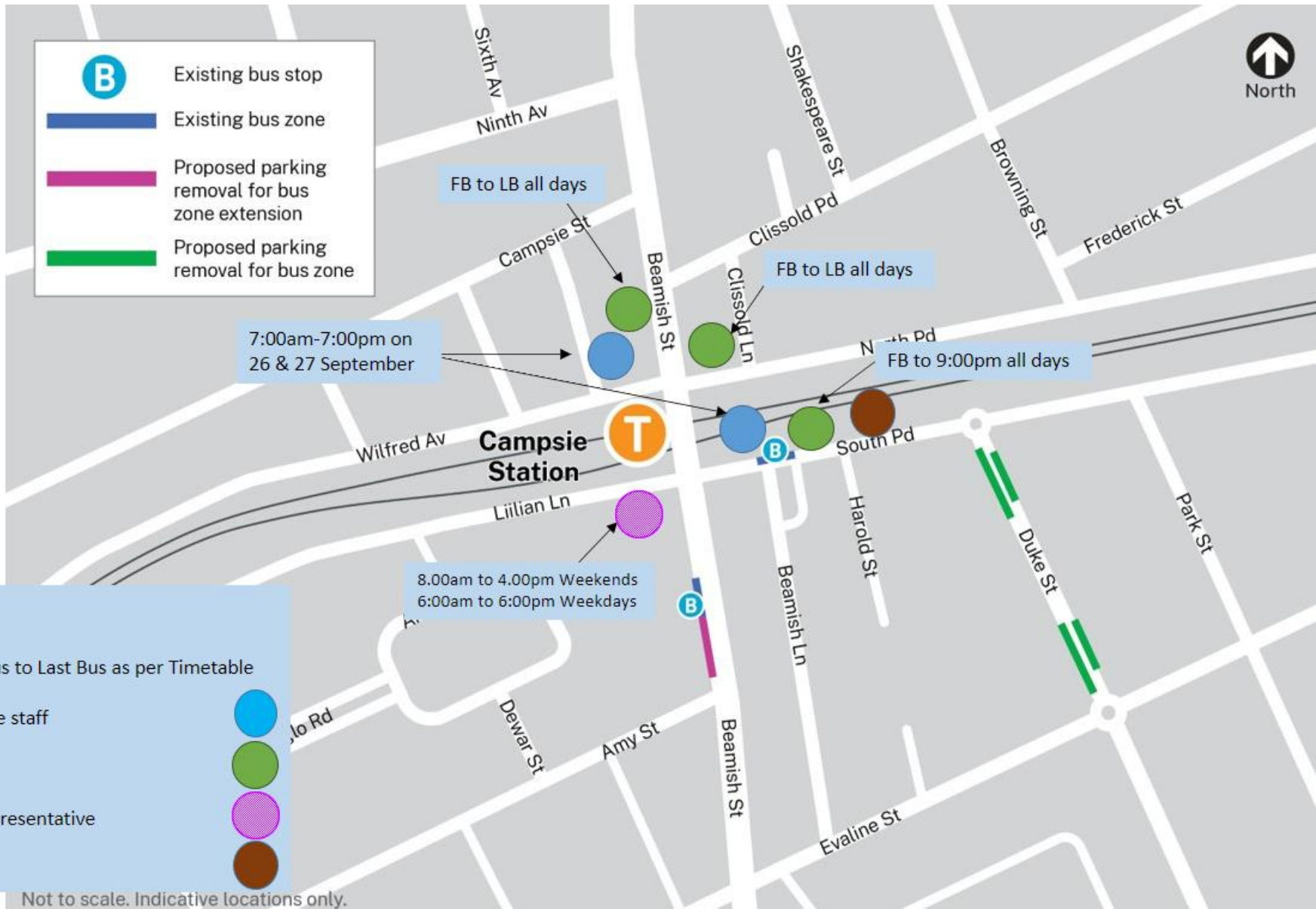






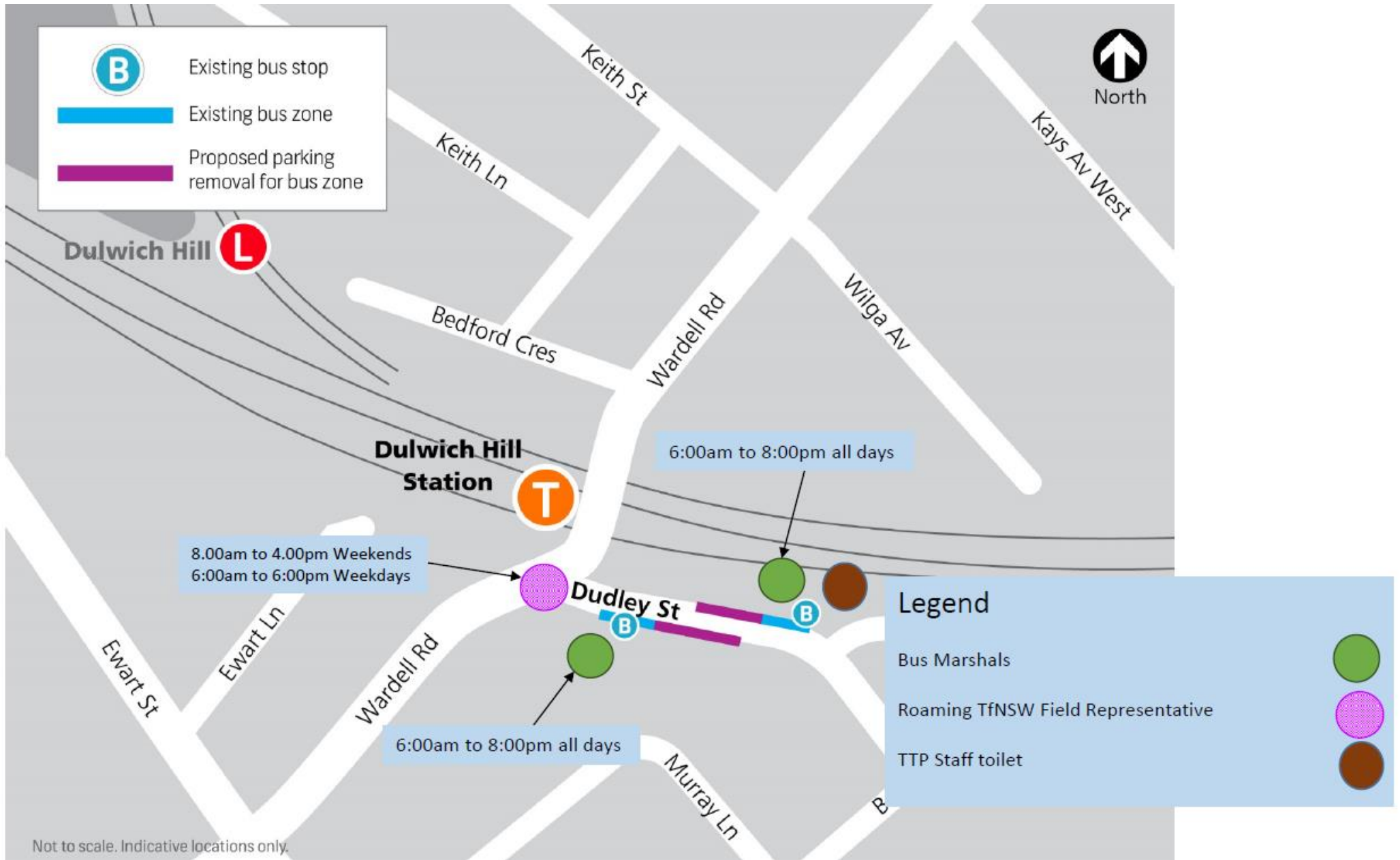
Not to scale. Indicative locations only.

















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Appendix D – Community Consultation Reports

Community Consultation Report

Sydenham to Bankstown Temporary Transport Plan –
Proposed temporary kerbside changes

Bankstown, Punchbowl, Wiley Park, Lakemba,
Belmore, Campsie, Canterbury, Hurlstone Park
stations –

Canterbury Bankstown Council

22 August 2022

transport.nsw.gov.au



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Introduction

Rail upgrade work is proposed to take place between Sydenham and Bankstown stations from Saturday 24 September 2022 to Sunday 9 October 2022 and from Monday 26 December 2022 to Thursday 12 January 2023. This work has been planned to take place in the September and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during this time. To accommodate these additional buses and ensure minimal disruption to traffic, some temporary changes to parking are proposed around stations between Sydenham and Bankstown as well as Lidcombe.

Purpose of this report

This report provides an overview of community consultation undertaken for temporary kerbside changes around Bankstown, Punchbowl, Wiley Park, Lakemba, Belmore, Campsie, Canterbury and Hurlstone Park stations which are proposed to support the Sydenham to Bankstown Temporary Transport Plan.

A summary of the feedback received is provided along with any changes that have been made to the Plan in response to feedback,

Proposed temporary kerbside changes

Representatives from the Temporary Transport Plan project team held a teleconference with officers from Canterbury Bankstown Council on 29 July 2022, to provide a briefing on the Sydenham to Bankstown Temporary Transport Plans. This included information on the operation of buses to support customers during the closure of the T3 line between Sydenham to Bankstown in the September and December/January school holidays.

Temporary kerbside changes near Bankstown, Punchbowl, Wiley Park, Lakemba, Belmore, Campsie, Canterbury and Hurlstone Park stations were proposed to support the bus operation and initial feedback was sought.

The following kerbside changes were proposed to local residents and businesses:

Bankstown

- Bus Zone extension within the Bankstown Station bus interchange utilising 11 parking spaces (60 metres) currently signed 1-hour between 8.30am and 6.30pm, Monday to Fridays and between 8.30am and 12.30pm on Saturday.
- Bus Zone on West Terrace, eastern side, utilising 13 parking spaces (80 metres) currently signed 2-hour parking between 8.30am and 6.30pm, Monday to Fridays and between 8.30am and 12.30pm on Saturdays.
- Bus Zone on Restwell Street, western side, utilising 25 metres of total space, currently signed no parking zone (18 metres) and 5 minute parking 8.00am to 6.30pm Monday to Friday (7 metres). One space for 5 minute parking will remain in place at the southern end near Stewart Lane.

Punchbowl

- The Boulevard, between Matthews Street and Arthur Street, southern side, utilising two parking spaces (11 metres) currently signed ½ (half hour) parking between 8.30am and 6pm, Monday to Friday and between 8.30am and 12.30pm on Saturdays.

Wiley Park

- Create a bus zone on The Boulevarde, northern side, utilising three parking spaces (32 metres) currently signed ½P (half hour parking) between 6am and 7pm, Monday to Friday, and between 9am and 6pm Saturday, Sunday and Public Holidays.
- Extend the existing bus zone on The Boulevarde, southern side, utilising three parking spaces (18 metres) currently signed ½P (half hour parking) between 6am and 7pm, Monday to Friday, and between 9am and 6pm Saturday, Sunday and Public Holidays.

Lakemba

- Extend the bus zone on the southern side of The Boulevarde, utilising one 5-minute parking space (7 metres).
- Create a bus zone of the northern side of The Boulevarde, utilising two taxi zone spaces (12 metres). Taxi zone will be relocated to Railway Parade;
- Relocate the taxi zone from The Boulevarde to the southern side of Railway Parade, utilising two parking spaces currently signed ½ (half hour) parking between 8.30am and 6pm Monday to Friday and 8.30am to 12.30pm Saturday.

Belmore

- Create a bus standby zone on the northern side of Bridge Road utilising four parking spaces (20 metres) of currently signed unrestricted parking, opposite the leagues club.
- Create a new bus zone on the northern side of Bridge Road by removing two taxi spaces (14 metres).
- Create a new bus zone on the southern side of Bridge Road utilising:
 - Four parking spaces (24 metres) currently signed 2-hour parking between 8.30am and 6pm, Monday to Friday, and 8.30am and 12.30pm, Saturday.
 - One loading zone space (6 metres) between 8.30am and 6pm, Monday to Friday, and between 8.30am and 12.30pm, Saturday.
- Relocate one loading zone space further east on the southern side of Bridge Road between Paragon Lane and Burwood Road, utilising one parking space (7 metres) of 2-hour parking between 8.30am and 6pm, Monday to Friday, and between 8.30am and 12.30pm, Saturday.

Campsie

Beamish Street

- Extend the existing bus zone on Beamish Street western side (near Amy Street) utilising three parking spaces (17 metres) currently signed:
 - Two spaces of ½ (half hour) parking between 8.30am and 9.30pm, Monday to Sunday.
 - One loading zone space between 6.30am and 8.30pm, Monday to Sunday.

Duke Street

- Create two bus zones on the eastern side of Duke Street – one zone near South Parade utilising four parking spaces (24 metres) of unrestricted parking, the other near Evaline Street, utilising three parking spaces (21 metres) of unrestricted parking

- Create a bus zone on the western side of Duke Street near South Parade utilising eight parking spaces (58 metres) currently signed No Parking between 8.30am and 9.30am and between 2.30pm and 3.30pm on School Days (11 metres) and unrestricted parking (47 metres)
- Create a bus zone on the western side of Duke Street near Evaline Street, utilising six parking spaces (40 metres) currently signed No Parking 8.30am and 9:30am, and 2:30pm and 3:30pm on School Days.

Canterbury

- Create a bus zone on Canterbury Road southern side, near Tincombe Street, utilising nine parking spaces (56 metres) of a clearway zone between 6am and 7pm Monday to Friday and between 9am and 6pm on Saturday, Sunday and Public Holidays.

Hurlstone Park

- Extend the no stopping zone on the northern side of Floss Street utilising three parking spaces (20 metres) of unrestricted parking.

The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these weeks.

Community Consultation

Community consultation on the proposed temporary parking changes in Bankstown, Punchbowl, Wiley Park, Lakemba, Belmore, Campsie, Canterbury and Hurlstone Park was undertaken for a two week period from Monday 8 August to Friday 19 August 2022.

Community notifications were delivered to residents and businesses by a professional distribution company operating under a COVID Safe Plan.

The objective of the consultation was to raise awareness of the proposed temporary parking changes needed to operate additional buses for the planned closure of the T3 Bankstown Line between Sydenham and Bankstown.

Local businesses and residents were asked to provide their feedback to help the project team refine bus operations in and around station precincts.

The consultation program consisted of the following activities:

- Letter box drop of 6173 notifications to businesses and residents within a 200 metre radius of Bankstown, Punchbowl, Wiley Park, Lakemba, Belmore, Campsie, Canterbury and Hurlstone Park stations
- A 24/7 phone number 1800 131 786 to receive feedback, answer any questions and provide the community with more information
- Project email address TTP@transport.nsw.gov.au to receive feedback, answer any questions and provide the community with more information
- A TfNSW project web page was created to provide more information, digital copies of the notifications and information about how to provide feedback.

Copies of the community consultation materials are available in the Appendices.

Consultation feedback received

Station precinct	Community feedback received	TfNSW response
Bankstown	Nil received	Temporary kerbside changes for the Sep and Dec/Jan school holiday periods are the same as the previous TTP in July 22 with no reported issues.
Punchbowl	Nil received	Temporary kerbside changes for the Sep and Dec/Jan school holiday periods are the same as the previous TTP in July 22 with no reported issues.
Wiley Park	Nil received	Temporary kerbside changes for the Sep and Dec/Jan school holiday periods are the same as the previous TTP in July 22 with no reported issues.
Lakemba	Nil received	Temporary kerbside changes for the Sep and Dec/Jan school holiday periods are the same as the previous TTP in July 22 with no reported issues.
Belmore	Nil received	Temporary kerbside changes for the Sep and Dec/Jan school holiday periods are the same as the previous TTP in July 22 with no reported issues.
Campsie	Nil received	Temporary kerbside changes for the Sep and Dec/Jan school holiday period are the same as the previous TTP in July 22 with no reported issues.
Canterbury	Nil received	Temporary kerbside changes for the Sep and Dec/Jan school holiday periods are the same as the previous TTP in July 22 with no reported issues.
Hurlstone Park	Nil received	Temporary kerbside changes for the Sep and Dec/Jan school holiday periods are the same as the previous TTP in July 22 with no reported issues.

Consultation outcomes

TfNSW has prepared submissions to local councils and their traffic committees for the Sydenham to Bankstown Temporary Transport Plan. As part of these submissions, community consultation has been undertaken with local residents and businesses in proximity to the bus zones around stations on the proposed temporary parking changes.

There were no submissions received from the community on the proposed temporary parking changes during the consultation period of 8 August to Friday 19 August 2022.

This was consistent with the previous TTP consultation period in May 2022. Surveying of businesses at that time, found a high awareness of the Sydenham to Bankstown TTP project and the temporary kerbside changes to facilitate bus operations during the school holiday periods.

Based on no feedback, objections or issues raised by local residents and businesses on the temporary parking changes, no further changes to the temporary parking plans are proposed.

Community Information Campaign

The Temporary Transport Plan will be supported with an extensive Community Information Campaign which includes:

- Multilingual communications collateral and advertising in relevant channels
- Geo-targeted social and digital campaign
- Wayfinding Strategy with posters and maps to direct customers
- Customer planning information uploaded to TfNSW's Trip Planner
- Sydney Trains customer announcements on platforms and trains
- Customer information personnel located at all station locations to assist customers during the TTP operations.

Appendix A – Community notifications for temporary kerbside changes

Community notifications were distributed via letter box drop. Examples of the notifications are provided below.

Bankstown - 734 community notifications distributed

Transport for NSW
8 August 2022



Proposed Temporary Parking Changes

T3 Bankstown Line upgrade work – Bankstown Station

What is happening?

Rail upgrade work will take place between Sydenham and Bankstown from **Saturday 24 September to Sunday 9 October 2022** and from **Monday 26 December 2022 to Sunday 15 January 2023**. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during this time. To accommodate the additional buses and ensure minimal disruption to traffic, some temporary parking changes are proposed around Bankstown Station.

What do I need to know?

From **2am Saturday 24 September to 2am Monday 10 October 2022**, and from **2am Monday 26 December 2022 to 2am Monday 16 January 2023**, the following temporary kerbside changes are proposed:

- Within the Bankstown Station bus interchange utilising 11 parking spaces (60 metres) currently signed 1-hour between 8.30am and 6.30pm, Monday to Fridays and between 8.30am and 12.30pm on Saturday.
- West Terrace, eastern side, utilising 13 parking spaces (80 metres) currently signed 2-hour parking between 8.30am and 6.30pm, Monday to Fridays and between 8.30am and 12.30pm on Saturdays.
- Restwell Street, western side, utilising 18 metres of space, currently signed no parking zone and 7 metres of 5-hour parking 8.00am to 6.30pm Monday to Friday. One space for 5-hour parking will remain in place at the southern end near Stewart Lane.

The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these times. Please see the map on the back of this notification for more information about the temporary parking changes.

Provide your feedback

Transport for NSW welcomes community feedback on the proposed changes to help refine bus operations in and around the station precinct. Please provide your feedback by **5pm 19 August 2022** via the following channels:

Email: TTPComms@transport.nsw.gov.au
Phone: 1800 171 386
For more information: mysydney.nsw.gov.au/sydenhamtobankstown

Transport.nsw.gov.au
1 of 2 Page

Map of the proposed temporary kerbside changes



Simplified Chinese
這份文件包含你所在地區公共交通工程項目的重要信息。如果你需要傳譯服務，請致電翻譯與傳譯服務機構，電話 131 450。要求他們為你接達交通工程師(Transport for NSW)，電話是 1800 171 386。傳譯員會為你做翻譯。

Traditional Chinese
這份文件包含你所在地區公共交通工程項目的重要信息。如果你需要傳譯服務，請致電翻譯與傳譯服務機構，電話 131 450。要求他們為你接達交通工程師(Transport for NSW)，電話是 1800 171 386。傳譯員會為你做翻譯。


Arabic
هذه الوثيقة تحتوي على المعلومات الهامة حول مشروع تحسينات النقل العام في المنطقة التي أنت فيها. إذا كنت بحاجة إلى خدمات الترجمة، يرجى الاتصال بخدمات الترجمة والتفسير، رقم الهاتف 131 450. نطلب منهم الاتصال بمهندسي النقل (Transport for NSW)، رقم الهاتف 1800 171 386. سيقوم المترجمون بترجمة الوثيقة لك.

August 2022
Page 1 of 2

Transport.nsw.gov.au Page 2 of 2

Punchbowl - 627 community notifications distributed

Transport for NSW
8 August 2022



Proposed Temporary Parking Changes

T3 Bankstown Line upgrade work – Punchbowl Station

What is happening?

Rail upgrade work will take place between Sydenham and Bankstown from **Saturday 24 September to Sunday 9 October 2022** and from **Monday 26 December 2022 to Sunday 15 January 2023**. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, a temporary parking change is proposed around Punchbowl Station.

What do I need to know?

From **2am Saturday 24 September to 2am Monday 10 October 2022**, and from **2am Monday 26 December 2022 to 2am Monday 16 January 2023**, the following temporary kerbside change is proposed:

- The Boulevard, between Matthews Street and Arthur Street, southern side, utilising two parking spaces (11 metres) currently signed 1/2 (half hour) parking between 8.30am and 6pm, Monday to Friday and between 8.30am and 12.30pm on Saturdays.

The proposed temporary parking change will allow for the safe operation of buses and will only be in place during these times. Please see the map on the back of this notification for more information about the temporary parking change.

Provide your feedback


Transport for NSW welcomes community feedback on the proposed change to help refine bus operations in and around the station precinct.

Please provide your feedback by **5pm 19 August 2022** via the following channels:

Email: TTPComms@transport.nsw.gov.au
Phone: 1800 171 386
For more information: mysydney.nsw.gov.au/sydenhamtobankstown

Transport.nsw.gov.au
1 of 2 Page

Map of the proposed temporary kerbside change



Simplified Chinese
這份文件包含你所在地區公共交通工程項目的重要信息。如果你需要傳譯服務，請致電翻譯與傳譯服務機構，電話 131 450。要求他們為你接達交通工程師(Transport for NSW)，電話是 1800 171 386。傳譯員會為你做翻譯。

Traditional Chinese
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Wiley Park - 553 community notifications distributed

Transport for NSW
8 August 2022



Proposed Temporary Parking Changes

T3 Bankstown Line upgrade work – Wiley Park Station

What is happening?
Rail upgrade work will take place between Sydenham and Bankstown from **Saturday 24 September to Sunday 9 October 2022** and from **Monday 26 December 2022 to Sunday 15 January 2023**. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, some temporary parking changes are proposed around Wiley Park Station.

What do I need to know?
From **2am Saturday 24 September to 2am Monday 10 October 2022**, and from **2am Monday 26 December 2022 to 2am Monday 16 January 2023**, the following temporary kerbside changes are proposed:

- Create a bus zone on The Boulevard, northern side, utilising three parking spaces (32 metres) currently signed 1/2P (half hour parking) between 6am and 7pm, Monday to Friday, and between 9am and 6pm Saturday, Sunday and Public Holidays.
- Extend the existing bus zone on The Boulevard, southern side, utilising three parking spaces (18 metres) currently signed 1/2P (half hour parking) between 6am and 7pm, Monday to Friday, and between 9am and 6pm Saturday, Sunday and Public Holidays.

The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these times. Please see the map on the back of this notification for more information about the temporary parking changes.

Provide your feedback
Transport for NSW welcomes community feedback on the proposed changes to help refine bus operations in and around the station precinct.

Please provide your feedback by **5pm 19 August 2022** via the following channels:

Email: TTPComms@transport.nsw.gov.au
Phone: 1800 171 386
For more information: mysydney.nsw.gov.au/sydenhantobankstown

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Map of the proposed temporary kerbside changes



Simplified Chinese
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Lakemba - 718 community notifications distributed

Transport for NSW
8 August 2022



Proposed Temporary Parking Changes

T3 Bankstown Line upgrade work – Lakemba Station

What is happening?
Rail upgrade work will take place between Sydenham and Bankstown from **Saturday 24 September to Sunday 9 October 2022** and from **Monday 26 December to Sunday 15 January 2023**. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, some temporary parking changes are proposed around Lakemba Station.

What do I need to know?
From **2am Saturday 24 September to 2am Monday 10 October 2022**, and from **2am Monday 26 December 2022 to 2am Monday 16 January 2023** the following temporary kerbside changes are proposed:

- Extend the bus zone on the southern side of The Boulevard, utilising one 5-minute parking space (7 metres).
- Create a bus zone of the northern side of The Boulevard, utilising 12 metres of no stopping zone (no impacts to parking) and removing two taxi zone spaces.
- Relocate the taxi zone from The Boulevard to the southern side of Railway Parade, utilising two parking spaces currently signed 1/2 (half hour) parking between 8.30am and 6pm Monday to Friday and 8.30am to 12.30pm Saturday.

The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these times. Please see the map on the back of this notification for more information about the temporary parking changes.

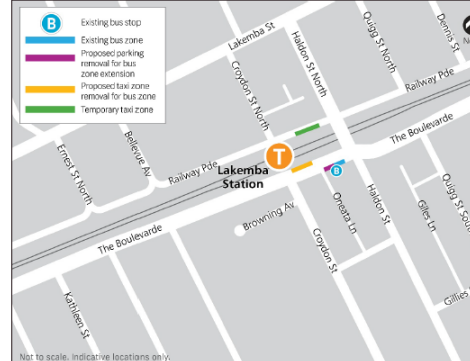
Provide your feedback
Transport for NSW welcomes community feedback on the proposed changes to help refine bus operations in and around the station precinct.

Please provide your feedback by **5pm 19 August 2022** via the following channels:

Email: TTPComms@transport.nsw.gov.au
Phone: 1800 171 386
For more information: mysydney.nsw.gov.au/sydenhantobankstown

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Map of the proposed temporary kerbside changes



Simplified Chinese
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Belmore - 446 community notifications distributed

Transport for NSW
8 August 2022



Proposed Temporary Parking Changes

T3 Bankstown Line upgrade work – Belmore Station

What is happening?
Rail upgrade work will take place between Sydenham and Bankstown from Saturday 24 September to Sunday 9 October 2022 and from Monday 26 December 2022 to Sunday 15 January 2023. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, some temporary parking changes are proposed around Belmore Station.

What do I need to know?
From 2am Saturday 24 September to 2am Monday 10 October 2022, and from 2am Monday 26 December 2022 to 2am Monday 16 January 2023, the following temporary kerbside changes are proposed:

- Create a bus standby zone on the northern side of Bridge Road utilising four parking spaces (20 metres) of currently signed unrestricted parking.
- Create a new bus zone on the northern side of Bridge Road by removing two taxi spaces (14 metres).
- Create a new bus zone on the southern side of Bridge Road utilising:
 - Four parking spaces (24 metres) currently signed 2-hour parking between 8.30am and 6pm, Monday to Friday, and 8.30am and 12.30pm, Saturday.
 - One loading zone space (8 metres) between 8.30am and 6pm, Monday to Friday, and between 8.30am and 12.30pm, Saturday.
- Relocate one loading zone space further east on the southern side of Bridge Road between Paragon Lane and Burwood Road, utilising one parking space (7 metres) of 2-hour parking between 8.30am and 6pm, Monday to Friday, and between 8.30am and 12.30pm, Saturday.

The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these times. Please see the map on the back of this notification for more information about the temporary parking changes.

Provide your feedback
Transport for NSW welcomes community feedback on the proposed changes to help refine bus operations in and around the station precinct. Please provide your feedback by 5pm 19 August 2022 via the following channels:

Email: TTPComms@transport.nsw.gov.au
Phone: 1800 171 386
For more information: mysydney.nsw.gov.au/sydenhamtobankstown

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Map of the proposed temporary kerbside changes



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Campsie - 910 community notifications distributed

Transport for NSW
8 August 2022



Proposed Temporary Parking Changes

T3 Bankstown Line upgrade work – Campsie Station

What is happening?
Rail upgrade work will take place between Sydenham and Bankstown from Saturday 24 September to Sunday 9 October 2022 and from Monday 26 December 2022 to Sunday 15 January 2023. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, some temporary parking changes are proposed around Campsie Station.

What do I need to know?
From 2am Saturday 24 September to 2am Monday 10 October 2022, and from 2am Monday 26 December 2022 to 2am Monday 16 January 2023, the following temporary kerbside changes are proposed:

Beamish Street:

- Extend the existing bus zone on Beamish Street western side (near Amy Street) utilising three parking spaces (17 metres) currently signed:
 - Two spaces of 1/2 (half hour) parking between 8.30am and 9.30pm, Monday to Sunday.
 - One loading zone space between 6.30am and 8.30pm, Monday to Sunday.

South Parade:

- Create a bus zone on the northern side of South Parade, opposite Harold Street, utilising eight parking spaces (20 metres) of 90 degree parking currently signed unrestricted parking.

Duke Street:

- Create two bus zones on the eastern side of Duke Street – one zone near South Parade utilising four parking spaces (24 metres) of unrestricted parking, the other near Evaline Street, utilising three parking spaces (21 metres) of unrestricted parking
- Create a bus zone on the western side of Duke Street near South Parade utilising eight parking spaces (58 metres) currently signed No Parking between 8.30am and 9.30am and between 2.30pm and 3.30pm on School Days (11 metres) and unrestricted parking (47 metres)
- Create a bus zone on the western side of Duke Street near Evaline Street, utilising six parking spaces (40 metres) currently signed No Parking 8.30am and 9.30am, and 2.30pm and 3.30pm on School Days.

The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these times. Please see the map on the back of this notification for more information about the temporary parking changes.

Provide your feedback
Transport for NSW welcomes community feedback on the proposed changes to help refine bus operations in and around the station precinct. Please provide your feedback by 5pm 19 August 2022 via the following channels:

Email: TTPComms@transport.nsw.gov.au
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Map of the proposed temporary kerbside changes



Simplified Chinese
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Canterbury - 1706 community notifications distributed

Transport for NSW
8 August 2022



Proposed Temporary Parking Changes

T3 Bankstown Line upgrade work – Canterbury Station

What is happening?
Rail upgrade work will take place between Sydenham and Bankstown from **Saturday 24 September to Sunday 9 October 2022** and from **Monday 26 December 2022 to Sunday 15 January 2023**. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, a temporary parking change is proposed around Canterbury Station.

What do I need to know?
From **2am Saturday 24 September to 2am Monday 10 October 2022**, and from **2am Monday 26 December 2022 to 2am Monday 15 January 2023**, the following temporary kerbside change is proposed:

- Create a bus zone on Canterbury Road southern side, near Tincombe Street, utilising nine parking spaces (56 metres) of a clearway zone between 6am and 7pm Monday to Friday and between 9am and 6pm on Saturday, Sunday and Public Holidays.

The proposed temporary parking change will allow for the safe operation of buses and will only be in place during these times. Please see the map on the back of this notification for more information about the temporary parking change.

Provide your feedback
Transport for NSW welcomes community feedback on the proposed change to help refine bus operations in and around the station precinct.

Please provide your feedback by **5pm 19 August 2022** via the following channels:
Email: TTPComms@transport.nsw.gov.au
Phone: 1800 171 386
For more information: mysydney.nsw.gov.au/sydenhamtobankstown

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Map of the proposed temporary kerbside change



Simplified Chinese
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Hurlstone Park - 479 community notifications distributed

Transport for NSW
8 August 2022



Proposed Temporary Parking Changes

T3 Bankstown Line upgrade work – Hurlstone Park Station

What is happening?
Rail upgrade work will take place between Sydenham and Bankstown from **Saturday 24 September to Sunday 9 October 2022** and from **Monday 26 December 2022 to Sunday 15 January 2023**. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, a temporary parking change is proposed around Hurlstone Park Station.

What do I need to know?
From **2am Saturday 24 September to 2am Monday 10 October 2022**, and from **2am Monday 26 December 2022 to 2am Monday 15 January 2023**, the following temporary kerbside change is proposed:

- Extend no stopping on the north side of Floss Street utilising three parking spaces (20 metres) of unrestricted parking.

The proposed temporary parking change will allow for the safe operation of buses and will only be in place during these times. Please see the map on the back of this notification for more information about the temporary parking changes.

Provide your feedback
Transport for NSW welcomes community feedback on the proposed change to help refine bus operations in and around the station precinct.

Please provide your feedback by **5pm 19 August 2022** via the following channels:
Email: TTPComms@transport.nsw.gov.au
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Map of the proposed temporary kerbside change



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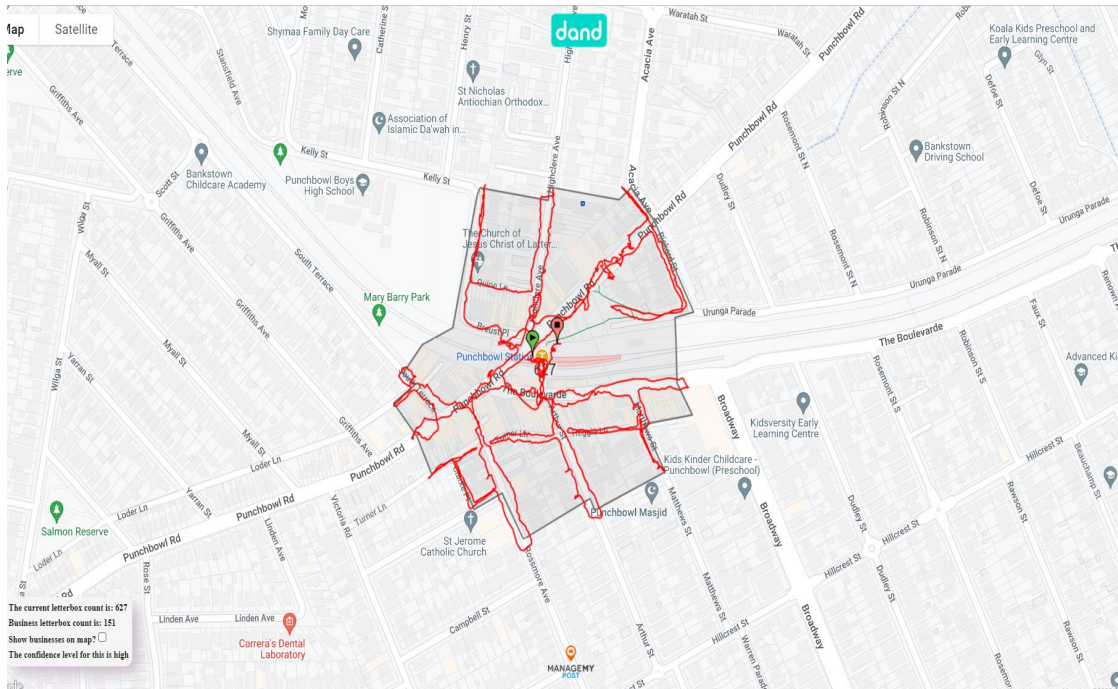
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Appendix B – Distribution tracking maps

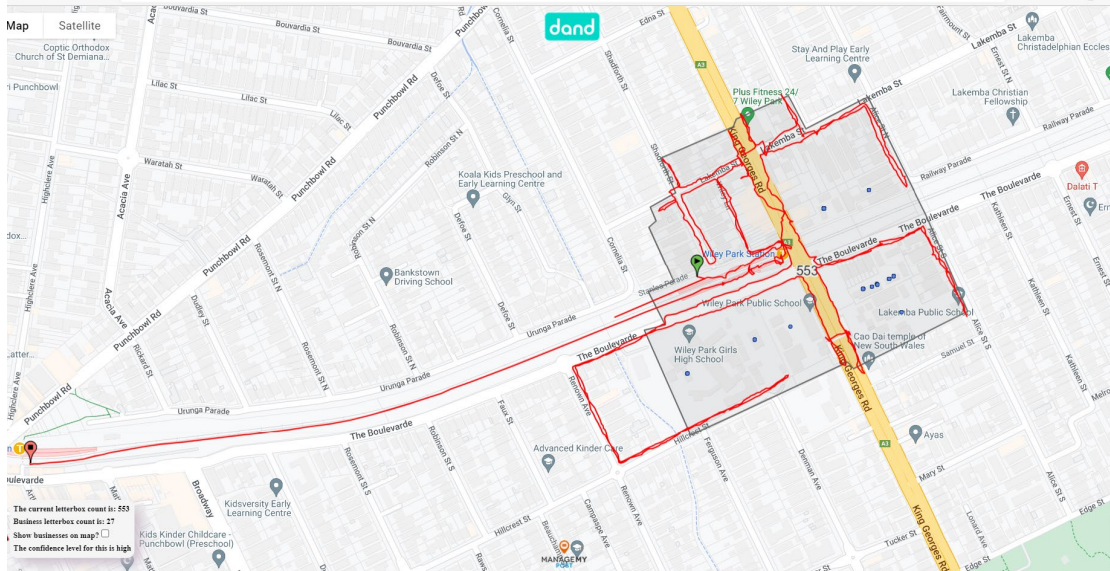
Bankstown distribution



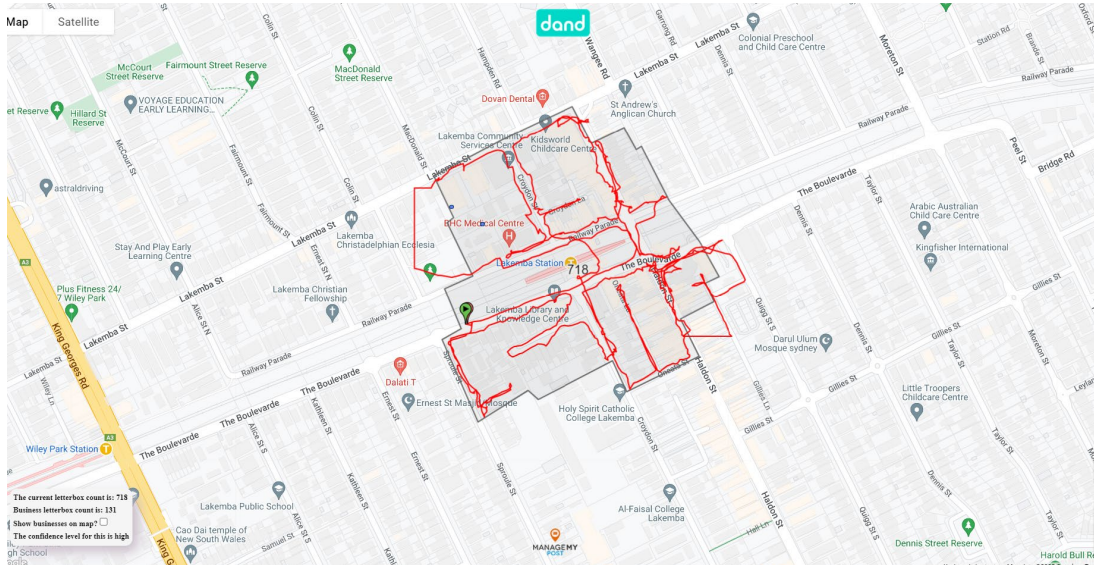
Punchbowl distribution



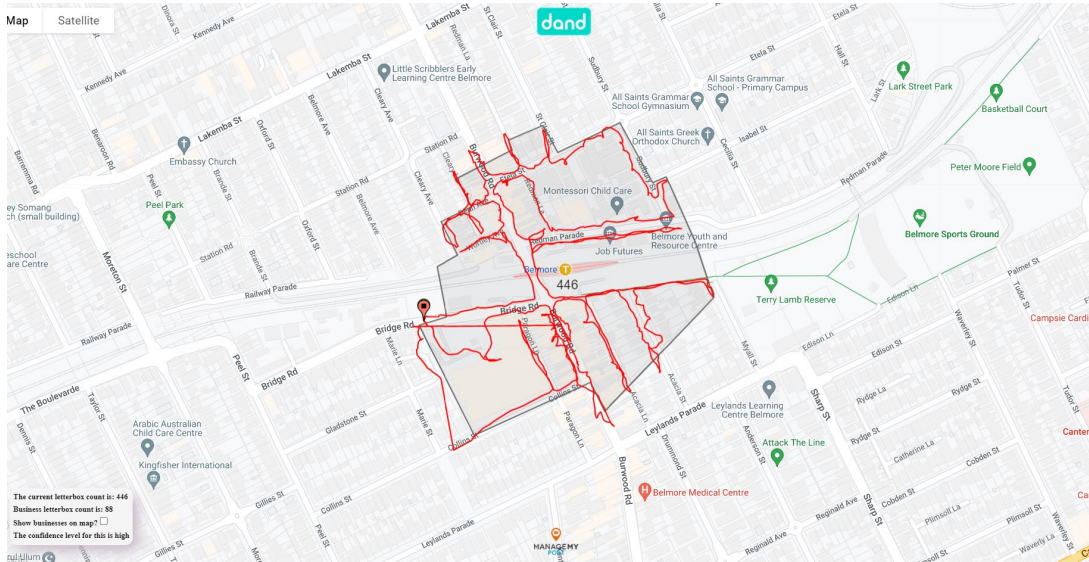
Wiley Park distribution



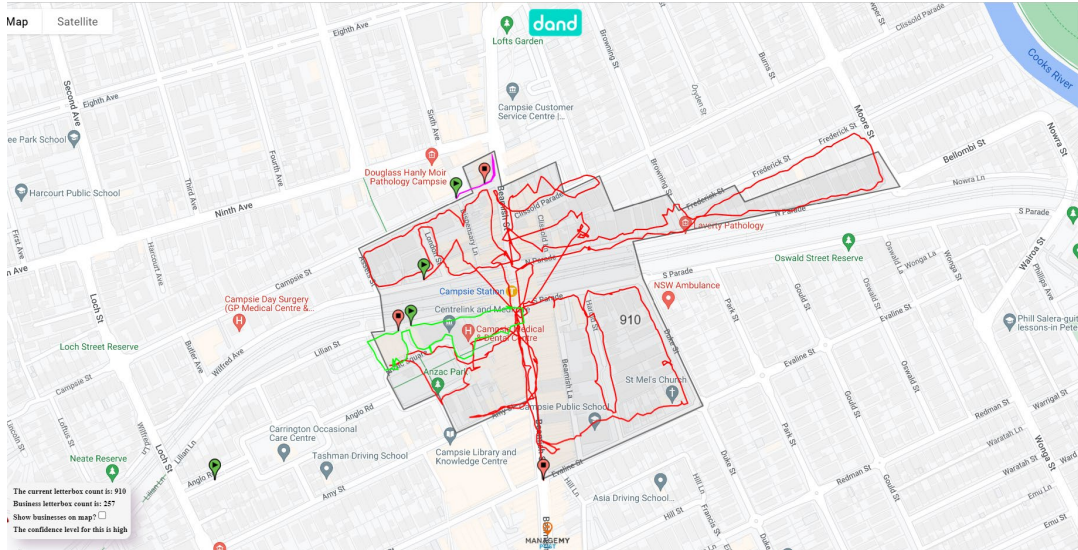
Lakemba distribution



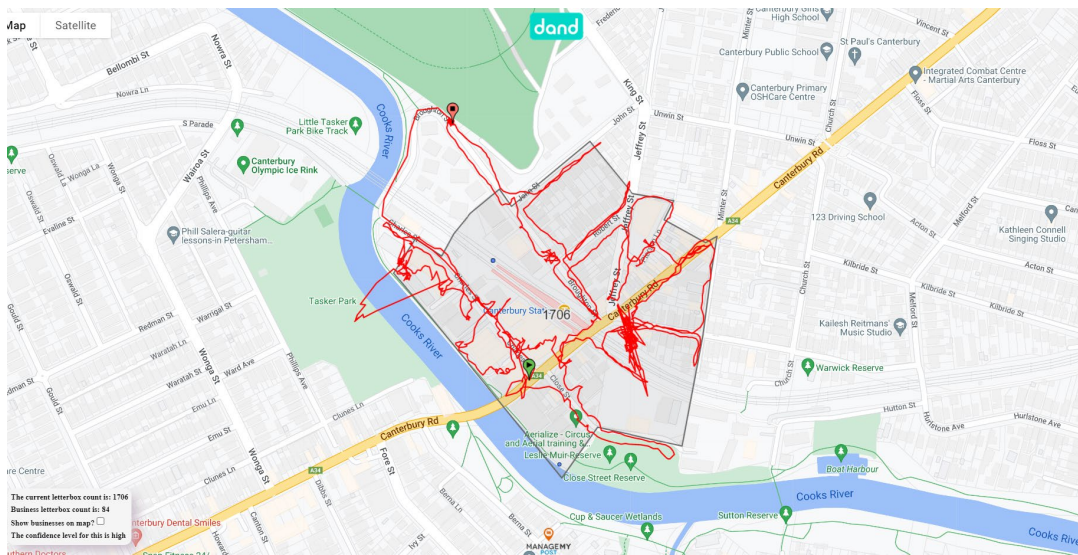
Belmore distribution



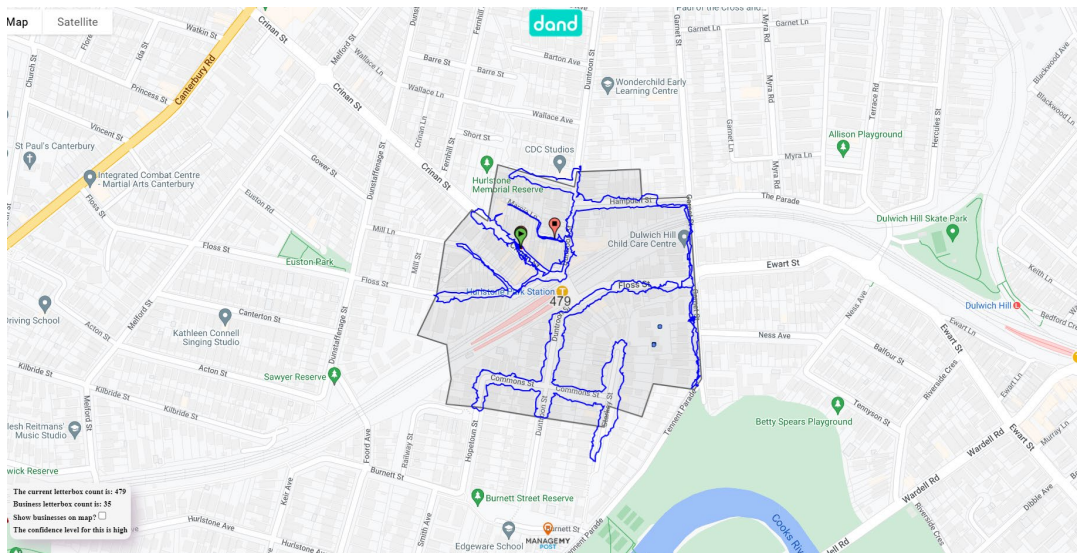
Campsie distribution



Canterbury distribution



Hurlstone Park distribution



Appendix C – Temporary Transport Plan project web page

Community notifications and links for further information were placed online at www.mysydney.nsw.gov.au/SydenhamtoBankstown

Refer to the screenshot below:

[VIEW ON PROJECT SITE](#)

T3 BANKSTOWN LINE - SYDENHAM TO BIRRRONG TEMPORARY RAIL CLOSURE –
Proposed from Saturday 24 September to Sunday 9 October, 2022 and from Monday 26
December 2022 to Thursday 12 January 2023

Rail upgrade work between Sydenham and Bankstown is proposed from Saturday 24 September to Sunday 9 October 2022 and from Monday 26 December to Sunday 15 January 2023. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, some temporary parking changes are proposed.

Consultation with the local community is now open on the proposed temporary parking changes. View the notifications and maps below for information about the temporary parking changes around your station:

Inner West – Consultation open 8 August to 19 August

- [Sydenham](#)
- [Marrickville](#)
- [Dulwich Hill](#)

Cumberland - Consultation open 8 August to 19 August

- [Lidcombe](#)

Canterbury Bankstown - Consultation open 8 August to 19 August

- [Hurlstone Park](#)
- [Canterbury](#)
- [Campsie](#)
- [Belmore](#)
- [Lakemba](#)
- [Wiley Park](#)
- [Punchbowl](#)
- [Bankstown](#)

Transport for NSW will consider any feedback received, and work with the relevant Councils on the changes to temporary parking.

Residents and businesses can provide their feedback on the proposed kerbside changes via email at TTPComms@transport.nsw.gov.au or telephone 1800 171 386

Final transport plans to keep customers moving during the upgrade will be shared with the community well in advance to give people plenty of time to plan ahead.

MORE INFORMATION

- > [About Sydney Metro](#)
- > [Bankstown](#)
- > [Belmore](#)
- > [Campsie](#)
- > [Canterbury](#)
- > [Dulwich Hill](#)
- > [Hurlstone Park](#)
- > [Lakemba](#)
- > [Lidcombe](#)
- > [Marrickville](#)
- > [Punchbowl](#)
- > [Sydenham](#)
- > [Wiley Park](#)

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Community Consultation Report

Sydenham to Bankstown Temporary Transport Plan –
Proposed temporary kerbside changes

Lidcombe station –
Cumberland Council

22 August 2022

transport.nsw.gov.au



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Introduction

Rail upgrade work is proposed to take place between Sydenham and Bankstown stations from Saturday 24 September to Sunday 9 October 2022 and from Monday 26 December 2022 to Thursday 12 January 2023. This work has been planned to take place in the September and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, Transport for NSW (TfNSW) is implementing a Sydenham to Bankstown Temporary Transport Plan (TTP) where frequent buses will replace trains during this time.

To accommodate these buses and ensure minimal disruption to traffic, some temporary changes to kerbside parking are proposed around stations between Sydenham and Bankstown as well as Lidcombe.

Purpose of this report

This report provides an overview of community consultation undertaken for temporary kerbside changes around Lidcombe station which are proposed to support the Sydenham to Bankstown Temporary Transport Plan.

A summary of the feedback received is provided along with any changes that have been made to the Plan in response to feedback,

Proposed temporary kerbside changes

Temporary kerbside changes near Lidcombe station were proposed to support the bus operation and initial feedback was sought.

The following kerbside changes were proposed to local residents and businesses:

Lidcombe

- Create a bus zone on Church Street, southern side, utilising 28 parking spaces (100 metres) currently 45 degree angled parking and signed 2-hour parking 8.30am to 6pm Monday to Friday and 8.30am to 12.30pm Saturday.
- Create a bus stop on Church Street, southern side, utilising six taxi spaces (45 metres) currently signed taxi zone.
- Relocate the current taxi zone on Church Street to two locations on the opposite side of Church Street (northern side):
 - utilising three parking spaces near John Street currently signed ½ (half hour) 8.30am to 6pm Monday to Friday and 8.30am to 12.30pm Saturday
 - utilising four parking spaces (24 metres) currently signed as three spaces unrestricted and one space 2-hour parking 8.30am to 6pm Monday to Friday and 8.30am to 12.30pm Saturday.

The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these two weeks.

Community Consultation

Community consultation on the proposed temporary parking changes in Lidcombe was undertaken for a two week period from Monday 8 August to Friday 15 August 2022.

Community notifications were delivered to residents and businesses by a professional distribution company operating under a COVID Safe Plan.

The objective of the consultation was to raise awareness of the proposed temporary parking changes needed to operate additional buses for the planned closure of the T3 Bankstown Line between Sydenham and Bankstown.

Local businesses and residents were asked to provide their feedback to help the project team refine bus operations in and around the station precinct.

The consultation program consisted of the following activities:

- Letter box drop of 596 notifications to businesses and residents within a 200 metres radius of Lidcombe station
- A 24/7 phone number 1800 131 786 to receive feedback, answer any questions and provide the community with more information
- Project email address TTP@transport.nsw.gov.au to receive feedback, answer any questions and provide the community with more information
- A project web page was created to provide more information, digital copies of the notifications and information about how to provide feedback

Copies of the community consultation materials are available in the Appendices.

Consultation feedback received

Station precinct	Community feedback received	TfNSW response
Lidcombe	Nil received	Temporary kerbside changes for the September and December/January school holiday periods are the same as the previous TTP in July 22 with no reported issues.

Consultation outcomes

TfNSW has prepared submissions to local councils and their traffic committees for the Sydenham to Bankstown Temporary Transport Plan. As part of these submissions, community consultation has been undertaken with local residents and businesses in proximity to the bus zones around stations on the proposed temporary parking changes.

There were no submissions received from the community on the proposed temporary parking changes in Lidcombe during the consultation period of from Monday 8 August to Friday 19 August 2022.

Based on no feedback, objections or issues raised by local residents and businesses on the temporary parking changes, no further changes to the temporary parking plans are proposed.

Community Information Campaign

The Temporary Transport Plan will be supported with an extensive Community Information Campaign which includes:


- Multilingual communications collateral and advertising in relevant channels
- Geo-targeted social and digital campaign
- Wayfinding Strategy with posters and maps to direct customers
- Customer planning information uploaded to TfNSW's Trip Planner
- Sydney Trains platform and train customer announcements
- Customer information personnel located at all station locations to assist customers during this time.

Appendix A – Community notification for temporary kerbside changes

Community notifications were distributed via letter box drop. An example of the notification is provided below.

Lidcombe - 596 community notifications distributed

Transport for NSW
8 August 2022



Proposed Temporary Parking Changes

T3 Bankstown Line upgrade work – Lidcombe Station

What is happening?
Rail upgrade work will take place between Sydenham and Bankstown from **Saturday 24 September to Sunday 9 October 2022** and from **Monday 26 December 2022 to Sunday 15 January 2023**. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, some temporary parking changes are proposed around Lidcombe Station.

What do I need to know?
From **2am Saturday 24 September to 2am Monday 10 October 2022** and from **2am Monday 26 December 2022 to 2am Monday 16 January 2023**, the following temporary kerbside changes are proposed:

- Create a bus zone on Church Street, southern side, utilising 28 parking spaces (100 metres) currently 45 degree angled parking and signed 2-hour parking 8.30am to 6pm Monday to Friday and 8.30am to 12.30pm Saturday.
- Create a bus stop on Church Street, southern side, utilising six taxi spaces (45 metres) currently signed taxi zone.
- Relocate the current taxi zone on Church Street to two locations on the opposite side of Church Street (northern side):
 - utilising three parking spaces near John Street currently signed ½ (half hour) 8.30am to 6pm Monday to Friday and 8.30am to 12.30pm Saturday
 - utilising four parking spaces (24 metres) currently signed as three spaces unrestricted and one space 2-hour parking 8.30am to 6pm Monday to Friday and 8.30am to 12.30pm Saturday.


The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these weeks. Please see the map on the back of this notification for more information about the temporary parking changes.

Provide your feedback
Transport for NSW welcomes community feedback on the proposed changes to help refine bus operations in and around the station precinct. Please provide your feedback by **5pm 19 August 2022** via the following channels:

Email: TTPComms@transport.nsw.gov.au
Phone: 1800 171 386
For more information: mysydney.nsw.gov.au/sydenhamtobankstown

Transport.nsw.gov.au 1 of 2 OFFICIAL Page

Map of the proposed temporary kerbside changes



Simplified Chinese
這份文件包含您所在地區公共交通工程項目的重要信息。如果您需要傳譯服務，請致電翻譯與傳譯服務機構，電話 131 450。要求他們為您提供交通工程前(Transport for NSW)，電話是 1800 171 386，傳譯員會為您做翻譯。

Traditional Chinese
這份文件包含您所在地區公共交通工程項目的重要信息。如果您需要傳譯服務，請致電翻譯與傳譯服務機構，電話 131 450。要求他們為您提供交通工程前(Transport for NSW)，電話是 1800 171 386。傳譯員會為您做翻譯。

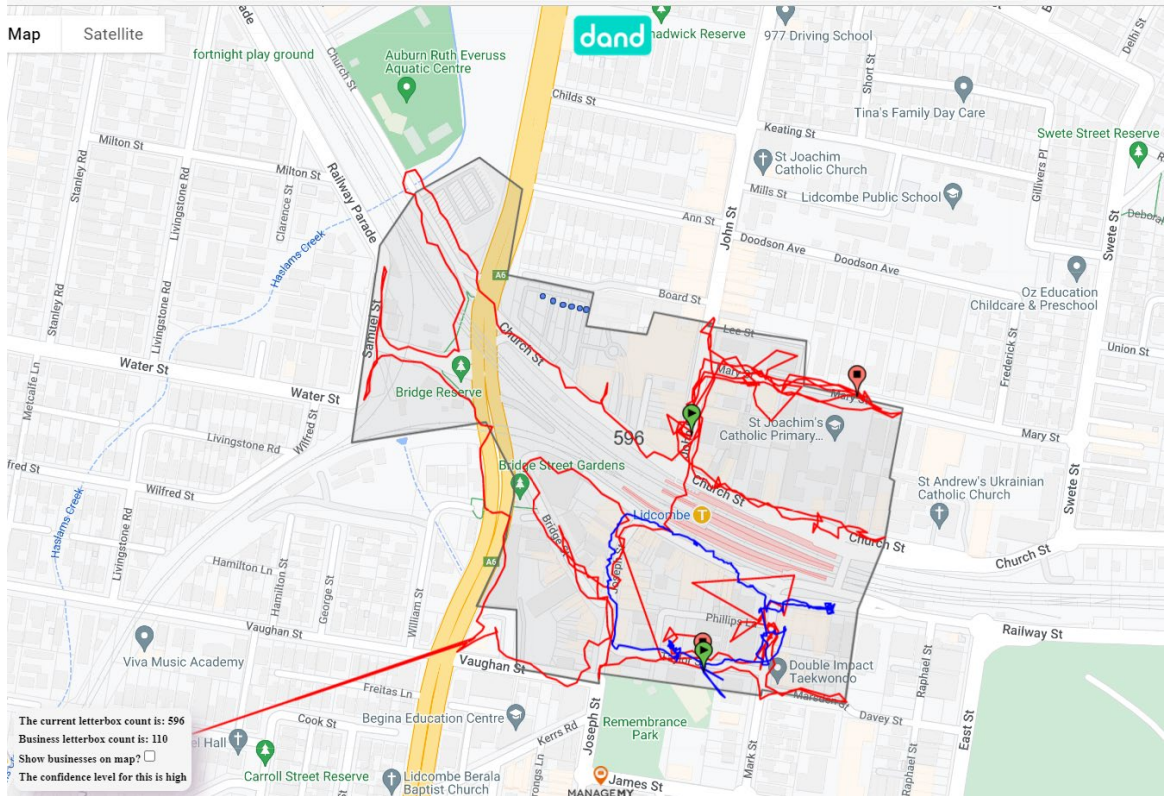
Arabic
التنصيح هذه الوثيقة معلومات عن مشاريع النقل العام في منطقتك. إذا كنت بحاجة إلى خدمات مترجم، الرجاء الاتصال بخدمة الترجمة الشفوية والخطية على رقم 131 450. عندما يحتاج المترجم بالترجمة والتفاهة عليهم ان يتصلوا بعمليّة المواصفات أيز سارت ويقر على رقم 1800 171 386.

August 2022
Pub No 1
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Transport.nsw.gov.au OFFICIAL Page 2 of 2

Appendix B – Distribution tracking map

Lidcombe



Appendix C – Temporary Transport Plan project web page

Community notifications and links for further information were placed online at www.mysydney.nsw.gov.au/SydenhamtoBankstown

Refer to the screenshot below:

TO BANKSTOWN UPGRADE

[VIEW ON PROJECT SITE](#)

T3 BANKSTOWN LINE - SYDENHAM TO BIRRONG TEMPORARY RAIL CLOSURE –
Proposed from Saturday 24 September to Sunday 9 October, 2022 and from Monday 26 December 2022 to Thursday 12 January 2023

Rail upgrade work between Sydenham and Bankstown is proposed from Saturday 24 September to Sunday 9 October 2022 and from Monday 26 December to Sunday 15 January 2023. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, some temporary parking changes are proposed.

Consultation with the local community is now open on the proposed temporary parking changes. View the notifications and maps below for information about the temporary parking changes around your station:

Inner West – Consultation open 8 August to 19 August

- [Sydenham](#)
- [Marrickville](#)
- [Dulwich Hill](#)

Cumberland - Consultation open 8 August to 19 August

- [Lidcombe](#)

Canterbury Bankstown - Consultation open 8 August to 19 August

- [Hurlstone Park](#)
- [Canterbury](#)
- [Campsie](#)
- [Belmore](#)
- [Lakemba](#)
- [Wiley Park](#)
- [Punchbowl](#)
- [Bankstown](#)

Transport for NSW will consider any feedback received, and work with the relevant Councils on the changes to temporary parking.

Residents and businesses can provide their feedback on the proposed kerbside changes via email at TTPComms@transport.nsw.gov.au or telephone 1800 171 386

Final transport plans to keep customers moving during the upgrade will be shared with the community well in advance to give people plenty of time to plan ahead.

MORE INFORMATION

- > [About Sydney Metro](#)
- > [Bankstown](#)
- > [Belmore](#)
- > [Campsie](#)
- > [Canterbury](#)
- > [Dulwich Hill](#)
- > [Hurlstone Park](#)
- > [Lakemba](#)
- > [Lidcombe](#)
- > [Marrickville](#)
- > [Punchbowl](#)
- > [Sydenham](#)
- > [Wiley Park](#)

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Community Consultation Report

Sydenham to Bankstown Temporary Transport Plan –
Proposed temporary kerbside changes

Dulwich Hill, Marrickville and Sydenham stations –
Inner West Council

22 August 2022

transport.nsw.gov.au



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Introduction

Rail upgrade work is proposed to take place between Sydenham and Bankstown stations from Saturday 24 September to Sunday 9 October 2022 and from Monday 26 December 2022 to Thursday 12 January 2023. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, Transport for NSW (TfNSW) is implementing a Sydenham to Bankstown Temporary Transport Plan (TTP) where frequent buses will replace trains during this time.

To accommodate these buses and ensure minimal disruption to traffic, some temporary changes to kerbside parking are proposed around stations between Sydenham and Bankstown as well as Lidcombe and Central.

Purpose of this report

This report provides an overview of community consultation undertaken for temporary kerbside changes around Dulwich Hill, Marrickville and Sydenham stations which were proposed to support the Sydenham to Bankstown Temporary Transport Plans.

A summary of the feedback received is provided along with any changes that have been made to the Plan in response to feedback,

Proposed temporary kerbside changes

Representatives from the Temporary Transport Plan project team notified Inner West Council on the Temporary Transport Plans. This included information on the operation of buses to support customers during the closure of the T3 line between Sydenham to Bankstown in the September and December/January school holidays.

Temporary kerbside changes at Dulwich Hill, Marrickville and Sydenham were proposed to support the bus operation and initial feedback was sought.

The following kerbside changes were proposed to local residents and businesses:

Dulwich Hill

- Extend the bus zone on the northern side of Dudley Street utilising:
 - One loading zone space (7 metres) currently signed between 8.30am and 6pm, Monday to Friday and between 8.30am and 12.30pm on Saturday.
 - Three parking spaces (18 metres) currently signed as 30 minute parking between 8.30am and 6pm Monday to Friday and between 8.30am and 12.30pm on Saturday.
- Extend the bus zone on the southern side of Dudley Street utilising one parking space (7 metres) currently signed as unrestricted parking.

Marrickville

- Extend the bus zone on the western side of Illawarra Road by utilising one parking space (7 metres) currently signed as 1-hour parking between 8.30am and 6pm.

Sydenham

- Create a bus zone on the southern side of Lower Railway Parade (between Marrickville Road and Sydenham Road) currently 45 degree parking utilising:
 - 46 parking spaces (122 metres) currently signed All-day parking

- 11 parking spaces (32 metres) currently signed 4-hour 8.30am to 6pm, Monday to Friday.
- Create a bus zone on the northern side of Burrows Avenue (prior to Gleeson Avenue) utilising 14 parking spaces (50 metres) currently signed unrestricted parking.
- Create a bus zone on the southern side of Burrows Avenue (prior to Gleeson Avenue) utilising 9 parking spaces (58 metres) currently signed unrestricted parking.
- Create a bus zone on the north-eastern side of Railway Road (prior to Gleeson Avenue) utilising 3 parking spaces (18 metres) currently signed 2-hour parking 8.00am to 10pm, Monday to Friday
- Extend the bus zone on the eastern side of Gleeson Avenue (between Burrows Avenue and Unwins Bridge Road) utilising 2 parking spaces (12 metres) currently signed 1-hour 9.00am to 3.30pm, Monday to Friday.

Community Consultation

Community consultation on the proposed temporary parking changes in Dulwich Hill, Marrickville and Sydenham, was undertaken for a two week period from Monday 8 August to Friday 19 August, 2022.

Community notifications were delivered to residents and businesses by a professional distribution company operating under a COVID Safe Plan.

The objective of the consultation was to raise awareness of the proposed temporary parking changes needed to operate additional buses for the planned closures of the T3 Bankstown Line.

Local businesses and residents were asked to provide their feedback to help the project team refine bus operations in and around station precincts.

The consultation program consisted of the following activities:

- Letter box drop of 2326 notifications to businesses and residents within a 200 metre radius of the three station locations
 - Dulwich Hill – 883 notifications
 - Marrickville – 1218 notifications
 - Sydenham – 225 notifications.
- A 24/7 phone number 1800 131 786 to receive feedback, answer any questions and provide the community with more information
- Project email address TTP@transport.nsw.gov.au to receive feedback, answer any questions and provide the community with more information
- A project web page was created to provide more information, digital copies of the notifications and information about how to provide feedback.

Copies of the community consultation materials are available in the Appendices.

Consultation feedback received

Station precinct	Community feedback received	TfNSW response
Dulwich Hill	1 compliant received in relation to the notification and the Arabic translation for TfNSW’s Translator Services which was illegible.	TfNSW contacted the resident and apologised. A formatting error for the notification resulted in the Arabic translation being expanded and illegible. TfNSW has taken steps to ensure this is rectified. Temporary kerbside changes are the same as the previous TTP in July 22 with no reported issues.
Marrickville	Nil received	Temporary kerbside changes are reduced from the previous TTP in July 22 with no reported issues.
Sydenham	Nil received	Temporary kerbside changes are the same as the previous TTP in July 22 with no reported issues.

Consultation outcomes

TfNSW has prepared submissions to local councils and their traffic committees for the Sydenham to Bankstown Temporary Transport Plan. As part of these submissions, community consultation has been undertaken with local residents and businesses in proximity to the bus zones around stations on the proposed temporary parking changes.

There was 1 complaint received in relation to the notification and the Arabic translation for TfNSW’s Translator Services. There were no submissions received from the community on the proposed temporary parking changes during the consultation period of between Monday 8 August and Friday 19 August 2022.

Based on no feedback in relation to the proposed kerbside changes raised by local residents and businesses on the temporary parking changes, no further changes to the temporary parking plans are proposed.

Community Information Campaign

The Temporary Transport Plan will be supported with an extensive Community Information Campaign which includes:

- Multilingual communications collateral and advertising in relevant channels
- Geo-targeted social and digital campaign
- Wayfinding Strategy with posters and maps to direct customers
- Customer planning information uploaded to TfNSW’s Trip Planner
- Sydney Trains platform and train customer announcements
- Customer information personnel located at all station locations to assist customers during this time.

Appendix A – Community notifications for temporary kerbside changes

Community notifications were distributed via letter box drop. Examples of the notifications are provided below.

Dulwich Hill - 883 community notifications distributed

Transport for NSW
8 August 2022

NSW GOVERNMENT

Proposed Temporary Parking Changes

T3 Bankstown Line upgrade work – Dulwich Hill Station

What is happening?
The next set of upgrade work will take place between Sydenham and Bankstown from Saturday 24 September to Sunday 9 October 2022 and from Monday 26 December 2022 to Sunday 15 January 2023. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, some temporary parking changes are proposed around Dulwich Hill Station.

What do I need to know?
From 2am Saturday 24 September to 2am Monday 10 October 2022 and from 2am Monday 26 December 2022 to 2am Monday 16 January 2023, the following temporary kerbside changes are proposed:

- Extend the bus zone on the northern side of Dudley Street utilising:
 - One loading zone space (7 metres) currently signed between 8.30am and 6pm, Monday to Friday and between 8.30am and 12.30pm on Saturday.
 - Three parking spaces (18 metres) currently signed as 30 minute parking between 8.30am and 6pm Monday to Friday and between 8.30am and 12.30pm on Saturday.
- Extend the bus zone on the southern side of Dudley Street utilising one parking space (7 metres) currently signed unrestricted parking.

The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these weeks. Please see the map on the back of this notification for more information about the temporary parking changes.

Provide your feedback
Transport for NSW welcomes community feedback on the proposed changes to help refine bus operations in and around the station precinct. Please provide your feedback by **5pm 19 August 2022** via the following channels:

Email: TTPComms@transport.nsw.gov.au
Phone: 1800 171 386
For more information: mysydney.nsw.gov.au/sydenhamtobankstown

Transport.nsw.gov.au OFFICIAL Page 1 of 2

Map of the proposed temporary kerbside changes

Simplified Chinese
這份文件包含您所在地區公共交通工程項目的重要信息。如果您需要傳譯服務，請致電翻譯與傳譯服務機構，電話 131 450。要求他們為您接洽交通工程師(Transport for NSW)，電話是 1800 171 386。傳譯員會為您做翻譯。

Traditional Chinese
這份文件包含您所在地區公共交通工程項目的重要信息。如果您需要傳譯服務，請致電翻譯與傳譯服務機構，電話 131 450。要求他們為您接洽交通工程師(Transport for NSW)，電話是 1800 171 386。傳譯員會為您做翻譯。

Arabic
تدعيتنا لاصحابنا اهلنا من مونتريال ونادي اتيانج بكنه اذا كنتون في وقتنا الحاضر في ايرلاندا نغري انهم نحتاجون الى معلومات اكثر عن هذه التغييرات. 1800 171 386 هو رقم الهاتف الذي نحتاجون اليه في وقتنا الحاضر. اطلبوا مننا ان نساعدكم في هذه التغييرات. 1800 171 386 هو رقم الهاتف الذي نحتاجون اليه في وقتنا الحاضر. اطلبوا مننا ان نساعدكم في هذه التغييرات.

August 2022
Pub No 1
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Marrickville - 1218 community notifications distributed

Transport for NSW
8 August 2022

NSW GOVERNMENT

Proposed Temporary Parking Changes

T3 Bankstown Line upgrade work – Marrickville Station

What is happening?
Rail upgrade work will take place between Sydenham and Bankstown from Saturday 24 September to Sunday 9 October 2022 and from Monday 26 December 2022 to Sunday 15 January 2023. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, a temporary parking change is proposed around Marrickville Station.

What do I need to know?
From 2am Saturday 24 September to 2am Monday 10 October 2022 and from 2am Monday 26 December 2022 to 2am Monday 16 January 2023, the following temporary kerbside change is proposed:

- Extend the bus zone on the western side of Illawarra Road by utilising one parking space (7 metres) currently signed as 1-hour parking between 8.30am and 6pm.

The proposed temporary parking change will allow for the safe operation of buses and will only be in place during these weeks. Please see the map on the back of this notification for more information about the temporary parking change.

Provide your feedback
Transport for NSW welcomes community feedback on the proposed changes to help refine bus operations in and around the station precinct. Please provide your feedback by **5pm 19 August, 2022** via the following channels:

Email: TTPComms@transport.nsw.gov.au
Phone: 1800 171 386
For more information: mysydney.nsw.gov.au/sydenhamtobankstown

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Map of the proposed temporary kerbside change

Simplified Chinese
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Traditional Chinese
這份文件包含您所在地區公共交通工程項目的重要信息。如果您需要傳譯服務，請致電翻譯與傳譯服務機構，電話 131 450。要求他們為您接洽交通工程師(Transport for NSW)，電話是 1800 171 386。傳譯員會為您做翻譯。

Arabic
لدينا اصحابنا اهلنا من مونتريال ونادي اتيانج بكنه اذا كنتون في وقتنا الحاضر في ايرلاندا نغري انهم نحتاجون الى معلومات اكثر عن هذه التغييرات. 1800 171 386 هو رقم الهاتف الذي نحتاجون اليه في وقتنا الحاضر. اطلبوا مننا ان نساعدكم في هذه التغييرات. 1800 171 386 هو رقم الهاتف الذي نحتاجون اليه في وقتنا الحاضر. اطلبوا مننا ان نساعدكم في هذه التغييرات.

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Sydenham - 219 community notifications distributed

Transport for NSW
8 August 2022



Proposed Temporary Parking Changes

T3 Bankstown Line upgrade work – Sydenham Station

What is happening?

Rail upgrade work will take place between Sydenham and Bankstown from Saturday 24 September to Sunday 9 October 2022 and from Monday 26 December 2022 to Sunday 15 January 2023. This work has been planned to take place in the October and December/January school holidays when there are fewer customers on the rail network.

To keep customers moving, frequent buses will replace trains during these times. To accommodate the additional buses and ensure minimal disruption to traffic, some temporary parking changes are proposed around Sydenham Station.

What do I need to know?

From 2am Saturday 24 September to 2am Monday 10 October 2022 and from 2am Monday 26 December 2022 to 2am Monday 16 January 2023, the following temporary kerbside changes are proposed:

- Create a bus zone on the southern side of Lower Railway Parade (between Marrickville Road and Sydenham Road) currently 45 degree parking utilising:
 - 45 parking spaces (22 metres) currently signed All-day parking
 - 11 parking spaces (32 metres) currently signed 4-hour 8.30am to 6pm, Monday to Friday.
- Create a bus zone on the northern side of Burrows Avenue (prior to Gleeson Avenue) utilising 14 parking spaces (50 metres) currently signed unrestricted parking.
- Create a bus zone on the southern side of Burrows Avenue (prior to Gleeson Avenue) utilising 9 parking spaces (58 metres) currently signed unrestricted parking.
- Create a bus zone on the north-eastern side of Railway Road (prior to Gleeson Avenue) utilising 3 parking spaces (18 metres) currently signed 2-hour parking 8.00am to 10pm, Monday to Friday
- Extend the bus zone on the eastern side of Gleeson Avenue (between Burrows Avenue and Unwins Bridge Road) utilising 2 parking spaces (12 metres) currently signed 1-hour 9.00am to 3.30pm, Monday to Friday.

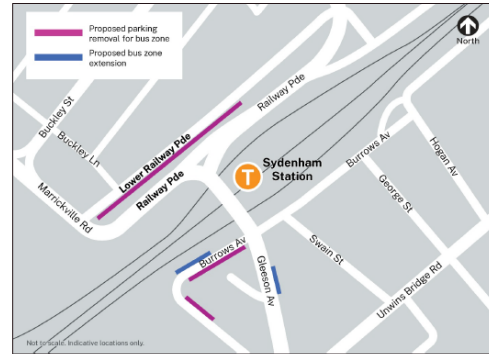
The proposed temporary parking changes will allow for the safe operation of buses and will only be in place during these weeks. Please see the map on the back of this notification for more information about the temporary parking changes.

Provide your feedback

Transport for NSW welcomes community feedback on the proposed changes to help refine bus operations in and around the station precinct. Please provide your feedback by 5pm 19 August 2022 via the following channels:

Email: TTPComms@transport.nsw.gov.au
Phone: 1800 171 386
For more information: www.transport.nsw.gov.au/sydenhamtobankstown

Map of the proposed temporary kerbside changes



Simplified Chinese

这份文件包含你所在地区公共交通工程项目的变更信息。如果你需要翻译服务，请联系翻译与传译服务机构，电话 131 450，要求他们为你接洽交通工程部(Transport for NSW)，电话是 1800 171 386。传译员会为你做翻译。

Traditional Chinese

這份文件包含你所在地區公共交通工程項目的重要信息。如果你需要翻譯服務，請致電翻譯與傳譯服務機構，電話 131 450，要求他們為你接洽交通工程部(Transport for NSW)，電話是 1800 171 386。傳譯員會為你做翻譯。

Arabic

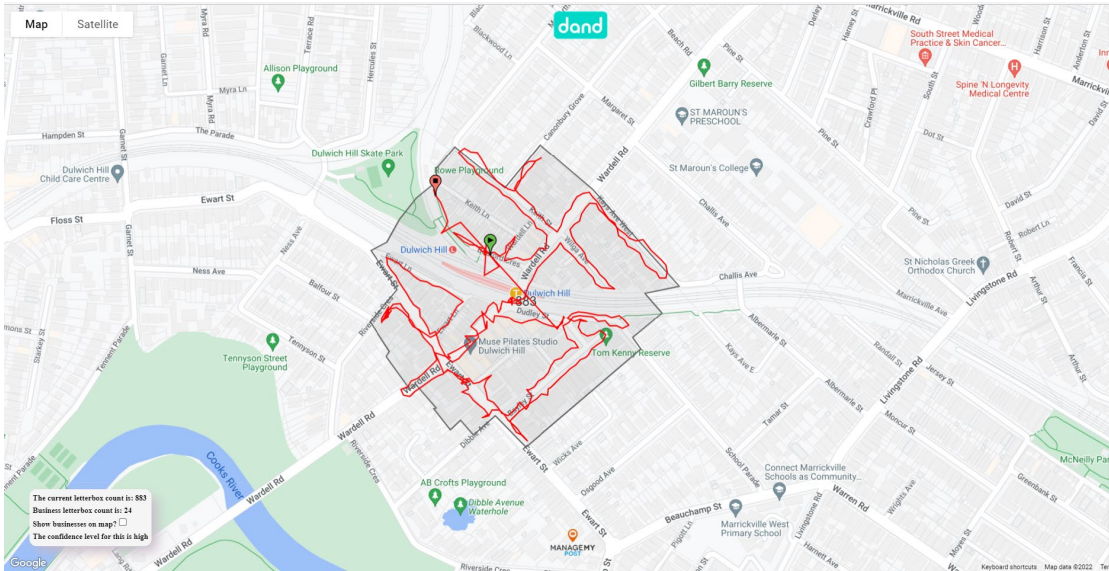
هذه الوثيقة تحتوي على معلومات مهمة تتعلق بمشروع تحسينات النقل العام في سيدني. إذا كنت بحاجة إلى خدمات الترجمة، يرجى الاتصال بخدمات الترجمة والتفسير، رقم الهاتف 131 450، وطلب منهم الاتصال بوحدة النقل (Transport for NSW)، رقم الهاتف 1800 171 386. المترجمون سيقومون بترجمة الوثيقة لك.

August 2022
Pub No 1

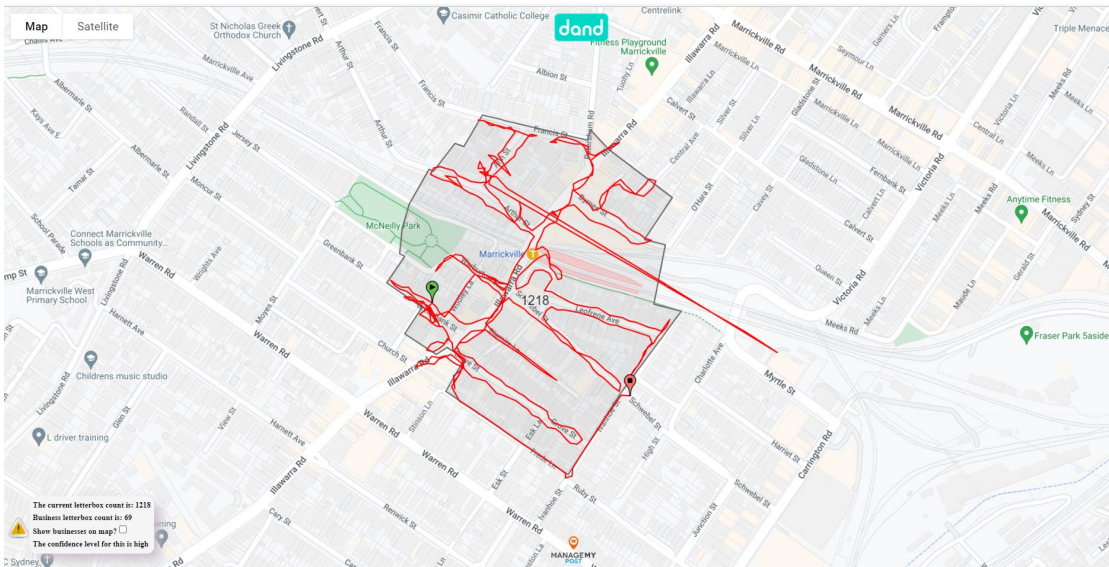
Privacy: Transport for NSW (TFNSW) is subject to the Privacy and Personal Information Protection Act 1988 (PPIPA) which requires that we comply with the Information Privacy Principles set out in the PPIPA Act. All information in correspondence is collected for the sole purpose of assisting in the delivery of this project. The information received, including names and addresses of respondents, may be published in subsequent documents unless a clear indication is given in the correspondence that all or part of that information is not to be published. Comments are not only disclose your personal information, without your consent. If authorized by the law, your personal information will be held by us at 27 Argyle Street, Parramatta. You have the right to access and correct the information if you believe that it is incorrect.

Appendix B – Notification tracking maps

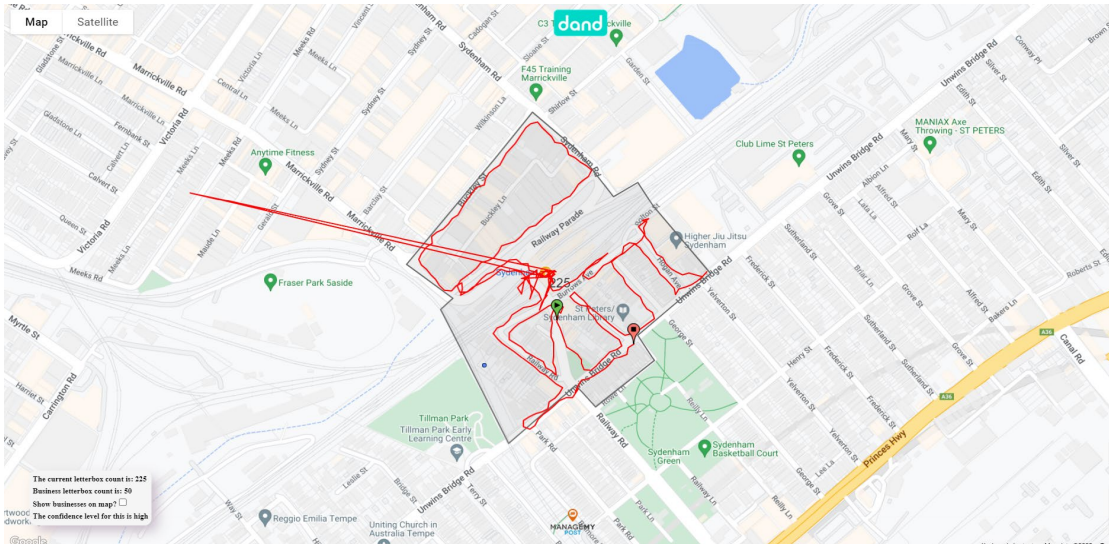
Dulwich Hill distribution



Marrickville distribution



Sydenham distribution



Appendix C – Temporary Transport Plan project web page

Community notifications and links for further information were placed online at www.mysydney.nsw.gov.au/SydenhamtoBankstown

Refer to the screenshot below:

