TRAFFIC & PARKING ASSESSMENT

RECLASSIFICATION OF COUNCIL LAND
SENIOR CITIZENS CENTRE & ADJOINING OFFICES

LOT 1 DP 1151446
1-3 BATHURST STREET, SINGLETON

PREPARED FOR: SINGLETON COUNCIL

AMENDED MAY 2021

20/041

TRAFFIC & PARKING ASSESSMENT
SINGLETON COUNCIL

RECLASSIFICATION OF LAND – SENIOR CITIZENS HALL & ADJOINING OFFICES
LOT 1 DP 1151446
1 -3 BATHURST STREET, SINGLETON

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QUALITY ASSURANCE

This document has been prepared, checked and released in accordance with the Quality Control Standards established by Intersect Traffic Pty Ltd.

Issue	Date	Description	By
A	25/08/20	Draft	JG
B	26/08/20	Edit	JG
C	12/05/21	Remove parking / Final Proof	JG
D	12/05/21	Approved	JG

This document has been authorised by

Date 12th May 2021

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1.0 INTRODUCTION

Intersect Traffic Pty Ltd has been engaged by Singleton Council to prepare a Traffic & Parking Assessment for the reclassification of land at Lot 1 in DP 1151446 – 1 – 3 Bathurst Street, Singleton. This land currently contains the Singleton Senior Citizens Centre and adjoining offices leased by Ourcare Services Ltd (Ourcare). Council has received an offer from Ourcare to purchase these buildings and for Council to sell the buildings the land first needs to be reclassified.

Ourcare is a not for profit organisation which provides a range of services to the community including community transport, meals on wheels, neighbour aid, home maintenance, home modification, domestic assistance and personal care. The services are currently provided for the Ourcare Services premises located on Part Lot 1 DP 1151446, 1 -3 Bathurst Street which is currently leased from Council.

The subject site also contains Singleton Senior Citizens Centre which is leased to Senior Citizens Centre Welfare Association Incorporated. The land forms part of the Reserve 30, known as Pole Park, and is classified as Community Land in accordance with the Local Government Act 1993.

An application to reclassify the land has been made to the Department of Planning, Industry and Environment (DoPIE). The DoPIE have requested further information with regards to traffic and parking specifically:

- The required number of parking spaces for this use/facility
- The number of allocated parking spaces for the building use within the adjoining public car park.

Specifically, the aim of this assessment then is to;

- Consider the parking impacts of the proposal.
- Determine the traffic generated by the development can be incorporated into the road system to ensure appropriate Levels of Service are maintained for all users; and
- Ensure that traffic-related safety risks are not introduced, or existing risks not exacerbated to an unsuitable level by the development.

The assessment has been carried out in accordance with the guidelines provided within the *RTA's Guide to Traffic Generating Developments*, Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking facilities* and *Singleton Council's DCP (2014)*.

2.0 SITE DESCRIPTION

The subject site is shown in ***Figure 1*** below. It is located on the western side of Bathurst Street, Singleton immediately south of William Street and within the Singleton CBD. The site currently contains the Singleton Senior Citizens Centre and Ourcare Services Pty Ltd offices.

The site has a total area of approximately 2,500 m^2 is titled Lot 1 DP 1151446 and is addressed as 1 – 3 Bathurst Street, Singleton. Pursuant to the Singleton LEP (2013) the site is zoned B4 Mixed Use.

The existing vehicular access to the public car park is provided from both Bathurst Street and an unnamed laneway at the rear of the site approximately 10 metres south of William Street. The laneway forms part of the Pitt Street public car park also at the rear of the site and runs along the western frontage of the site. These 7-metre-wide combined entry / exit driveways provides convenient and safe access to the 25 space on-site car park on the site. ***Photograph 1*** below shows the existing on-site development from Bathurst Street while ***Photograph 2*** shows the public laneway along the western boundary of the site and part of the Pitt Street public car park at the rear of the site.

Figure 1 – Site Location

Photograph 1 – Development site.

Photograph 2 – Public laneway and Pitt Street car park at rear of site.

3.0 ALTERNATE TRANSPORT MODES

Hunter Valley Buses run public transport (bus) services in the area. A review of the route maps and timetables for the service indicates that the site is serviced by public transport as shown in the bus route extracts shown in ***Figure 2*** below. The routes most convenient to the site are;

1. Route 401 – Singleton Town Service;
2. Route 402 – Singleton to Darlington and Hunterview; and
3. Routes 403 & 404 – Singleton to Singleton Heights.

This provides access to all residential areas within Singleton, the local rail network and major business and retail areas. The nearest bus stops are located west of the site on John Street and these are considered to be within convenient walking distance of the site.

A concrete and asphalt pedestrian footpath network exists around the site along Bathurst Street, William Street and Pitt Street through to John Street which has full width pedestrian footpaths along its length. This provides excellent pedestrian access around the site to all the commercial and retail shops / offices in the Singleton CBD and to the nearby public transport facilities (bus stops). Pedestrian crossing facilities of William Street and Pitt Street are available through marked crossings near John Street while a number of marked pedestrian crossings of John Street are located from Ryan Avenue to Pitt Street. Pedestrian crossing signals are also provided across John Street at its intersection with Ryan Avenue and Hunter Street approximately 200 metres north-west of the site. ***Photographs 3 and 4*** below show the pedestrian infrastructure around the site.

No on or off-road cycle ways were observed in the vicinity of the site with cyclists required to share travel lanes or parking lanes with other vehicles when accessing the site.

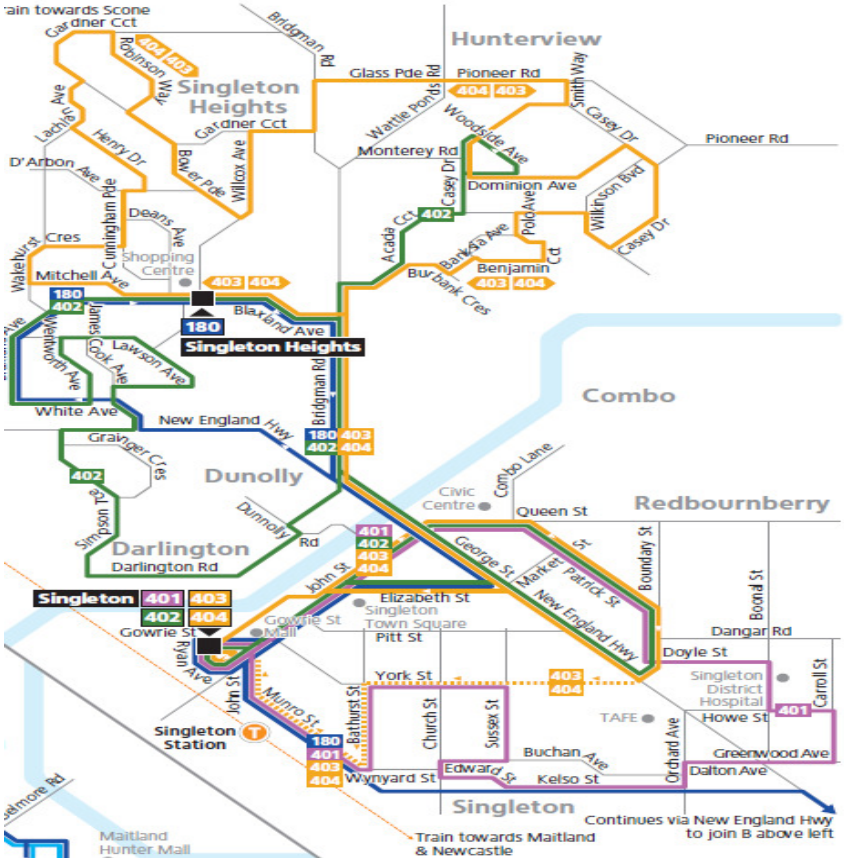


Figure 2 – Bus routes

Photograph 3 – Concrete footpath Bathurst Street along site frontage.

Photograph 4 – Pedestrian Crossing – John Street / Pitt Street intersection.

4.0 ROAD NETWORK

The local road network most impacted by the existing development on the site is considered to be John Street, William Street and Bathurst Street.

John Street is a classified regional road (MR 128) performing the function of a sub-arterial as it connects Singleton to sub-regions in the area and eventually to the Putty Road and western Sydney. It is under the care and control of Singleton Council however Council receives some funding assistance from Transport for NSW (TfNSW) for its maintenance.

Near the site John Street is within a high pedestrian activity area and a 40 km/h speed zone exists. John Street has recently been upgraded as part of a CBD enhancement project and has a kerb to kerb carriageway width of 11 metres between kerb and gutter which allows a 2.2 metre wide parking lane along each side of the road as well as a 3.3 metre wide travel lane in each direction. At the time of inspection John Street was observed to be in excellent condition as shown in ***Photograph 5*** below.

Photograph 5 – John Street near William Street

William Street is a local collector road which collects and distributes local traffic to the sub-arterial and arterial networks near the site as well as provide vehicular access to properties along its length. William Street is under the care and control of Singleton Council. William Street is subject to a 50 km/h speed zoning being a local urban street and has a light load limit on the street between John Street and Bathurst Street.

Near the site William Street has a sealed pavement 10 metres wide which allows 2.1 metre wide parking lanes along both sides of the road as well as 2.9 metre travel lanes in both directions. At the time of inspection William Street was found to be in good condition as shown in **Photograph 6** below.

Photograph 6 – William Street near the site

Bathurst Street is a local road with its major function being to provide vehicular access to properties along its length. Bathurst Street is under the care and control of Singleton Council and a 50 km/hr speed zone applies to the road. Bathurst Street is subject to a 50 km/h speed zoning being a local urban street.

Near the site Bathurst Street has a sealed pavement 10 metres wide which allows 2.1 metre wide parking lanes along both sides of the road as well as 2.9 metre travel lanes in both directions. At the time of inspection Bathurst Street was found to be in good condition as shown in **Photograph 7** below.

Photograph 7 – Bathurst Street near the site

5.0 TRAFFIC VOLUMES

Northern Transport Planning and Engineering (NTPE) on behalf of Intersect Traffic undertake manual intersection counts at the Ryan Avenue / John Street traffic signals and the John Street / William Street intersection during typical AM and PM peak traffic periods to determine the existing traffic volumes on the road network during peak hour periods. These counts were undertaken on Thursday 27th July 2020 with the peak hour periods found to be 8 am to 9 am and 4.15 pm to 4.30 pm. The traffic count data collected by NTPE are provided in ***Attachment A.***

The existing 2020 peak two-way mid-block traffic volumes extracted from this data and adopted in this assessment is shown below in ***Table 1.*** Ten years of background traffic growth at 1.5 % per annum (compound) has been added to the 2020 volumes to determine the predicted 2030 traffic volumes on the road network and these are also shown in ***Table 1***. The background traffic growth adopted in this assessment i.e. 1.5 % per annum is the background traffic growth rate used by TfNSW in all the Lower Hunter traffic modelling it undertakes.

Table 1 – 2020 traffic volumes and predicted 2030 traffic volumes.

Road	Section	2020 AM peak vtph	2020 PM peak vtph	2030 AM peak vtph	2030 PM peak vtph
John Street	north of Hunter Street	1024	1663	1188	1930
John Street	south of Hunter Street	478	740	555	859
Ryan Avenue	west of John Street	501	975	581	1132
John Street	north of William Street	481	739	558	858
John Street	south of William Street	463	733	537	851
William Street	east of John Street	114	192	139	234

6.0 ROAD CAPACITY

The capacity of urban roads is generally determined by the capacity of intersections. However, Table 4.3 of the *RTA's Guide to Traffic Generating Developments* provides some guidance on mid-block capacities for urban roads for a LoS C. This table is reproduced below.

Table 4.3
Typical mid-block capacities for urban roads with interrupted flow

Type of Road	One-Way Mid-block Lane Capacity (pcu/hr)	
Median or inner lane:	Divided Road	1,000
	Undivided Road	900
Outer or kerb lane:	With Adjacent Parking Lane	900
	Clearway Conditions	900
	Occasional Parked Cars	600
4 lane undivided:	Occasional Parked Cars	1,500
	Clearway Conditions	1,800
4 lane divided:	Clearway Conditions	1,900

Source: - RTA's Guide to Traffic Generating Developments (2002)

Therefore based on the road capacity being the point where two-way mid-block capacity first becomes a LoS C and noting the road network is typically a two way two lane road network the two-way mid-block capacity of the local road network is 2 x 900 vtph = 1,800 vtph. However in the case of John Street and Ryan Avenue as major sub-arterial roads it is still considered acceptable to have a LoS D on the road due to its higher order function within the road hierarchy. Typically one way lane volumes of up to 1,100 vtph are still considered acceptable and the two-way mid-block capacity of such roads is 2,200 vtph. Therefore the adopted two way mid-block road capacities road capacities within this assessment are.

- John Street and Ryan Avenue – 2,200 vtph; and
- William Street and Bathurst Street 1,800 vtph.

7.0 DEVELOPMENT PROPOSAL

The proposed development involves the reclassification of Lot 1 in DP 1151446 – 1 – 3 Bathurst Street, Singleton from community land to operational land to enable Singleton Council to sell the property to Ourcare Services Pty Ltd who currently lease the office building on the site. The proposal and sale of the property will not result in any operational changes for buildings on the site with all current services and facilities maintained and continuing to be managed by Ourcare and the Senior Citizens Welfare Association.

8.0 TRAFFIC IMPACT ASSESSMENT

In considering the impact of the proposal on the local and state road network it is noted that the reclassification of the land does not change the operation of the existing buildings on the site. The Ourcare offices will continue to be used to manage the services provided by Ourcare while the Senior Citizens Centre will continue to be used for Senior Citizen and private functions. Therefore there will be no increase in traffic volumes generated by the site or change to the trip distributions to and from the site for this traffic. As such it is considered that to demonstrate that the existing road network around the site is operating satisfactorily would satisfy the requirement of the brief described below'

- *Determine the traffic generated by the development can be incorporated into the road system to ensure appropriate Levels of Service are maintained for all users; and*

The two areas to demonstrate the road network already satisfactorily incorporates traffic generated by the site are;

1. Two way mid-block capacity; and
2. Intersection capacity.

In regard to two way mid-block capacity, ***Table 2*** below demonstrates that the existing traffic volumes recorded for the adjacent local and state road network and the predicted 2030 traffic volumes for the local and state road network are all below the two way mid-block road capacity determined for the local and state road network. Therefore it can be concluded that the existing local and state road network can satisfactorily accommodate the existing two-way mid-block traffic volumes and has sufficient capacity to also accommodate ten years of background traffic growth through to 2030.

Table 2 – Two-way mid-block road capacity assessment.

Road	Section	2020 AM peak vtph	2020 PM peak vtph	2030 AM peak vtph	2030 PM peak vtph	Capacity vtph
John Street	north of Hunter Street	1024	1663	1188	1930	2000
John Street	south of Hunter Street	478	740	555	859	2000
Ryan Avenue	west of John Street	501	975	581	1132	2000
John Street	north of William Street	481	739	558	858	2000
John Street	south of William Street	463	733	537	851	2000
William Street	east of John Street	114	192	139	234	1800

In terms of intersection capacity it is noted that the majority of intersections on the local road network along Bathurst Street and William Street likely to be used for access to the site were observed to operate with uninterrupted flow conditions with little or no delay from vehicles using these intersections therefore it is reasonable to conclude that the existing local road network intersections have sufficient capacity to cater for traffic flows from the proposed development.

In terms of connection to the state road network it is considered the two main intersections through which the majority of traffic generated by the development on the site would be the John Street / William Street give way controlled T-intersection and the John Street / Ryan Avenue / Hunter Street signal controlled intersection. To demonstrate these are working satisfactorily and would continue to work satisfactorily in the future these intersections have been modelled using the recently released Sidra Intersection 9 modelling software. This software is a micro-analytical program which identifies "Level of Service" (LoS) criteria for intersection analysis which range from LoS A to LoS F. Assessment is then based on the LoS requirements of the TfNSW shown below:

Table 4.2
Level of service criteria for intersections

Level of Service	Average Delay per Vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way & Stop Signs
A	< 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays & spare capacity	Acceptable delays & spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity & accident study required
E	57 to 70	At capacity; at signals, incidents will cause excessive delays Roundabouts require other control mode	At capacity, requires other control mode

Source: - RTA's Guide to Traffic Generating Developments (2002).

In undertaking this assessment the following assumptions were made.

- The intersection is to remain as currently constructed.
- Traffic data used was sourced by NTPE in July 2020.
- A background traffic growth rate of 1.5 % per annum (compound) has been adopted.

The results of the modelling are summarised for the 'all vehicles' case with the worst delay and level of service provided for the sign controlled intersection within ***Tables 3 & 4*** below while the full Sidra movement summary tables provided in ***Attachment B.***

Table 3 – John St / Ryan Ave / Hunter St signalised intersection – Sidra Results Summary

Model	Deg. Satn (v/c)	Average Delay (s)	Average Level of Service	95 % back of queue length (cars)
2020 AM	0.895	26.0	B	21.2
2020 PM	0.894	36.1	C	33.7
2030 AM	0.873	29.4	C	29.7
2030 PM	0.909	44.0	D	48.5

The modelling shows that whilst the John Street / Ryan Avenue / Hunter Street signalised intersection is a busy intersection during peak periods the intersection still operates within the criteria set by TfNSW for satisfactory operation and the cycle times are practical ranging from 75 seconds to 105 seconds. However in the PM peak by 2030 the intersection is approaching capacity and an accident study should be undertaken to determine if the intersection should be upgraded.

Table 4 – John St / William Street give way intersection – Sidra Results Summary

Model	Deg. Satn (v/c)	Worst Average Delay (s)	Worst Level of Service	95 % back of queue length (cars)
2020 AM	0.179	5.8	A	0.3
2020 PM	0.238	7.6	A	1.3
2030 AM	0.208	6.2	A	0.4
2030 PM	0.281	8.5	A	1.7

This modelling therefore shows the existing intersection operates satisfactorily and will continue to doe so through to 2030 with 1.5 % per annum (compound) background traffic growth. The degree of saturation, average delay and queue lengths at the intersection will remain well within the acceptable criteria set by TfNSW.

Overall it is concluded the existing road network can suitably cater for the traffic generated by existing development on the site.

9.0 ON-SITE CAR PARKING

9.1 – Singleton Council DCP (2014) requirements

On-site car parking provision needs to be in accordance with *AS2890.1 – 2004 parking facilities – Part 1 Off street car parking* and *Singleton Council's DCP (2014).*

The peak parking demand rates specified within Council's DCP that would be applied to the existing development on the site are;

Office Space (Ourcare Offices)

1 space per 40 m^2 GFA and 1 bicycle space per 5 car spaces.

Function Centre (Senior Citizens Centre)

0.5 per staff plus 1 space per 20 m^2 GFA.

Note there is no change to the servicing arrangements for the site as a result of this development therefore no specific changes to servicing areas is required. The existing buildings GFA have been estimated from the aerial photographs of the site (source Near Map) and are as follows.

- Ourcare offices – 420 m^2 GFA
- Senior Citizens Centre – 600 m^2 GFA (no staff).

Therefore the required on-site car parking for the development based on the Singleton DCP can therefore be calculated as;

On-site car parking = 420 / 40 + 600 / 20 = 10.5 + 30 = 41 car spaces.

Therefore it is concluded that 41 spaces within the Pitt Street public car park will need to be assigned to the existing offices and Senior Citizens building to comply with Council's DCP.

Having observed the existing car parking provided on the site it is also concluded that this on-site car parking is compliant with the requirements of Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking*.

9.2 – Parking Surveys.

To determine if there is spare capacity within the Pitt Street public car park a parking survey using historical aerial photographs (Near Map) and a single beat car park count (to confirm aerial photograph findings) was undertaken. The results are shown below in ***Tables 5 and 6.***

Table 5 - Spot Parking Survey

Date	Time	Maximum no. of vacant car parks in Pitt Street car park
Wednesday 8th July 2020	10 am - 11 am	61
	12 pm - 1 pm	50
Tuesday 25th August 2020	1 pm - 2 pm	52
	3 pm - 4 pm	64

Table 6 - Near map Parking Survey

Date	No. vacant car parks in Pitt Street car park
Sunday 3rd May 2020	79
Monday 10th September 2018	39
Monday 11th January 2016	61
Friday 6th March 2015	35
Tuesday 1st July 2014	45

The parking surveys undertaken for the project were undertaken while the Ourcare services offices were operating therefore the parking demand from the office (estimated to be 11 spaces) was being surveyed. The Senior Citizens building was not being used therefore the actual vacancy number required in the car park is only 30 spaces (41 – 11). The results indicate that there is likely to be at least 35 spaces available to cater for any parking overflow generated by the private use of Senior Citizens Centre during normal business hours. The survey also determined that little use of the Pitt Street public car park occurs on weekends indicating that there is sufficient overflow car parking already available within the Pitt Street public car park to cater for overflow parking from the Senior Citizens Centre if operating at full capacity.

Overall based on the results of the parking surveys it is reasonable to conclude that there is sufficient spare capacity within the Pitt Street public car park to allow up to 41 spaces being allocated to the Ourcare Offices and Senior Citizens Building without the car park being likely to reach capacity at any time during the weekdays or weekends.

10.0 VEHICULAR ACCESS

The existing Pitt Street public car parking is serviced by access crossings to both Bathurst Street and the unnamed laneway within the Pitt Street public car park. These are combined entry / exit driveways approximately 7 metres wide which satisfy the criteria for a category 2 access within Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking*. Further Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking Table 3.1* requires an access to a car park servicing a short term 25 space car park accessed off a local road to be a minimum Category 1 access. Therefore the existing vehicular access exceeds this requirement. Further the accesses are not within a prohibited area for access as shown in *Figure 3.1* of Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking*. Vehicular and pedestrian sight lines from the accesses are also in accordance with Figure 3.2 of

Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking* which requires a minimum 45 metres sight distance for a 50 km/h speed frontage.

Overall it is concluded the existing vehicular accesses to the Pitt Street public car park is fully compliant with Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking* therefore are satisfactory for use by the development on the site, providing a suitably safe access to the site.

11.0 PEDESTRIAN FACILITIES

The development would generate some pedestrian traffic on the local road network as staff and visitors access the site from other areas of the CBD or from public transport stops. However the existing pedestrian facilities provided in the area are considered satisfactory for the current level of usage generated by the development and no improvements or additions to the public footpath network is required to provide a suitably safe pedestrian network in the vicinity of the site.

12.0 ALTERNATE TRANSPORT MODE FACILITIES

The proposed development may generate some patronage of the existing public transport system (buses) servicing the site. It is noted the site is already well serviced by public transport with bus routes and bus stops being within convenient walking distance of the site. Therefore, changes to the existing public transport system or additional infrastructure is not required.

Similarly the development does not generate any significant bicycle traffic therefore no nexus exists for the provision of additional cycle ways near the site.

13.0 CONCLUSIONS

This traffic and parking assessment for the reclassification of land at Lot 1 in DP 1151446 – 1 – 3 Bathurst Street, Singleton has determined the following:

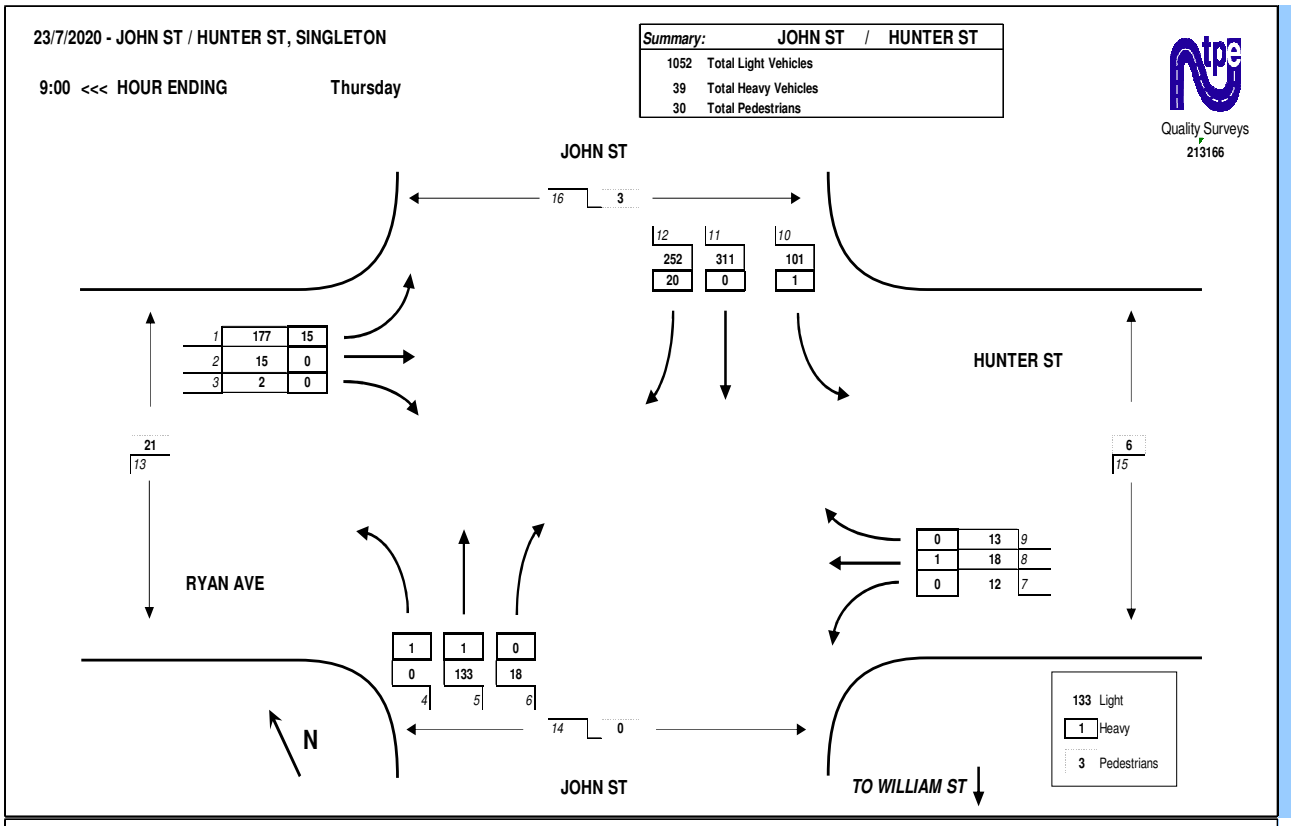
- The existing local and state road network can satisfactorily accommodate the existing two-way mid-block traffic volumes, including development traffic, and has sufficient capacity to also accommodate ten years of background traffic growth through to 2030.
- The existing state and local road network can suitably cater for the traffic generated by existing development on the site with all intersections on the road network in close vicinity of the currently operating satisfactorily and continuing to operate satisfactorily with ten years background traffic growth through to 2030.
- There is sufficient spare capacity within the Pitt Street public car park to allow a total of 41 spaces to be allocated to the Ourcare Offices and Senior Citizens building without the public car park reaching its capacity.
- That the existing Pitt Street public car parking is compliant with the requirements of Australian Standard AS2890.1-2004 Parking facilities – Part 1 Off-street car parking.
- The existing vehicular accesses to the Pitt Street public car park is fully compliant with Australian Standard *AS2890.1-2004 Parking facilities – Part 1 Off-street car parking* therefore are satisfactory for use by the development on the site, providing a suitably safe access to the site.
- The development would generate some pedestrian traffic on the local road network as staff and visitors access the site from other areas of the CBD or from public transport stops. However the existing pedestrian facilities provided in the area are considered satisfactory for the current level of usage generated by the development and no improvements or additions to the public footpath network is required to provide a suitably safe pedestrian network in the vicinity of the site.
- It is noted the site is already well serviced by public transport with bus routes and bus stops being within convenient walking distance of the site. Therefore, changes to the existing public transport system or additional infrastructure is not required.
- The development does not generate any significant bicycle traffic therefore no nexus exists for the provision of additional cycle ways near the site.

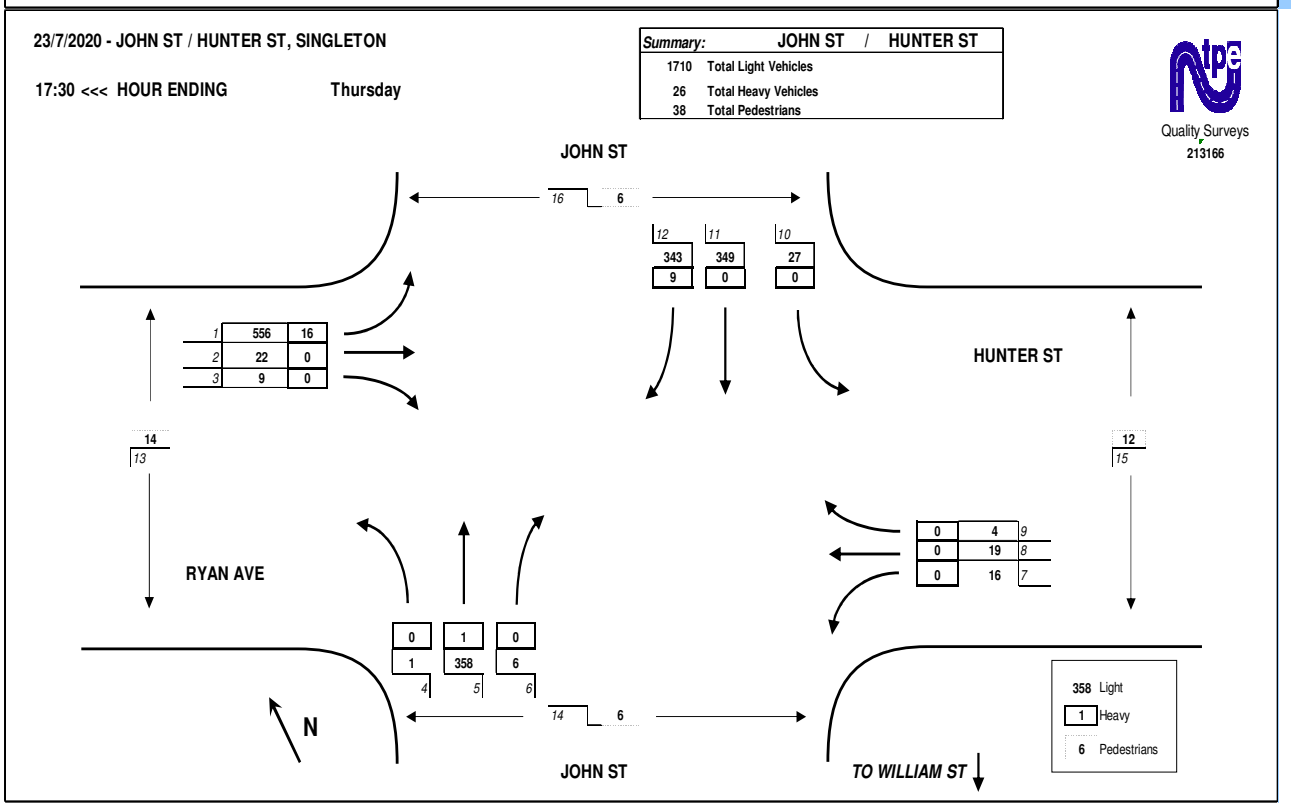
14.0 RECOMMENDATION

Having carried out this traffic and parking assessment for the reclassification of land at Lot 1 in DP 1151446 – 1 – 3 Bathurst Street, Singleton, it is recommended that the proposal can be supported from a traffic and parking perspective as the existing road network satisfactorily caters for the existing development on the site, there is sufficient available car parking within the Pitt Street public car park to allow 41 spaces to be allocated to the development and there is no unacceptable road safety risk associated with the existing vehicular access to the site. The existing development therefore already complies with the requirements of Singleton Council, TfNSW and Australian Standards in regard to the traffic, parking and access arrangements for the site.

JR Garry BE (Civil), Masters of Traffic
Director
Intersect Traffic Pty Ltd

ATTACHMENT A
TRAFFIC COUNT DATA


23/7/2020 - JOHN ST / HUNTER ST, SINGLETON
9:00 <<< HOUR ENDING Thursday
Summary: JOHN ST / HUNTER ST
1052 Total Light Vehicles
39 Total Heavy Vehicles
30 Total Pedestrians
Quality Surveys
213166
JOHN ST
HUNTER ST
RYAN AVE
JOHN ST
TO WILLIAM ST
N
133 Light
1 Heavy
3 Pedestrians

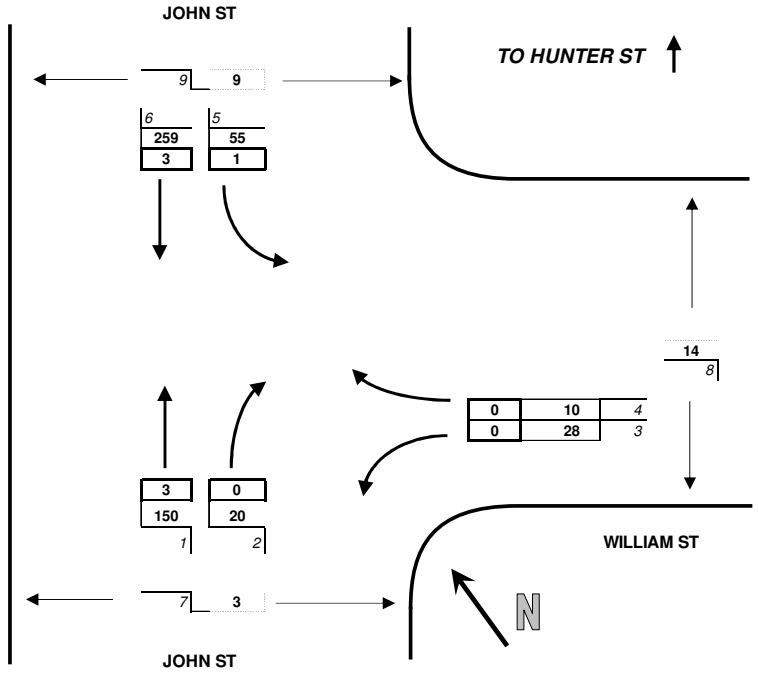

23/7/2020 - JOHN ST / HUNTER ST, SINGLETON
17:30 <<< HOUR ENDING Thursday
Summary: JOHN ST / HUNTER ST
1710 Total Light Vehicles
26 Total Heavy Vehicles
38 Total Pedestrians
Quality Surveys
213166
JOHN ST
HUNTER ST
RYAN AVE
JOHN ST
TO WILLIAM ST
N
358 Light
1 Heavy
6 Pedestrians

23/7/2020 - JOHN ST / WILLIAM ST, SINGLETON

9:00 <<< HOUR ENDING **Thursday**

Summary:	JOHN ST / WILLIAM ST
522	Total Light Vehicles
7	Total Heavy Vehicles
26	Total Pedestrians

Quality Surveys 213166



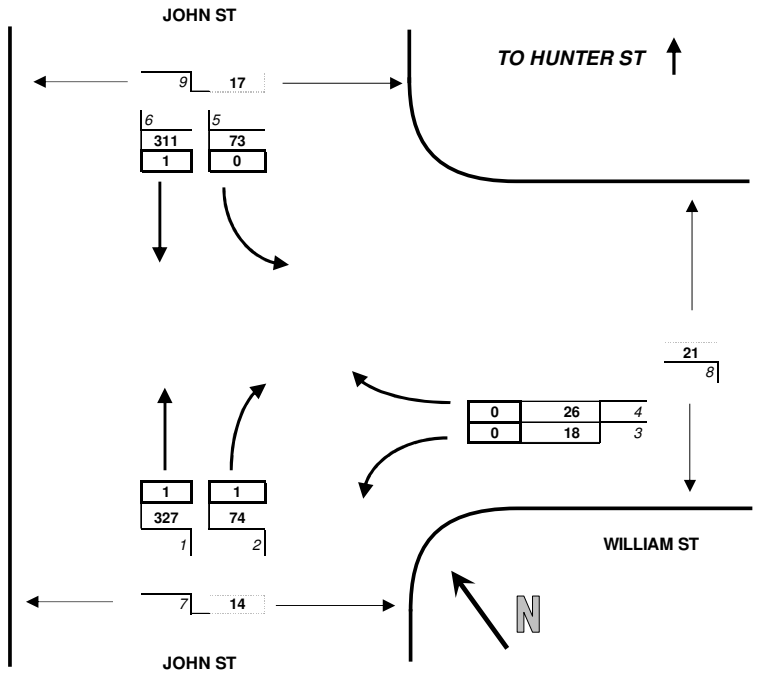
20	Light Vehicles
0	Heavy Vehicles
14	Pedestrians

23/7/2020 - JOHN ST / WILLIAM ST, SINGLETON

17:15 <<< HOUR ENDING **Thursday**

Summary:	JOHN ST / WILLIAM ST
829	Total Light Vehicles
3	Total Heavy Vehicles
52	Total Pedestrians

Quality Surveys 213166



74	Light Vehicles
1	Heavy Vehicles
21	Pedestrians

ATTACHMENT B
SIDRA MOVEMENT SUMMARY TABLES

MOVEMENT SUMMARY

Site: 101 [2020AM (Site Folder: General)]

John Street / William Street / Hunter Street
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 75 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hunter Street														
4a	L1	12	0	13	0.0	0.045	30.8	LOS C	0.5	3.2	0.85	0.66	0.85	29.8
6a	R1	19	1	20	5.3	0.225	38.4	LOS C	1.2	8.3	0.96	0.71	0.96	28.2
6b	R3	13	0	14	0.0	0.225	41.6	LOS C	1.2	8.3	0.97	0.71	0.97	27.7
Approach		44	1	46	2.3	0.225	37.3	LOS C	1.2	8.3	0.93	0.70	0.93	28.5
NorthEast: John Street														
24b	L3	102	1	107	1.0	*0.167	10.2	LOS A	1.5	10.5	0.58	0.64	0.58	36.7
25	T1	311	0	327	0.0	*0.833	24.3	LOS B	21.2	152.8	0.87	0.91	1.03	31.1
26	R2	272	20	286	7.4	0.833	29.5	LOS C	21.2	152.8	0.90	0.93	1.07	30.8
Approach		685	21	721	3.1	0.833	24.3	LOS B	21.2	152.8	0.84	0.88	0.98	31.7
NorthWest: Ryan Avenue														
27	L2	192	15	202	7.8	0.196	11.2	LOS A	3.4	25.6	0.50	0.65	0.50	35.7
27a	L1	15	0	16	0.0	0.117	38.5	LOS C	0.6	4.5	0.96	0.68	0.96	28.4
29	R2	2	0	2	0.0	*0.117	40.1	LOS C	0.6	4.5	0.96	0.68	0.96	28.0
Approach		209	15	220	7.2	0.196	13.4	LOS A	3.4	25.6	0.53	0.65	0.53	35.0
SouthWest: John Street														
30	L2	1	1	1	100.0	0.895	51.2	LOS D	7.1	50.2	1.00	1.13	1.60	26.2
31	T1	134	1	141	0.7	*0.895	47.2	LOS D	7.1	50.2	1.00	1.13	1.60	26.3
32a	R1	18	0	19	0.0	0.895	49.4	LOS D	7.1	50.2	1.00	1.13	1.60	26.5
Approach		153	2	161	1.3	0.895	47.5	LOS D	7.1	50.2	1.00	1.13	1.60	26.3
All Vehicles		1091	39	1148	3.6	0.895	26.0	LOS B	21.2	152.8	0.81	0.86	0.98	31.2

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)

MOVEMENT SUMMARY

Site: 101 [2020PM (Site Folder: General)]

John Street / William Street / Hunter Street
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 105 seconds (Site Practical Cycle Time)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hunter Street														
4a	L1	16	0	17	0.0	0.044	35.4	LOS C	0.7	4.8	0.79	0.66	0.79	28.7
6a	R1	19	0	20	0.0	0.220	55.2	LOS D	1.2	8.5	0.98	0.70	0.98	25.0
6b	R3	4	0	4	0.0	0.220	58.4	LOS E	1.2	8.5	0.99	0.70	0.99	24.7
Approach		39	0	41	0.0	0.220	47.4	LOS D	1.2	8.5	0.90	0.69	0.90	26.4
NorthEast: John Street														
24b	L3	27	0	28	0.0	*0.179	22.1	LOS B	4.1	28.7	0.65	0.59	0.65	33.5
25	T1	349	0	367	0.0	*0.894	34.1	LOS C	33.7	238.8	0.83	0.86	0.98	28.8
26	R2	352	9	371	2.6	0.894	45.0	LOS D	33.7	238.8	0.92	0.98	1.13	27.1
Approach		728	9	766	1.2	0.894	38.9	LOS C	33.7	238.8	0.87	0.91	1.04	28.1
NorthWest: Ryan Avenue														
27	L2	572	16	602	2.8	0.631	20.9	LOS B	20.9	149.7	0.74	0.78	0.74	32.7
27a	L1	22	0	23	0.0	0.301	56.6	LOS E	1.7	12.0	0.99	0.72	0.99	24.8
29	R2	9	0	9	0.0	*0.301	58.1	LOS E	1.7	12.0	0.99	0.72	0.99	24.6
Approach		603	16	635	2.7	0.631	22.8	LOS B	20.9	149.7	0.75	0.78	0.75	32.1
SouthWest: John Street														
30	L2	1	1	1	100.0	0.868	55.2	LOS D	21.8	153.2	1.00	1.04	1.23	25.5
31	T1	359	1	378	0.3	*0.868	51.2	LOS D	21.8	153.2	1.00	1.04	1.23	25.6
32a	R1	6	0	6	0.0	0.868	53.4	LOS D	21.8	153.2	1.00	1.04	1.23	25.8
Approach		366	2	385	0.5	0.868	51.3	LOS D	21.8	153.2	1.00	1.04	1.23	25.6
All Vehicles		1736	27	1827	1.6	0.894	36.1	LOS C	33.7	238.8	0.86	0.89	0.98	28.7

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)

MOVEMENT SUMMARY

Site: 101 [2030AM (Site Folder: General)]

John Street / William Street / Hunter Street
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 90 seconds (Site Practical Cycle Time)
Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hunter Street														
4a	L1	12	0	15	0.0	0.062	38.9	LOS C	0.7	4.7	0.88	0.68	0.88	28.0
6a	R1	19	1	23	5.3	0.312	47.2	LOS D[11]	1.6	11.7	0.97	0.72	0.97	26.4
6b	R3	13	0	16	0.0	0.312	50.6	LOS D[11]	1.6	11.7	0.99	0.72	0.99	25.9
Approach		44	1	54	2.3	0.312	45.9	LOS D[11]	1.6	11.7	0.95	0.71	0.95	26.7
NorthEast: John Street														
24b	L3	102	1	125	1.0	*0.174	10.1	LOS A	1.9	13.6	0.53	0.63	0.53	36.7
25	T1	311	0	380	0.0	*0.871	28.4	LOS B	29.7	214.2	0.84	0.91	1.01	30.1
26	R2	272	20	332	7.4	0.871	33.9	LOS C	29.7	214.2	0.87	0.93	1.05	29.7
Approach		685	21	837	3.1	0.871	27.9	LOS B	29.7	214.2	0.81	0.88	0.95	30.7
NorthWest: Ryan Avenue														
27	L2	192	15	235	7.8	0.214	11.3	LOS A	4.4	33.1	0.46	0.64	0.46	35.7
27a	L1	15	0	18	0.0	0.164	47.2	LOS D[11]	0.9	6.4	0.97	0.69	0.97	26.6
29	R2	2	0	2	0.0	*0.164	48.8	LOS D[11]	0.9	6.4	0.97	0.69	0.97	26.3
Approach		209	15	255	7.2	0.214	14.3	LOS A	4.4	33.1	0.51	0.64	0.51	34.7
SouthWest: John Street														
30	L2	1	1	1	100.0	0.873	56.1	LOS D[11]	9.4	66.8	1.00	1.08	1.42	25.3
31	T1	134	1	164	0.7	*0.873	52.1	LOS D[11]	9.4	66.8	1.00	1.08	1.42	25.4
32a	R1	18	0	22	0.0	0.873	54.2	LOS D[11]	9.4	66.8	1.00	1.08	1.42	25.6
Approach		153	2	187	1.3	0.873	52.4	LOS D[11]	9.4	66.8	1.00	1.08	1.42	25.4
All Vehicles		1091	39	1333	3.6	0.873	29.4	LOS C	29.7	214.2	0.78	0.85	0.93	30.3

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.

11 Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.
* Critical Movement (Signal Timing)

MOVEMENT SUMMARY

Site: 101 [2030PM (Site Folder: General)]

John Street / William Street / Hunter Street
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 150 seconds (Site Practical Cycle Time)
Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hunter Street														
4a	L1	16	0	20	0.0	0.081	38.8	LOS C	0.9	6.6	0.70	0.65	0.70	27.9
6a	R1	19	0	23	0.0	0.380	82.8	LOS F[11]	2.1	15.0	1.00	0.72	1.00	21.1
6b	R3	4	0	5	0.0	0.380	84.9	LOS F[11]	2.1	15.0	1.00	0.72	1.00	20.9
Approach		39	0	48	0.0	0.380	65.0	LOS E[11]	2.1	15.0	0.88	0.69	0.88	23.4
NorthEast: John Street														
24b	L3	27	0	33	0.0	*0.180	23.8	LOS B	6.2	43.6	0.57	0.54	0.57	33.0
25	T1	349	0	426	0.0	*0.899	36.1	LOS C	48.5	343.9	0.77	0.78	0.85	28.3
26	R2	352	9	430	2.6	0.899	47.4	LOS D[11]	48.5	343.9	0.87	0.90	0.98	26.7
Approach		728	9	889	1.2	0.899	41.1	LOS C	48.5	343.9	0.81	0.83	0.90	27.6
NorthWest: Ryan Avenue														
27	L2	572	16	699	2.8	0.682	25.3	LOS B	33.6	240.9	0.73	0.79	0.73	31.4
27a	L1	22	0	27	0.0	0.499	83.2	LOS F[11]	2.9	20.3	1.00	0.73	1.00	21.0
29	R2	9	0	11	0.0	*0.499	84.8	LOS F[11]	2.9	20.3	1.00	0.73	1.00	20.8
Approach		603	16	737	2.7	0.682	28.3	LOS B	33.6	240.9	0.74	0.79	0.74	30.6
SouthWest: John Street														
30	L2	1	1	1	100.0	0.909	77.2	LOS F[11]	36.6	257.1	1.00	1.04	1.21	22.1
31	T1	359	1	439	0.3	*0.909	73.2	LOS F[11]	36.6	257.1	1.00	1.04	1.21	22.2
32a	R1	6	0	7	0.0	0.909	75.4	LOS F[11]	36.6	257.1	1.00	1.04	1.21	22.3
Approach		366	2	447	0.5	0.909	73.2	LOS F[11]	36.6	257.1	1.00	1.04	1.21	22.2
All Vehicles		1736	27	2121	1.6	0.909	44.0	LOS D[11]	48.5	343.9	0.83	0.86	0.91	27.0

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.

11 Level of Service is worse than the Level of Service Target specified in the Parameter Settings dialog.
* Critical Movement (Signal Timing)

MOVEMENT SUMMARY

Site: 101 [2020 AM (Site Folder: General)]

John Street / William Street Give Way
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: William Street														
4a	L1	28	0	29	0.0	0.034	4.5	LOS A	0.2	1.2	0.34	0.50	0.34	37.8
6b	R3	10	0	11	0.0	0.034	5.8	LOS A	0.2	1.2	0.34	0.50	0.34	36.5
Approach		38	0	40	0.0	0.034	4.8	LOS A	0.2	1.2	0.34	0.50	0.34	37.6
NorthEast: Jeff Garry														
24b	L3	56	1	59	1.8	0.179	4.1	LOS A	0.0	0.0	0.00	0.09	0.00	40.2
25	T1	262	3	276	1.1	0.179	0.0	LOS A	0.0	0.0	0.00	0.09	0.00	39.4
Approach		318	4	335	1.3	0.179	0.7	NA	0.0	0.0	0.00	0.09	0.00	39.6
SouthWest: John Street														
31	T1	153	3	161	2.0	0.099	0.3	LOS A	0.3	2.1	0.15	0.05	0.15	39.4
32a	R1	20	0	21	0.0	0.099	4.0	LOS A	0.3	2.1	0.15	0.05	0.15	39.7
Approach		173	3	182	1.7	0.099	0.8	NA	0.3	2.1	0.15	0.05	0.15	39.4
All Vehicles		529	7	557	1.3	0.179	1.0	NA	0.3	2.1	0.07	0.11	0.07	39.3

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: INTERSECT TRAFFIC PTY LTD | Licence: PLUS / 1PC | Processed: Wednesday, 26 August 2020 9:13:09 AM
Project: Not Saved

MOVEMENT SUMMARY

Site: 101 [2020 PM (Site Folder: General)]

John Street / William Street Give Way
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: William Street														
4a	L1	18	0	19	0.0	0.056	4.7	LOS A	0.2	1.6	0.40	0.61	0.40	37.2
6b	R3	26	0	27	0.0	0.056	7.6	LOS A	0.2	1.6	0.40	0.61	0.40	35.5
Approach		44	0	46	0.0	0.056	6.4	LOS A	0.2	1.6	0.40	0.61	0.40	36.4
NorthEast: Jeff Garry														
24b	L3	73	0	77	0.0	0.216	4.1	LOS A	0.0	0.0	0.00	0.10	0.00	40.1
25	T1	312	1	328	0.3	0.216	0.0	LOS A	0.0	0.0	0.00	0.10	0.00	39.4
Approach		385	1	405	0.3	0.216	0.8	NA	0.0	0.0	0.00	0.10	0.00	39.5
SouthWest: John Street														
31	T1	328	1	345	0.3	0.238	0.8	LOS A	1.3	9.1	0.28	0.09	0.28	38.9
32a	R1	75	1	79	1.3	0.238	4.7	LOS A	1.3	9.1	0.28	0.09	0.28	39.4
Approach		403	2	424	0.5	0.238	1.6	NA	1.3	9.1	0.28	0.09	0.28	39.0
All Vehicles		832	3	876	0.4	0.238	1.5	NA	1.3	9.1	0.16	0.12	0.16	39.1

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Organisation: INTERSECT TRAFFIC PTY LTD | Licence: PLUS / 1PC | Processed: Wednesday, 26 August 2020 11:16:20 AM
Project: C:\Work Documents\Projects\2020\2020.041 - Singleton Council Land reclassifiaction\Sidra\William Street\John_William.sip9

MOVEMENT SUMMARY

Site: 101 [2030 AM (Site Folder: General)]

John Street / William Street Give Way
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: William Street														
4a	L1	28	0	34	0.0	0.041	4.7	LOS A	0.2	1.5	0.37	0.52	0.37	37.7
6b	R3	10	0	12	0.0	0.041	6.2	LOS A	0.2	1.5	0.37	0.52	0.37	36.3
Approach		38	0	46	0.0	0.041	5.1	LOS A	0.2	1.5	0.37	0.52	0.37	37.5
NorthEast: Jeff Garry														
24b	L3	56	1	68	1.8	0.208	4.1	LOS A	0.0	0.0	0.00	0.09	0.00	40.2
25	T1	262	3	320	1.1	0.208	0.0	LOS A	0.0	0.0	0.00	0.09	0.00	39.4
Approach		318	4	388	1.3	0.208	0.7	NA	0.0	0.0	0.00	0.09	0.00	39.6
SouthWest: John Street														
31	T1	153	3	187	2.0	0.115	0.4	LOS A	0.4	2.6	0.16	0.05	0.16	39.3
32a	R1	20	0	24	0.0	0.115	4.3	LOS A	0.4	2.6	0.16	0.05	0.16	39.6
Approach		173	3	211	1.7	0.115	0.9	NA	0.4	2.6	0.16	0.05	0.16	39.4
All Vehicles		529	7	646	1.3	0.208	1.1	NA	0.4	2.6	0.08	0.11	0.08	39.3

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

▽ Site: 101 [2030 PM (Site Folder: General)]

John Street / William Street Give Way
Site Category: (None)
Give-Way (Two-Way)
Design Life Analysis (Final Year): Results for 10 years

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: William Street														
4a	L1	18	0	22	0.0	0.072	5.0	LOS A	0.3	2.0	0.44	0.65	0.44	37.0
6b	R3	26	0	32	0.0	0.072	8.5	LOS A	0.3	2.0	0.44	0.65	0.44	35.2
Approach		44	0	54	0.0	0.072	7.1	LOS A	0.3	2.0	0.44	0.65	0.44	36.1
NorthEast: Jeff Garry														
24b	L3	73	0	89	0.0	0.251	4.1	LOS A	0.0	0.0	0.00	0.10	0.00	40.1
25	T1	312	1	381	0.3	0.251	0.0	LOS A	0.0	0.0	0.00	0.10	0.00	39.4
Approach		385	1	470	0.3	0.251	0.8	NA	0.0	0.0	0.00	0.10	0.00	39.5
SouthWest: John Street														
31	T1	328	1	401	0.3	0.281	1.1	LOS A	1.7	11.6	0.32	0.09	0.32	38.7
32a	R1	75	1	92	1.3	0.281	5.3	LOS A	1.7	11.6	0.32	0.09	0.32	39.2
Approach		403	2	492	0.5	0.281	1.9	NA	1.7	11.6	0.32	0.09	0.32	38.8
All Vehicles		832	3	1016	0.4	0.281	1.7	NA	1.7	11.6	0.18	0.12	0.18	38.9

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.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Queue Model: SIDRA Standard.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.