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Gwynneville Estate – Traffic and Transport Assessment

Homes NSW

21 February 2025





**Gwynneville Estate – Traffic and Transport
Assessment**

21 February 2025

Prepared for:

Homes NSW

Prepared by:

Stantec Consulting Services Inc.



GWYNNEVILLE ESTATE – TRAFFIC AND TRANSPORT ASSESSMENT | February 2025

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ACKNOWLEDGMENT OF COUNTRY

In the spirit of reconciliation, Stantec acknowledges the Traditional Custodians of country throughout Australia and their connections to land, sea and community. We pay our respect to their Elders past and present, and extend that respect to all Aboriginal and Torres Strait Islander peoples.

Limitations

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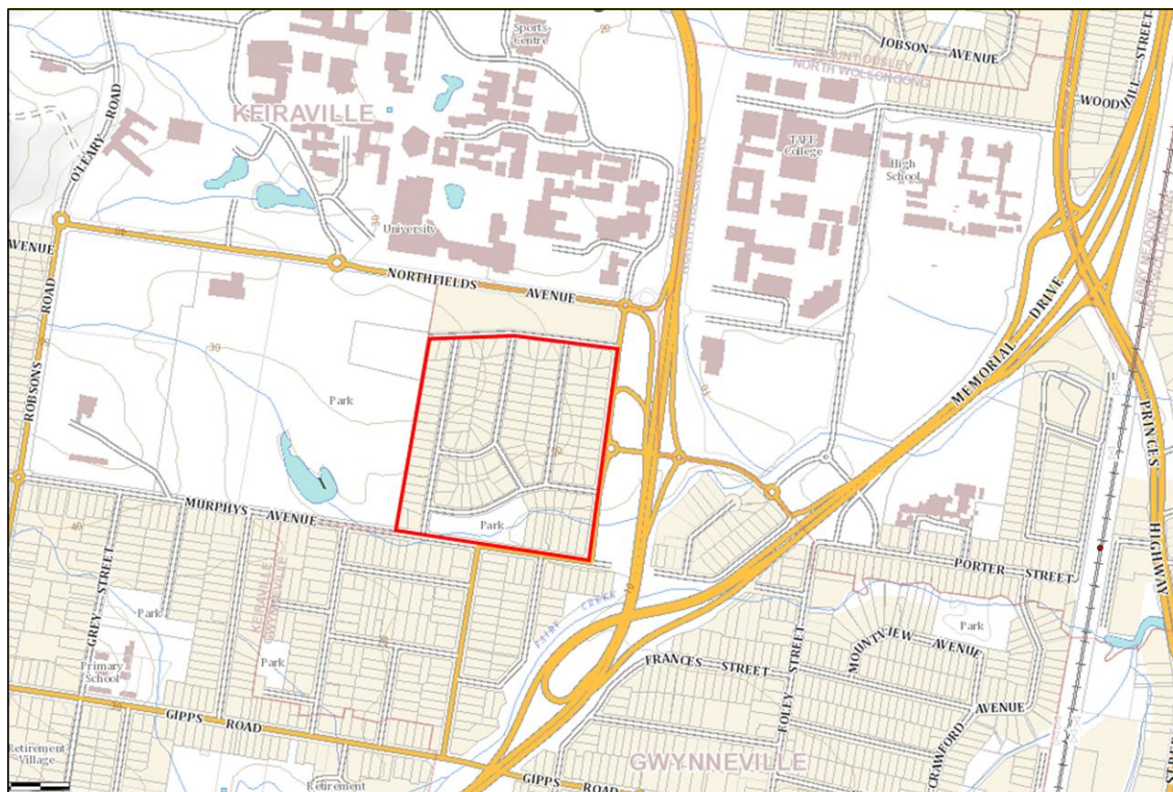
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GWYNNEVILLE PRECINCT – PROJECT SUMMARY

This report has been prepared by Stantec Australia Pty Ltd (Stantec) on behalf Homes NSW (formerly the NSW Land and Housing Corporation - LAHC) to support a planning proposal for urban renewal of land at Gwynneville, NSW.

Covering approximately 9 hectares in area, the Gwynneville precinct is located 2km north-west of the Wollongong CBD. The site sits immediately south of the University of Wollongong, and east of the Botanic Gardens. Irvine Street makes up the site's eastern boundary, with Murphy Avenue to the south. Refer Figure 1 below.

Figure 1



Source: SIX Maps, 2023

The Northfields Avenue Bus Interchange is approximately 150m northwest of the site, and North Wollongong Railway Station is approximately 1km to the east.

Many of the existing dwellings in Gwynneville were constructed by the NSW Government during the 1950s. The precinct is made up of predominantly single storey detached dwellings set in a modified grid-type street layout.

The Gwynneville precinct has been identified as a location capable of supporting more social, affordable and diverse private market housing for the Illawarra community, and to contribute to addressing NSW's housing crisis.

The site currently comprises approximately 131 residential lots, consisting of:

- A total of 79 social dwelling units on 75 individual lots owned by Homes NSW; and
- Approximately 56 privately owned dwelling units on 56 individual lots.

Over 60% of the homes in the precinct are owned by Homes NSW, providing an opportunity to consider additional density while taking into account key constraints such as traffic, views to and from Mount Keira as well potential to increase and embellish existing areas of open space.

Redevelopment of the Gwynneville precinct requires a formal rezoning process to confirm an amended land use zone; increased FSR and building heights, and result in improvements to the current street network, pedestrian connectivity, open space / parkland, and public amenity.

Homes NSW propose amending the Wollongong Local Environmental Plan 2009 (WLEP) to help deliver a diverse range of housing typologies which will include additional social and affordable housing, market housing products and seniors housing, as well as opportunities to develop build-to-rent, key worker housing and student accommodation.

The planning proposal intends to change the current zone of the land from R2 Low Density Residential to R4 High Density Residential, with new and expanded areas of RE1 Public Recreation. This will create the opportunity for more low to mid- rise apartments in the precinct.

The base FSR of 0.5:1 and the height control of 9m that currently applies to the precinct is not proposed change. However, building height and FSR incentives will facilitate site amalgamation to create lots more capable of accommodating increased density and providing amenity. Height and FSR bonuses will be contingent upon achieving design excellence outcomes, providing public benefits such as social and affordable housing, and increased public open space within the precinct.

Homes NSW aims to create a high-amenity, walkable residential neighbourhood with an increased density and choice of affordable and diverse housing options that provide for a broad range of community needs and family types - including students, people on low incomes, people with disability and seniors.

New residential development will enable increased housing choices within in a well-connected location benefiting from frequent free shuttle bus services operating between University of Wollongong, North Wollongong railway station and a multitude of destinations including the city centre and hospital.

The planning proposal was submitted to Wollongong City Council on 19 July 2024, which was then placed on preliminary notification for public and agency comment. Following this notification period, Council and Homes NSW worked together to establish key amendments to the proposal and master plan that formed the basis of the reporting to Council in November 2024. The planning proposal was unanimously approved by Council on 25 November 2024 to proceed to the next step in the approval process, i.e. Gateway Determination. The revised proposal and masterplan included revisions which relate to key sites and implementation, built form outcomes, and public open space delivery. This report has been updated to reflect the outcomes of the amended planning proposal and master plan, current as at February 2025.

EXECUTIVE SUMMARY

This traffic and transport assessment has been prepared to support a planning proposal for urban renewal of land at Gwynneville, NSW. The Gwynneville precinct has been identified as a location capable of supporting more social, affordable and diverse private market housing for the Illawarra community, and to contribute to addressing NSW's housing crisis. Homes NSW propose amending the Wollongong Local Environmental Plan 2009 (WLEP) to help deliver a diverse range of housing typologies which will include additional social and affordable housing, market housing products and seniors housing, as well as opportunities to develop build-to-rent, key worker housing and student accommodation. This traffic and transport assessment has addressed some of the preliminary transport considerations and traffic impacts expected to result from an amended land use, with outcomes and recommendations as presented in this report expected to be further refined in consultation with local authorities as part of the planning approvals process.

This traffic and transport assessment has assessed an indicative concept proposal which allows for approximately 1,250 dwellings, whilst this model assumes 30% social and affordable housing, Homes NSW has committed to the delivery of 50% social and affordable housing (i.e. 625 dwellings) and 50% market / private sale homes (i.e. 625 dwellings) at Gwynneville. As a result, the outputs of this transport model can be viewed as "conservative" and the traffic impacts from the development will be less than anticipated at this preliminary stage. Each Development Application will be required to confirm their individual traffic impact with a Traffic Impact Assessment, or equivalent document.

A traffic impact assessment was undertaken of 11 key intersections surrounding the subject site, generally coinciding with the cordon boundary of the precinct. Based on the key assumptions documented within this report, expected development traffic generation within the precinct at key points in time, network wide assumptions relating to general background growth and potential impacts of the Mount Ousley interchange upgrade, key findings are as follows:

- the primary pinch points on the road network include Irvine Street and University Avenue in the morning peak, and Irvine Street, Ring Road and Northfields Avenue in the afternoon peak
- both of these locations (and the resulting Irvine Street corridor) are already exceeding accepted capacity thresholds under existing background traffic conditions
- the operational performance of these intersections is expected to further degrade as traffic volumes increase, which is a result of background traffic growth and expected impacts resulting from the Mount Ousley interchange upgrade
- additional traffic as a result of the planning proposal is also expected to contribute to the degradation in operational performance and as a result, mitigating treatments have been investigated as part of this report
- it is noted that all other intersections within the study network are currently providing adequate levels of service based on existing surveyed traffic demand, with this expected to continue into the future, inclusive of development generated traffic.

Based on the results of the traffic modelling which reviewed forecast degrees of saturation, level of service and 95th percentile queues, mitigation treatments are suggested at the Ring Road / Northfields Avenue roundabout and the Irvine Road / University Avenue roundabout. A summary of the recommended improvements are as follows:

- a new high entry angle approach to Irvine Street (southbound) to facilitate easy access to University Avenue and reduce queuing on Irvine Street
- an additional lane on Irvine Street (southbound) by removing the current on-street parking provision, increasing the capacity of Irvine Street
- finalising the 2-lane provision of the Ring Road / Northfields Avenue roundabout to facilitate improved performance on Ring Road and Northfields Avenue.

Overall, the recommended mitigation works are expected to result in improved network performance which is expected to accommodate the additional traffic demands expected to be generated by the proposal.

In addition to the investigation of traffic impacts and associated mitigation measures as recommended above, additional recommendations have been made with respect to the overall layout of the indicative concept proposal. These recommendations are summarised below.

RECOMMENDATIONS

This report addresses the issue of traffic and transport and has been prepared in support of the Gwynneville Precinct Planning Proposal.

Whilst the analysis from this report assumes 30% social and affordable housing split, Homes NSW has committed to the delivery of 50% social and affordable housing (i.e. 625 dwellings) and 50% market / private sale homes (i.e. 625 dwellings) at Gwynneville. As a result, the findings from the transport model can be viewed as "conservative" and the traffic impacts from the development will be less than anticipated at this preliminary stage. Each Development Application will be required to confirm their individual traffic impact with a Traffic Impact Assessment, or equivalent document.

This report includes the following recommendations:

Vehicle Access

- direct vehicle access to Irvine Street is not recommended and is instead recommended to be consolidated onto the nearby lower volume roads such as Hoskins Street
- vehicle access design is to be developed in accordance with applicable Australian Standards, Council's Development Control Plan and other relevant guidelines in accordance with good traffic engineering practice.

Carparking

- specific car parking provisions are yet to be determined and will be confirmed in a later design phase, however, it is recommended that the car parking provisions carefully considers the balance of supply so as to achieve the aspired mode share for the precinct but does not exacerbate existing on-street car parking issues.

Pedestrian Facilities

- it is recommended that additional pedestrian facilities should be provided on all road frontages within the precinct to facilitate active travel
- a review of the existing pedestrian crossing facilities on Northfields Avenue should be undertaken in accordance with the Austroads 'Pedestrian Crossing Facility Selection Tool' to ensure that the most suitable crossing facilities are present to encourage Active Transport mode shift where possible
- it is further recommended that a "Walk Network Plan" is prepared to identify the key pedestrian desire lines within the precinct following full development, and appropriate pedestrian crossing treatments for key routes to ensure safe and efficient access.

Bicycle Facilities

- specific bicycle parking provisions are yet to be determined and will be confirmed in a later design phase, however, it is recommended that statutory bike parking requirements are met (at a minimum) and high-quality end-of-trip provisions are provided internal to the development to help assist with increasing active travel mode share.

Refuse Collection and Heavy Vehicle Servicing

- service vehicle and loading bay provisions are yet to be determined and will be confirmed in a later design phase, however, it is recommended that all service vehicle requirements and associated loading bay provisions (parking aisle width, ramp grades, etc.) are to be provided as per the requirements noted in AS2890.2 and Council's Development Control Plan.

Traffic Impact Mitigation

- based on the results of the traffic modelling which reviewed forecast degrees of saturation, level of service and 95th percentile queues, mitigation treatments are suggested at the Ring Road / Northfields Avenue roundabout and the Irvine Road / University Avenue roundabout. A summary of the recommended improvements are as follows:
 - a new high entry angle approach to Irvine Street (southbound) to facilitate easy access to University Avenue and reduce queuing on Irvine Street
 - an additional lane on Irvine Street (southbound) by removing the current on-street parking provision, increasing the capacity of Irvine Street
 - finalising the 2-lane provision of the Ring Road / Northfields Avenue roundabout to facilitate improved performance on Ring Road and Northfields Avenue.

Green Travel Plan

- it is recommended that a Green Travel Plan is developed as part of future design stages to ensure better transport arrangements for people living within the site.

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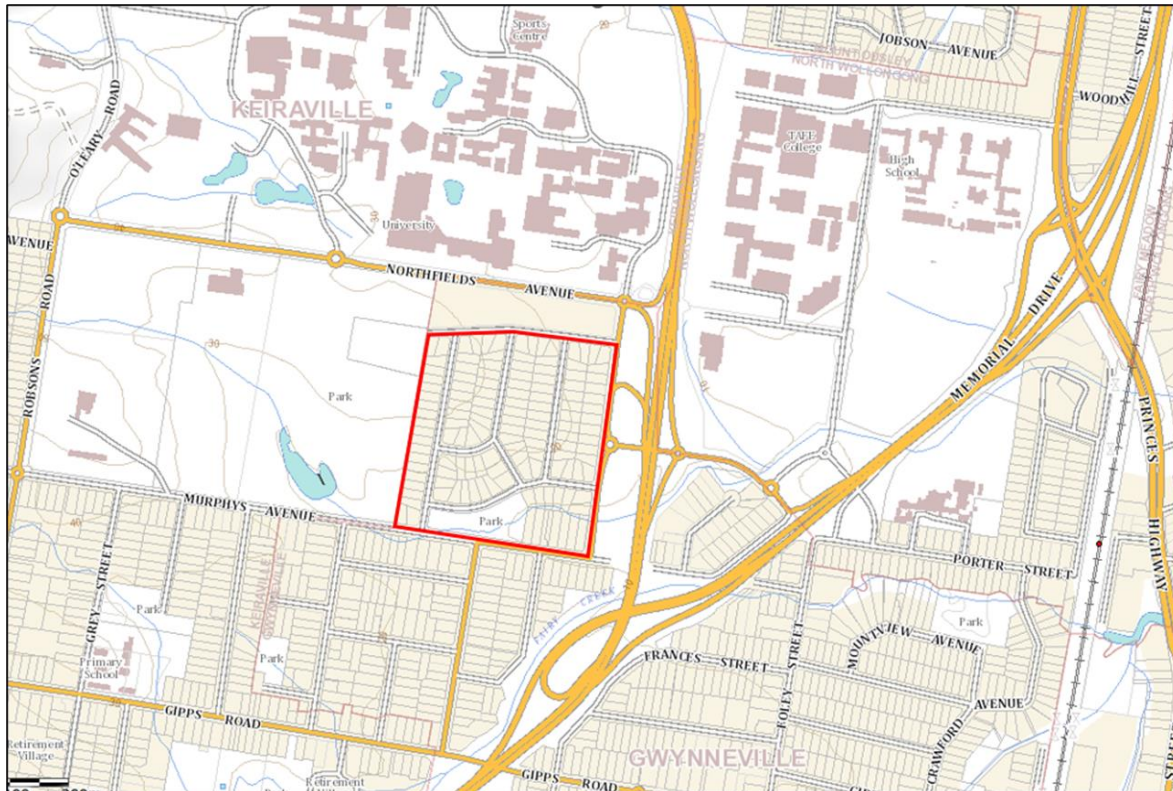
1.0 INTRODUCTION

1.1 OVERVIEW

This report has been prepared by Stantec Australia on behalf of Homes NSW (formerly the NSW Land and Housing Corporation (LAHC)) to support a planning proposal for urban renewal of land at Gwynneville, NSW.

Covering approximately 9 hectares in area, the Gwynneville precinct is located 2km north-west of the Wollongong CBD. The site sits immediately south of the University of Wollongong, and east of the Botanic Gardens. Irvine Street makes up the site's eastern boundary, with Murphy Avenue to the south. Refer Figure 1-1 below.

Figure 1-1: Site Overview



Source: SixMaps 2023

The Northfields Avenue Bus Interchange is approximately 150m northwest of the site, and North Wollongong Railway Station is approximately 1km to the east.

Many of the existing dwellings in Gwynneville were constructed by the NSW Government during the 1950s. The precinct is made up of predominantly single storey detached dwellings set in a modified grid-type street layout.

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The planning proposal was submitted to Wollongong City Council on 19 July 2024, which was then placed on preliminary notification for public and agency comment. Following this notification period, Council and Homes NSW worked together to establish key amendments to the proposal and master plan that formed the basis of the reporting to Council in November 2024. The planning proposal was unanimously approved by Council on 25 November 2024 to proceed to the next step in the approval process, i.e. Gateway Determination. The revised proposal and masterplan included revisions which relate to key sites and implementation, built form outcomes, and public open space delivery. This report has been updated to reflect the outcomes of the amended planning proposal and master plan, current as at February 2025.

1.2 PURPOSE OF THIS REPORT

This report sets out an assessment of the anticipated transport implications of the proposal, including consideration of the following:

- existing traffic and parking conditions surrounding the site
- indicative concept proposal and potential dwelling mix
- proposed vehicle access, car parking & service vehicle arrangements
- the traffic generating characteristics of the proposal
- the transport impact of the proposal on the surrounding road network
- green travel planning framework, objectives and site-specific measures.

1.3 REFERENCES

In preparing this report, reference has been made to the following:

- an inspection of the site and its surrounds, undertaken by Stantec on Thursday 04/05/23
- Wollongong Development Control Plan (DCP) 2009, version date 18/08/22
- Australian/New Zealand Standard, Parking Facilities (AS 2890)
- traffic and pedestrian count surveys undertaken by Matrix Traffic and Transport Data, as referenced in the context of this report
- indicative plans for the proposal prepared by Gyde Consulting as referenced in the context of this report
- Keiraville-Gwynneville Access and Movement Study, prepared by Cardno Pty Ltd, dated 25/11/20
- Keiraville-Gwynneville Access and Movement Study Car Parking Strategy, prepared by Cardno Pty Ltd, dated 25/11/20
- UoW Transport Strategy Report, prepared by Cardno Pty Ltd, dated 11/08/17
- Transport and Access Action Plan 2022-2024, prepared by the UoW
- Transport and Access Action Plan Progress Report 2020, prepared by the UoW, dated 02/21
- other documents and data as referenced in this report.



2.0 EXISTING CONDITIONS

2.1 LOCATION

The subject site is in Gwynneville, Wollongong, and is bound by Madoline Street, Irvine Street, Paulsgrove Street, and Murphys Avenue as shown in Figure 2-1. The site is located within close proximity to two significant land uses, being the UoW to the north, and the Wollongong Botanic Gardens to the east. The Wollongong Town Centre is located approximately 2km to the south-east, and the North Wollongong Train Station is located approximately 1km to the east.

The site has an area of approximately 9 hectares and is currently zoned as R2-Low Density Residential. The properties surrounding the site are primarily zoned for Educational Establishments with a mix of Public Recreational and Low-Density Residential zones.

Figure 2-1: Subject Site and Its Environs



Source: Nearmap

2.2 ROAD NETWORK

2.2.1 ROAD HIERARCHY

Roads are classified according to the functions they perform. The main purpose of defining a road's functional class is to provide a basis for establishing the policies which guide the management of the road according to their intended service or qualities.

In terms of functional road classification, State roads are strategically important as they form the primary network used for the movement of people and goods between regions, and throughout the State. Transport for NSW (formally Roads and Maritime) is responsible for funding, prioritising and carrying out works on State roads.

State roads generally include roads classified as freeways, state highways, and main roads under the Roads Act 1993. Transport for NSW defines four levels in a typical functional road hierarchy, ranking from high mobility and low accessibility, to high accessibility and low mobility. These road classes are:

Arterial Roads – Controlled by Transport for NSW, typically no limit in flow and designed to carry vehicles long distance between regional centres.

Sub-Arterial Roads – Managed by either Council or Transport for NSW under a joint agreement. Typically, their operating capacity ranges between 10,000 and 20,000 vehicles per day, and their aim is to carry through traffic between specific areas in a sub region or provide connectivity from arterial road routes (regional links).

Collector Roads – Managed by Council. Provide connectivity between local sites and the sub-arterial road network, and within Wollongong, typically carry between 3,000 and 10,000 vehicles per day.

Local Roads – Managed by Council. Provide direct access to properties and the collector road system, and within Wollongong, typically carry between 300 and 3,000 vehicles per day.

2.2.2 SURROUNDING ROAD NETWORK

Characteristics of key roads on the surrounding road network proximate to the proposal are summarised in Table 2-1.

Table 2-1: Existing Road Network

Road Name	Jurisdiction	Posted Speed Limit	Lane formation	Existing Carriageway Width	Existing Reserve Width	Kerbside Parking ^[1]
Irvine Street	Council	50 km/h	2-lane, 2-way. 3-lane, 2-way road between Madoline St and Spearing Parade	~12.5m	~18.5m	Restricted parking from Madoline St and Spearing Parade
Hoskins Street			Two-lane, Two-way	~7.0m	~15m	Restricted parking on both sides of the road
Sidney Street				~7.0m	14.5m	
Paulsgrove Street				~7.0m	~16m	
Madoline Street				~7.0m	~16m	Parking is restricted only on the northern side
Leahy Crescent				~7.5m	~18m	
Spearing Parade				~7.5m	~14.5m	No parking from Paulsgrove Street to Sidney Street. Restricted Parking otherwise
Murphys Avenue				~11.0m	~20m	Predominately unrestricted parking

[1] Discussed further in Section 2.5.

2.3 EXISTING CONDITIONS

2.3.1 SURVEY VOLUMES

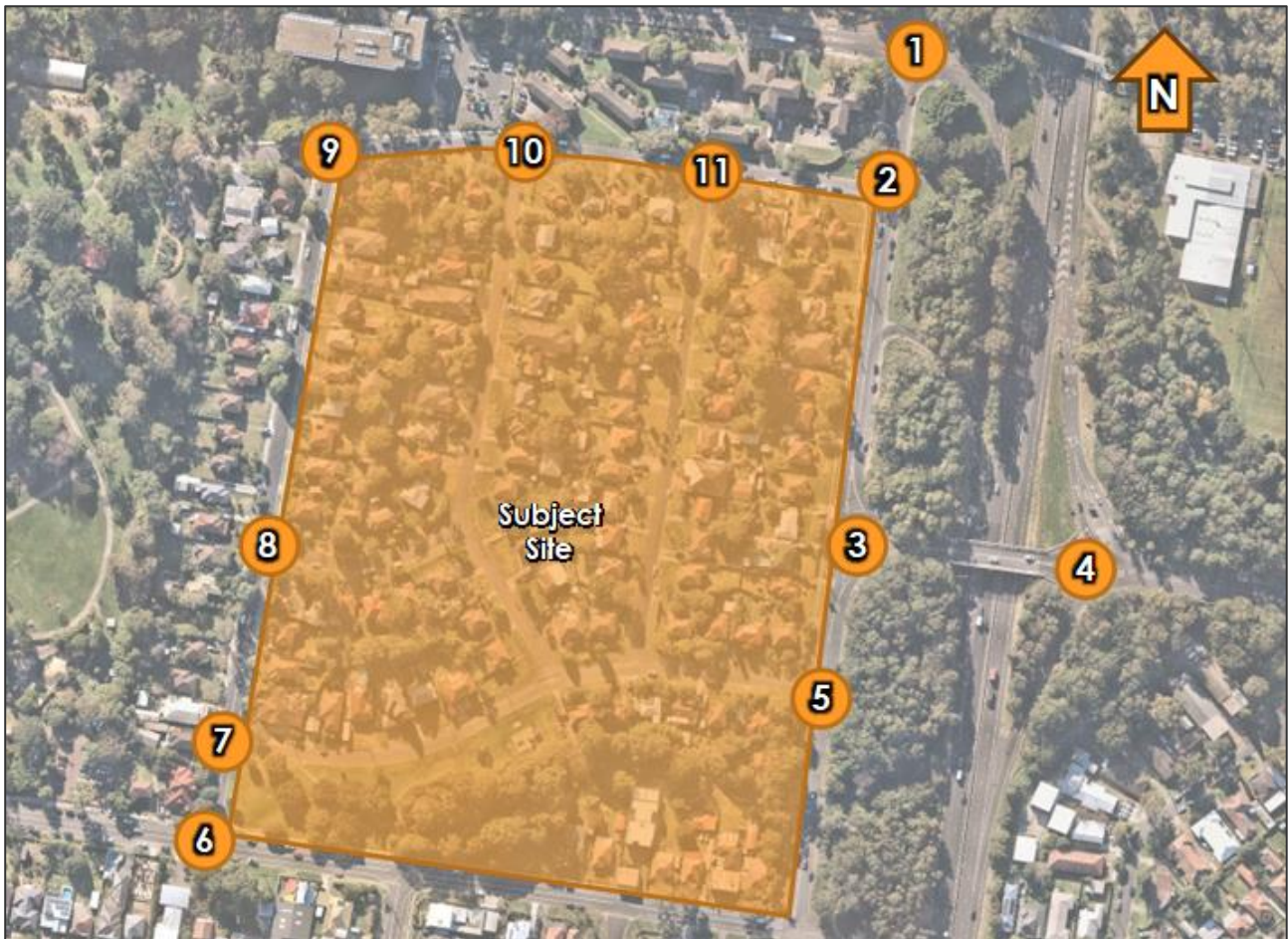
In order to assess the potential traffic impacts of the proposal on the local road network, the following intersection surveys were conducted:

- Northfields Avenue / Ring Road/ Irvine Street / Princess Motorway Northbound Off-ramp roundabout
- Irvine Street / Madoline Street
- Irvine Street / University Avenue
- University Avenue / Princes Motorway Southbound On/Off Ramps
- Irvine Street / Spearing Parade
- Murphys Avenue / Paulsgrove Street
- Paulsgrove Street / Spearing Parade
- Paulsgrove Street / Leahy Court
- Paulsgrove Street / Madoline Street
- Madoline Street / Sidney Street
- Madoline Street / Hoskins Street.



A summary of the surveyed intersection locations is outlined in Figure 2-2.

Figure 2-2: Surveyed intersections



All intersections were surveyed from 7:00AM – 10:00AM and 4:00PM – 7:00PM, with the network peak hours calculated to be:

- AM Peak: 8:00 AM to 9:00 AM
- PM Peak: 4:30 PM to 5:30 PM

2.3.2 INTERSECTION OPERATION

The operation of key intersections within the study area have been assessed using SIDRA Intersection v9.0 (SIDRA), a modelling package which calculates intersection performance and vehicle delay. SIDRA determines the average delay that vehicles encounter and provides a measure of the level of service. Table 2-2 shows the criteria that SIDRA adopts in assessing the level of service.

Table 2-2: SIDRA Level of Service Criteria

Level of Service (LOS)	Average Delay per vehicle (sec/veh)	Traffic Signals, Roundabout	Give Way & Stop Sign
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Near capacity	Near capacity, accident study required
E	57 to 70	At capacity, at signals incidents will cause excessive delays	At capacity, requires other control mode

Level of Service (LOS)	Average Delay per vehicle (sec/veh)	Traffic Signals, Roundabout	Give Way & Stop Sign
F	Greater than 70	Extra capacity required	Extreme delay, major treatment required

It is noted that there are multiple factors in assessing the suitability and performance of an intersection. Along with the average delay, these factors also include the degree of saturation (DOS) and the 95th percentile queue of the worst-performing movement of the intersection. In assessing the operational performance of intersection, failure conditions require mitigation when one or more of the following performance parameters noted in Table 2-3 have been exceeded.

Table 2-3: SIDRA Intersection Performance Parameters

Intersection Control Type	Degree of Saturation (DOS)	Queues
Priority	< 0.80	Within Storage Lanes
Roundabout	< 0.85	Within Storage Lanes
Signals	< 0.90	Within Storage Lanes

2.3.3 INTERSECTION OPERATION

Table 2-4 presents a summary of the existing operation of the surveyed intersections, with the background traffic surveys presented in **Appendix B** and full results presented in **Appendix C** of this report.

Table 2-4: Intersection Operations - Existing Conditions (2023)

Intersection	Peak	Degree of Saturation (DOS)	Level of Service (LOS)	Average Delay (sec)	Average / 95 th Percentile Queue (m)
Northfields Ave / Irvine St / Ring Rd / Princes Mwy ramps*	AM	0.60	A	9 sec	12m
	PM	0.81	B	16 sec	37m
Irvine St / Madoline St*	AM	0.20	A	1 sec	1m
	PM	0.43	A	1 sec	1m
Irvine St / University Ave*	AM	0.72	A	8 sec	25m
	PM	0.88	A	10 sec	55m
University Ave / Princes Mwy ramps*	AM	0.63	A	9 sec	18m
	PM	0.65	A	7 sec	26m
Irvine St / Spearing Pde	AM	0.18	A	0 sec	1m
	PM	0.17	A	1 sec	1m
Murphys Ave / Paulsgrove St	AM	0.14	A	1 sec	2m
	PM	0.14	A	1 sec	1m
Paulsgrove St / Spearing Pde	AM	0.02	A	3 sec	0m
	PM	0.02	A	3 sec	1m
Paulsgrove St / Leahy Cres	AM	0.01	A	2 sec	0m
	PM	0.01	A	3 sec	0m
Paulsgrove St / Madoline St	AM	0.02	A	5 sec	0m
	PM	0.01	A	5 sec	0m
Madoline St / Sidney St	AM	0.02	A	2 sec	0m
	PM	0.01	A	2 sec	0m
Madoline St / Hoskins St	AM	0.02	A	1 sec	0m
	PM	0.02	A	2 sec	0m

* Recorded Queue Lengths are the average queue lengths for these intersections



Based on the results outlined in Table 2-4, analysis of the existing conditions SIDRA model shows that the intersections generally operate satisfactorily during the surveyed peak hours, with the exception of the Irvine Street / University Avenue roundabout, which is currently reaching its capacity threshold.

2.3.4 NETWORK OPERATION

Given the proximity of the intersections on Irvine Street, the following intersections have been modelled in a network configuration:

- Northfields Avenue / Ring Road/ Irvine Street / Princess Motorway Northbound Off-ramp roundabout
- Irvine Street / Madoline Street
- Irvine Street / University Avenue
- University Avenue / Princes Motorway Southbound On/Off Ramps.

This network has been modelled to better replicate the observed queuing and determine the potential future traffic impacts on the local network. Table 2-5 denotes the DOS on each intersection leg of the network, and Figure 2-3 outlines which colour is representative of the corresponding DOS.

Figure 2-3: DOS Criteria

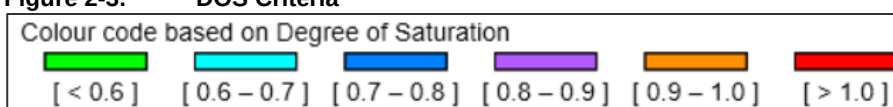
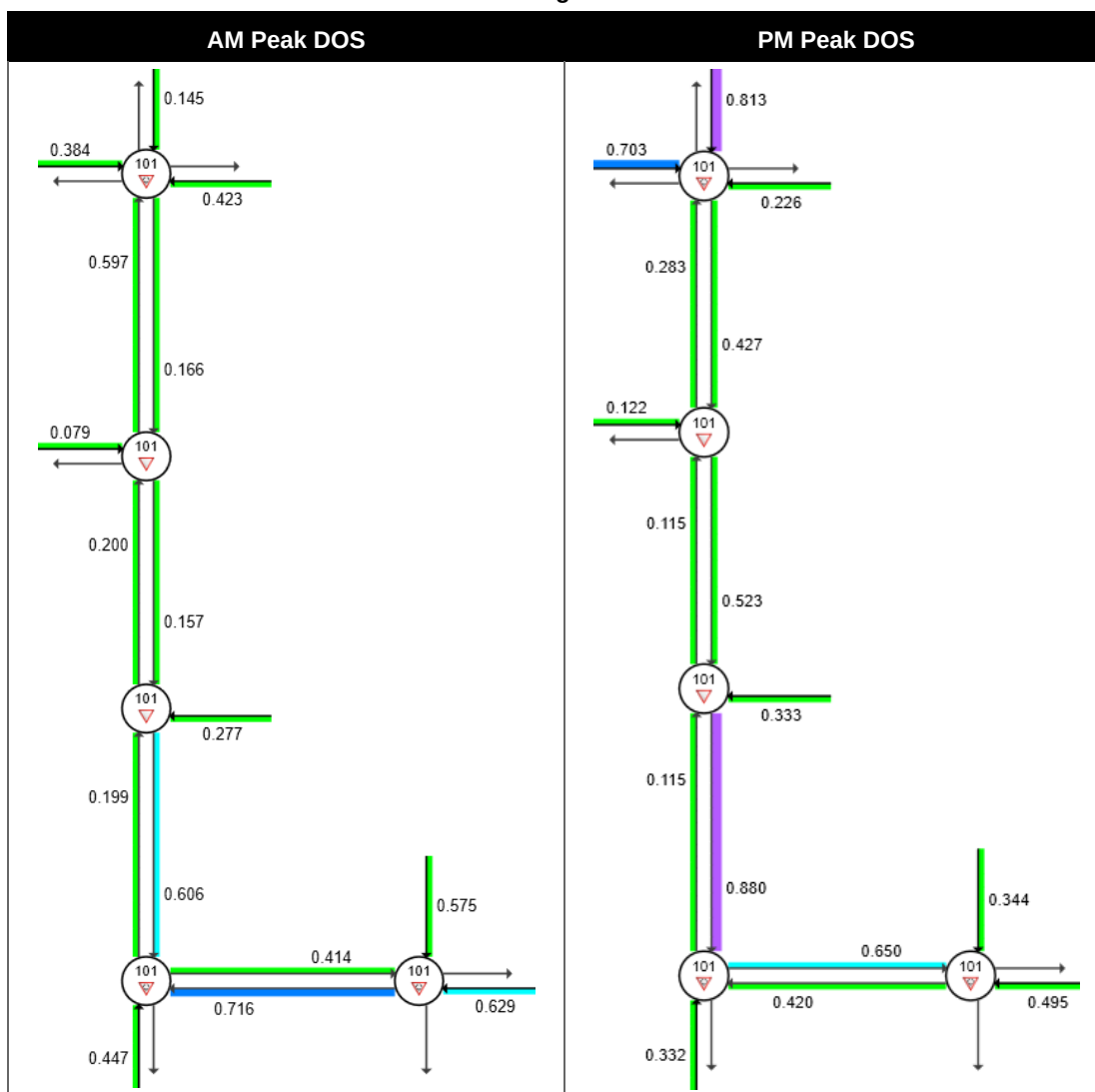


Table 2-5: SIDRA Network DOS Plots – 2023 Background



As noted in Section 2.3.3, the primary pinch points on the road network include Irvine Street and University Avenue in the AM Peak, and Irvine Street, Ring Road and Northfields Avenue in the PM Peak. Specifically, it is noted that Irvine Street /

University Avenue already exceeds the DOS requirements (i.e. less than 0.85 DOS for roundabouts) in the PM peak hour. This will be further discussed in Section 4.

2.4 PUBLIC TRANSPORT PROVISION

A review of public transport provision in the vicinity of the subject site is summarised in Figure 2-1 and Table 2-6. The review indicates that the site is currently well serviced by public transport and has a high level of public transport accessibility.

Buses serve as the primary mode of public transport, with several bus stops located within a short walking distance, either on the site perimeter or within 700m of the site. Buses operate at regular intervals throughout the day, providing frequent services to key destinations, such as the UoW, Botanic Gardens, Wollongong CBD and Wollongong Hospital.

In addition to bus services, the site benefits from its proximity to the North Wollongong Train Station, located approximately 1.3km walking distance from the site. Shuttle services are available from UoW to the North Wollongong Train Station.

The South Coast Line provides regular train services, with trains running every 15 to 30 minutes on weekdays and 30 minutes to 1 hour on weekends. This train station offers access to key locations such as the Wollongong Hospital, the Wollongong CBD and neighbouring townships.

As shown, the subject site has several existing public transport provisions available, with both multiple routes surrounding the subject site, and a shuttle bus to the train station available nearby to help facilitate longer public transport journeys.

Table 2-6: Public Transport Provisions

Service	Route	Route Description	Location of Stop	Distance to nearest stop	Service Frequency	Start/Finish
Bus	3	Wollongong to Bellambi via Towradgi (Loop Service)	Irvine St opposite Madoline St	~ 600m	~ Every 1hr from 8 AM to 9 am	Wollongong - WIN Stadium (Loop service)
	8	Wollongong to Bellambi via Balgownie (Loop Service)			~ Every 2hrs from 3 to 6 pm	
	11	Wollongong to Wollongong University (Loop Service)	Irvine St and Murphys Ave	~ 400m	Every 1hr from 7 AM to 7 pm, with frequency changing from 7 AM to 9 AM to every 10-30mins	Start: UoW / Wollongong – Win Stadium Finish: Wollongong – WIN Stadium / UoW
	41	Dapto to UoW	Irvine St at Madoline St / Murphys Ave		Every 1hr from 8 to 11 AM and 4 to 8 pm	Dapto Station / UoW
	887	Campbelltown to Wollongong via Appin	Irvine St	~ 600m	Every 1hr from 6 AM to 7 pm, except from 3 to 5 pm, the frequency changes to every 30mins to 1hr 30mins	Campbelltown Station / Wollongong
Shuttle Bus	9/9N	UoW North Gong Shuttle via Ring Road	Northfields Ave/Irvine St	~ 400m to 700m	Every 5-10mins from 8 AM to 10 am. From 10 AM to 10 PM every 10 to 50 mins	UoW / North Wollongong
	55A / 55C	UoW to Wollongong via Gwynneville/ Fairy Meadow (Loop service)			Weekday – Every 10mins from 7 AM to 6 pm. From 6 PM to 10 PM every 20 mins Weekend – Every 20mins	UoW (Loop Service)
Train	South Coast Line	Bomaderry or Port Kembla to Central and Bondi Junction	North Wollongong Train Station	1.4-1.6km	Every 15 – 30 mins on Weekdays and 30mins to 1hr on Weekends	Start: Bondi Junction / Bomaderry Finish: Bomaderry / Bondi Junction

Figure 2-4: Public Transport Provisions



Source: Nearmap

2.5 CAR PARKING

Significant on-street car parking demands have been observed on the local network, which are likely driven by UoW. As such, there are several different parking restriction classifications enforced on the local network, which have been summarised in Figure 2-5 and Table 2-7.

Table 2-7: Existing On-Street Parking Inventory

Parking	Irvine Street	Hoskins Street	Sidney Street	Paulsgrove Street	Madoline Street	Leahy Crescent	Spearing Parade	Murphys Avenue
Unrestricted	✓				✓	✓		✓
Restricted Parking: 1/4P								
Bus Zone								✓
Restricted Parking: 2P - 8:30 AM – 6 PM (Mon-Fri)		✓	✓	✓			✓	✓
Restricted Parking: No parking between 6:00 AM – 6:00 pm	✓	✓	✓	✓	✓	✓	✓	
No Stopping (All Day)	✓			✓	✓		✓	
No Parking (All Day)							✓	

Figure 2-5: Existing On-Street Parking Inventory



Source: Nearthmap

2.6 ACTIVE TRANSPORT PROVISION

The active transport provisions near the subject site are summarised in Figure 2-6 and Table 2-8.

There are limited pedestrian connections central to the subject site, with formal connections only provided around the edge of the subject site. As part of the proposal, it is recommended that additional provisions are provided through the centre of the subject site along Sidney Street & Hoskins Street to further promote active transport opportunities and reduce vehicle trips.

Table 2-8: Existing Active Transport Provision

Road Name	Existing Footpath Width	Existing Shared Path Width
Irvine Street	~1.4m	-
Hoskins Street	-	-
Sidney Street	-	-
Paulsgrove Street	~1.2m	~2.5m
Madoline Street	~1.5m	-
Leahy Crescent	-	-
Spearing Parade	-	-
Murphys Avenue	~1.3m	-

Figure 2-6: Existing Active Transport Provisions



Source: Nearmap

2.7 ROAD SAFETY

Road crash data proximate to the subject site was analysed to assess the current levels of road safety. Road crash data was sourced from the Transport for New South Wales (TfNSW), Crash and Casualty Statistics - for Local Government Area (LGA) for five years between January 1st 2017 – December 31st 2021. This crash data provides information on the number of crashes on the surrounding road network, categorised into the following:

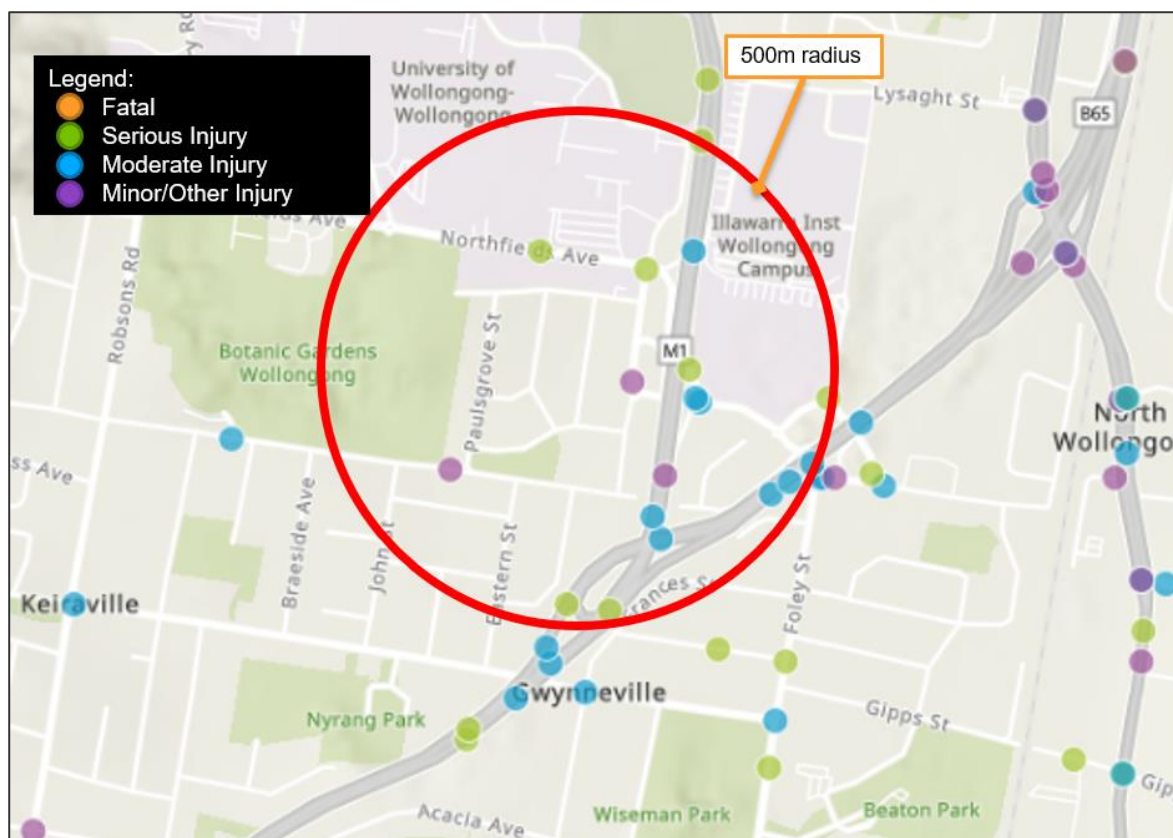
- crashes resulting in a Fatality
- crashes resulting in Serious Injury
- crashes resulting in Moderate Injury
- crashes resulting in Minor/Other Injury.

A review of the recorded crashes found that 18 occurred on the surrounding road network near the site. Figure 2-7 and Table 2-9 show a breakdown of the crash incidence by severity and location.

Table 2-9: Road Crash Locations (2017-2021) - Gwynneville

Location	Crash Severity	Number of Crashes
Subject site (bound by Madoline Street, Irvine Street, Paulsgrove Street and Murphys Avenue)	Fatal	0
	Serious Injury	7
	Moderate Injury	8
	Minor/Other Injury	3

Figure 2-7: Road Crash Locations (2017-2021) – Gwynneville



Source: Crash and casualty statistics - LGA view (TfNSW Centre for Road Safety)

The crash history is indicative of a congested network, with the majority of crashes near the subject site recorded along Northfields Avenue, Irvine Street and University Avenue. As such, mitigation options and safety review may be required for these intersections and will be discussed further in Section 4.

2.8 FUTURE PLANNING

Wollongong City Council is actively involved in several ongoing projects and future projects aimed at improving infrastructure and connectivity within the city.

First is the Keiraville-Gwynneville Access and Movement Study, which contains transport network issues and opportunities for the greater area which includes the subject site and the transportation network providing access to it. This document identifies a number of pre-existing network issues, some of which include:

- vehicle parking demand from the UoW spilling onto the streets within the subject site
- missing active transport connections
- inappropriate intersection configurations for active transport
- public transport connectivity and frequencies.

It is recommended that the actions contained within this document are incorporated into the future design for the proposal, where feasible, as they will be key in achieving Council's and TfNSW transportation mode share goals for the subject site, UoW, and the greater Keiraville – Gwynneville area.

Additionally, TfNSW is upgrading the M1 Princes Motorway at the base of the Mount Ousley Interchange. The project has now been awarded and early work activities and detailed design is underway. As part of the upgrade, a new interchange is planned to provide access from the M1 Princes Motorway to Mount Ousley Road and the UoW. This new access to the UoW will fundamentally alter the traffic levels and patterns on the road network surrounding the subject site and therefore it is recommended that the forecasted peak and daily traffic volumes are sourced from the strategic model utilised for the M1 Princes Motorway upgrade. Additionally, it is recommended that the land uses considered for the subject site and associated trip generation are requested from TfNSW so it can be determined if there has been a net increase traffic levels within the model. It is noted that the analysis included in Section 4 does not include TfNSW strategic model forecasts after the completion of Mount Ousley. This information has been requested, but has not yet been received, and it is recommended that the analysis outcomes as presented herein are reviewed once the information has been provided.

Figure 2-8 presents a diagram of the TfNSW planned M1 Princes Motorway at the base of Mount Ousley Interchange.

Figure 2-8: Princes Highway at Base to Mount Ousley



The impacts of the Mount Ousley interchange are discussed further in Section 4.

3.0 INDICATIVE CONCEPT PROPOSAL

3.1 LAND USES

The amended controls will facilitate the delivery of a diverse range of housing typologies which will include additional social and affordable housing, market housing products and seniors housing, as well as opportunities to develop build-to-rent, key worker housing and student accommodation. The proposal will allow for approximately 1,250 dwellings, at least 50% of which will be social and affordable housing. Whilst the analysis below assumes 30% social and affordable housing split, Homes NSW has committed to the delivery of 50% social and affordable housing (i.e. 625 dwellings) and 50% market / private sale homes (i.e. 625 dwellings) at Gwynneville. As a result, the following outputs of this transport model can be viewed as "conservative" and the traffic impacts from the development will be less than anticipated at this preliminary stage. Each Development Application will be required to confirm their individual traffic impact with a Traffic Impact Assessment, or equivalent document.

The proposal is indicatively shown Figure 3-1, with the indicative proposal yields outlined in Table 3-1.

Figure 3-1: Proposal Overview



Table 3-1: Indicative Proposal Yields

Land Use	% Weighting	Indicative Dwelling numbers
Residential Dwellings (Private Sale)	70%	875
Affordable Housing (e.g. Student Accommodation)	10%	125
Social Housing	20%	250

The exact dwelling layout and other development details are to be further developed in future stages of planning and design.

3.2 VEHICLE ACCESS

Specific vehicle crossover provisions are yet to be determined and will be confirmed in a later design phase. Notwithstanding, it is recommended that the following provisions are incorporated into future design:

- direct access to Irvine Street is not proposed and is instead recommended to be consolidated onto the nearby lower volume roads such as Hoskins Street
- proposed access points are located a minimum of 6m from the perpendicular tangent of any intersection, as noted in AS2890.1 and Council's DCP 2009, Chapter D13, Section 4.3.2
- vehicle crossover width is to be determined in accordance with the number of parking spaces that can access the crossover, in accordance with Table 3.1 of AS2890.1 2004
- vehicle crossovers should be built in accordance with Council's Standard Drawings.

3.3 CAR PARKING

Specific car parking provisions are yet to be determined and will be confirmed in a later design phase. Whilst this analysis assumes 30% social and affordable housing, Homes NSW has committed to the delivery of 50% social and affordable housing (i.e. 625 dwellings) and 50% market / private sale homes (i.e. 625 dwellings) at Gwynneville. As a result, the car parking requirements can be viewed as "conservative" and the impacts from the development will be less than anticipated at this preliminary stage. Each Development Application will be required to confirm their individual parking impact with a Traffic Impact Assessment, or equivalent document.

Notwithstanding, a review of the statutory car parking requirement rates has been undertaken and is summarised in Table 3-2.

Table 3-2: Statutory Car Parking Requirements

Land Use	Statutory Parking Rate
Residential Multi-Dwelling	1 car parking space per dwelling (<70m ²) or 1.5 spaces per dwelling (70-110m ²) or 2 car parking spaces per dwelling (>110m ²), plus 0.2 car parking spaces per dwelling for visitors
Social Housing	1 car parking space per 5 dwellings where social housing

It is noted that a specific parking rating for Student Accommodation is not available within Council's DCP. As such, a specific rate for this land use will need to be calculated and justified as part of future design stages. A reduction in the parking provision is possible given the proximity of the UoW and available public transport routes, which will likely promote significant travel mode switch from cars to active and public transport. It is recommended that the following provisions are incorporated into future design:

- All car parking spaces and associated layout provisions (parking aisle width, etc.) are to be provided as per the recommended user class classification, as noted in Table 1.1 of AS2890.1, with the following classes recommended:
 - User Class 1A for the residential parking spaces for all land uses
 - User Class 3 for the visitor parking spaces.
- The inclusion of PWD parking spaces as part of visitor parking provision, in order to satisfy the requirement of 1 PWD space per 50 visitor parking spaces.

3.4 PEDESTRIAN FACILITIES

As noted in Section 2, there are existing pedestrian facilities noted around the edge of the subject site. Specific pedestrian provisions regarding the proposal are yet to be confirmed and will be refined in a later design phase. Notwithstanding, it is recommended that the following provisions are incorporated into future design:

- additional pedestrian facilities should be provided on all road frontages within the subject site to facilitate active travel
- A review of the existing pedestrian crossing facilities on Northfields Avenue should be undertaken in accordance with the Austroads 'Pedestrian Crossing Facility Selection Tool' to ensure that the most suitable crossing facilities are present to encourage Active Transport mode shift where possible
- it is further recommended that a "Walk Network Plan" is prepared to identify the key pedestrian desire lines within the precinct following full development, and appropriate pedestrian crossing treatments for key routes to ensure safe and efficient access.

The proposed pedestrian pathway network is set out in Figure 3-2. This pedestrian pathway network provides direct access to key destinations, including:

- University of Wollongong;
- Bus interchange;
- Pedestrian connections over the Highway.

Figure 3-2: Active Transport Network



3.5 BICYCLE FACILITIES

Specific bicycle parking provisions are yet to be determined and will be confirmed in a later design phase. Whilst this analysis assumes 30% social and affordable housing, Homes NSW has committed to the delivery of 50% social and affordable housing (i.e. 625 dwellings) and 50% market / private sale homes (i.e. 625 dwellings) at Gwynneville. As a result, the bicycle parking requirements can be viewed as "conservative" and the impacts from the development will be less than anticipated at this preliminary stage. Each Development Application will be required to confirm their individual bicycle parking impact with a Traffic Impact Assessment, or equivalent document.

Notwithstanding, a review of the statutory bicycle parking requirement rates has been undertaken and is summarised in Table 3-3.

Table 3-3: Statutory Proposal Bicycle Parking Requirements

Land Use	Statutory Parking Rate
Residential Multi-Dwelling	1 bicycle space per 3 dwellings (residents) and 1 bicycle space per 12 dwellings (visitors)
Social Housing	NA

It is noted that a specific bicycle parking rate for Student Accommodation is not available within Council's DCP. As such, a specific rate for this land use will need to be calculated and justified as part of future design stages, as noted with car parking. Notwithstanding, it is recommended that the following provisions are incorporated into future design:

- all parking spaces and associated layout provisions (bicycle rack specifications, etc.) are to be provided as per the recommended security level classification, as noted in Table 1.1 of AS2890.3, with the following classes noted:
 - Security Level B for all residential spaces for all land uses
 - Security Level C for the visitor spaces
- end of trip facilities are to be provided in accordance with Council's DCP Chapter E03 Section 7.3 Table 1.

3.6 REFUSE COLLECTION AND HEAVY VEHICLE SERVICING

Service vehicle and loading bay provisions are yet to be determined and will be confirmed in a later design phase. Whilst this analysis assumes 30% social and affordable housing, Homes NSW has committed to the delivery of 50% social and affordable housing (i.e. 625 dwellings) and 50% market / private sale homes (i.e. 625 dwellings) at Gwynneville. As a result, the service vehicle requirements can be viewed as "conservative" and the impacts from the development will be less than anticipated at this preliminary stage. Each Development Application will be required to confirm their individual service vehicle impact with a Traffic Impact Assessment, or equivalent document.

Notwithstanding, a review of the statutory service vehicle requirements has been undertaken and is summarised in Table 3-4.

Table 3-4: Statutory Proposal Service Vehicle Requirements

Land Use	Statutory Service Vehicle Requirement
Residential Multi-Dwelling	Large Rigid Vehicle and side loading Refuse Collection Vehicle
Social Housing	Large Rigid Vehicle

It is recommended that the following provisions are incorporated into future design:

- all service vehicle requirements and associated loading bay provisions (parking aisle width, ramp grades, etc.) are to be provided as per the requirements noted in AS2890.2 and Council's DCP
- all service vehicle access points and associated swept path assessments are provided as per the requirements noted in AS2890.2.

4.0 TRAFFIC IMPACT ASSESSMENT

4.1 STUDY NETWORK

As noted in Section 2, the study network consists of 11 intersections surrounding the subject site, as follows:

- Northfields Avenue / Ring Road/ Irvine Street / Princess Motorway Northbound Off-ramp roundabout
- Irvine Street / Madoline Street
- Irvine Street / University Avenue
- University Avenue / Princes Motorway Southbound On/Off Ramps
- Irvine Street / Spearing Parade
- Murphys Avenue / Paulsgrove Street
- Paulsgrove Street / Spearing Parade
- Paulsgrove Street / Leahy Court
- Paulsgrove Street / Madoline Street
- Madoline Street / Sidney Street
- Madoline Street / Hoskins Street.

4.2 TRIP GENERATION

The proposal consists of multiple residential land uses, consisting of private sale, student accommodation and social housing uses. Each land use has been further broken down into a bedrooms per dwelling trip generation rate, which is detailed separately in the chapters below. Whilst the analysis below assumes 30% social and affordable housing split, Homes NSW has committed to the delivery of 50% social and affordable housing (i.e. 625 dwellings) and 50% market / private sale homes (i.e. 625 dwellings) at Gwynneville. As a result, the following outputs of this transport model can be viewed as "conservative" and the traffic impacts from the development will be less than anticipated at this preliminary stage. Each Development Application will be required to confirm their individual traffic impact with a Traffic Impact Assessment, or equivalent document.

Traffic generation estimates for the proposal have been sourced from the Roads and Marine Services (RMS) 'Guide to Trip Generating Proposals' (GTGD) 2002 and Technical Direction (TDT) 2013 / 04 Updated traffic surveys (TDT 2013/ 04).

4.2.1 PRIVATE SALE

Private sale dwellings are likely to consist of 1, 2 & 3-bedroom dwellings with a dwelling projection consisting of approximately 70% of the total proposal dwelling yield. The assumed dwelling breakdown (for the purposes of this traffic impact assessment) is as follows:

- 1 Bedroom – 475 Dwellings
- 2 Bedrooms – 288 Dwellings
- 3 Bedrooms – 112 Dwellings.

The trip rate for the 2- & 3-bedroom dwellings has been adopted from the GTGD 2002 Section 3.3.2, with a peak hour trip rate of 0.45 trips / dwelling adopted for 2 bedrooms, and 0.58 trips / dwelling adopted for 3 bedrooms. The 1-bedroom trip rate has been adopted from the GTGD TDT 2013, which denotes a peak hour trip rate of 0.21 trips per bedroom as the regional average. This trip rate is considered suitable as the UoW bus interchange is located approximately 500m from the centre of the proposal, or a ~6 minute walk away. Additionally, these rates have been conservatively adopted for both the AM & PM peak periods, noting that the GTGD TDT 2013 outlines a lower PM peak hour trip generation rate.

4.2.2 STUDENT ACCOMMODATION

Student accommodation is likely to consist of 1 & 2-bedroom dwellings and may consist of approximately 10% of the total proposal dwelling yield. The assumed dwelling breakdown (for the purposes of this traffic impact assessment) is as follows:

- 1 Bedroom – 100 Dwellings
- 2 Bedrooms – 25 Dwellings.



The student accommodation land use trip rate is estimated to only generate 10% of the private sale vehicle trip generation, given the primary destination for this land use is expected to be the UoW. It is expected that the majority of trips for this demand segment will be active and public transport trips. This trip rate will be further justified in future design stages and can be enforced with the provision of reduced parking rates.

4.2.3 SOCIAL / AFFORDABLE HOUSING

Social and affordable housing is likely to consist of 1, 2 & 3-bedroom dwellings and may consist of approximately 20% of the total proposal. The assumed dwelling breakdown (for the purposes of this traffic impact assessment) is as follows:

- 1 Bedroom – 113 Dwellings
- 2 Bedrooms – 125 Dwellings
- 3 Bedrooms – 12 Dwellings.

As noted in Section 3, there is a significant difference in the required parking provision rate between private sale and affordable housing provisions. Based on the difference in Council's parking rates specified within the DCP and the affordable housing parking rates noted in the NSW State Environmental Planning Policy (SEPP), a reduction of 65% in required parking capacity is noted. As such, it is expected that a similar reduction in trip generation will occur for the affordable housing land use, which has been assumed for the analysis presented below.

4.2.4 SUMMARY

Based on the above traffic generation rates and indicative dwelling configuration, Table 4-1 denotes the estimated traffic generation for the proposal. Whilst the analysis below assumes 30% social and affordable housing split, Homes NSW has committed to the delivery of 50% social and affordable housing (i.e. 625 dwellings) and 50% market / private sale homes (i.e. 625 dwellings) at Gwynneville. As a result, the following outputs of this transport model can be viewed as "conservative" and the traffic impacts from the development will be less than anticipated at this preliminary stage. Each Development Application will be required to confirm their individual traffic impact with a Traffic Impact Assessment, or equivalent document.

Table 4-1: Trip Generation (Proposed Development)

Land Use	Bedrooms	Indicative No. Dwellings	Trip Rate	Traffic Generation (AM & PM Peak)
Private Sale	1 bedroom	475	0.21 trips / dwelling	100 trips
	2 bedrooms	288	0.45 trips / dwelling	130 trips
	3 bedrooms	112	0.58 trips / dwelling	65 trips
Student Accommodation	1 bedroom	100	0.02 trips / dwelling	2 trips
	2 bedrooms	25	0.05 trips / dwelling	1 trip
Social / Affordable Housing	1 bedroom	113	0.07 trips / dwelling	8 trips
	2 bedrooms	125	0.16 trips / dwelling	20 trips
	3 bedrooms	12	0.20 trips / dwelling	2 trips
Total		1,250 Dwellings	-	328 trips

4.3 DESIGN SCENARIOS

The following assumptions have been made regarding the proposal:

- the initial year of opening for the proposal is 2028
- upon opening, the proposal is expected to develop at a rate of 200 – 250 dwellings per year
- the proposal will likely be fully developed by 2033 with an indicative total of 1,250 dwellings.

Based on the above assumptions, the following traffic generation scenarios have been considered:

- 2023: Existing Conditions
- 2028: Background Volumes + Growth + Year of Opening for the proposal (250 Dwellings)
- 2033: Background Volumes + Growth + Ultimate Design (1,250 Dwellings)
- 2038: Background Volumes + Growth + 10yr Design Horizon from the Year of Opening (1,250 Dwellings)



Figure 4-2: Mount Ousley Background Volume Modification Factors



Table 4-2: Mount Ousley Background Volume Modification Factors

Road Segment	Direction	AM Peak % change	PM Peak % change
Murphys Ave	Eastbound	-11%	+2%
	Westbound	No Change	+20%
Irvine Street	Northbound	-11%	+16%
	Southbound	+8%	+10%
Northfields Ave	Eastbound	-35%	-11%
	Westbound	-55%	-20%

It is noted that the modification factors do not affect turning traffic volumes, only through volumes, which will change the balance of volumes between the intersections. Additionally, the modification factors also include the likely background traffic growth for each segment. As such, the process for calculating the background traffic scenarios was as follows:

1. Utilise traffic survey data which was collated for this study (2023)
2. Apply the Mount Ousley modification factors to the affected segments to determine 2027 volumes (note that no additional background growth is applied beyond the modification factors).
3. Apply a 1% p.a. growth rate from 2027 onwards to calculate the background volumes (2028, 2033 & 2038).
4. Balance the traffic volumes between the intersections on Irvine Street. This has been undertaken via the following methodology:
 - a. Add volumes to equal the highest recorded through volumes on Irvine Street on the through movements to ensure a conservative assessment where possible
 - b. Add volumes on the turning movements to equal the resulting through volumes
 - c. Reduce volumes only at the extremities of the network to reduce overall impacts.

The resultant background traffic volumes are shown within the Turn Movement Diagrams (TMDs), which are included in **Appendix D**.

4.6 DISTRIBUTION AND ASSIGNMENT

4.6.1 EXTERNAL DISTRIBUTION

Vehicle trip distribution and assignment has been determined through a mix of survey volumes and likely destinations. Given the close proximity of the university, it is likely that any trips destined to UoW will be active transport trips. As such, the Wollongong CBD has been considered the primary destination for vehicle trips, emphasising eastbound and southbound movements in correlation with the noted survey volumes.

The adopted external distribution has been nominated accordingly, with the adopted AM & PM Peak distributions shown in Figure 4-3 and Figure 4-4 respectively.

Table 4-3 summarises the external distribution for ease of reference.

Table 4-3: External Distribution

Segment	AM Peak		PM Peak	
	Inbound	Outbound	Inbound	Outbound
Ring Road	1%	1%	1%	1%
Princess Highway NB	23%	5%	15%	10%
Northfields Ave	1%	1%	1%	1%
Murphys Ave	10%	10%	10%	10%
Princess Highway SB	35%	18%	28%	23%
University Ave	15%	45%	30%	40%
Eastern Street	15%	20%	15%	15%

Figure 4-3: External Distribution and Assignment - AM Peak

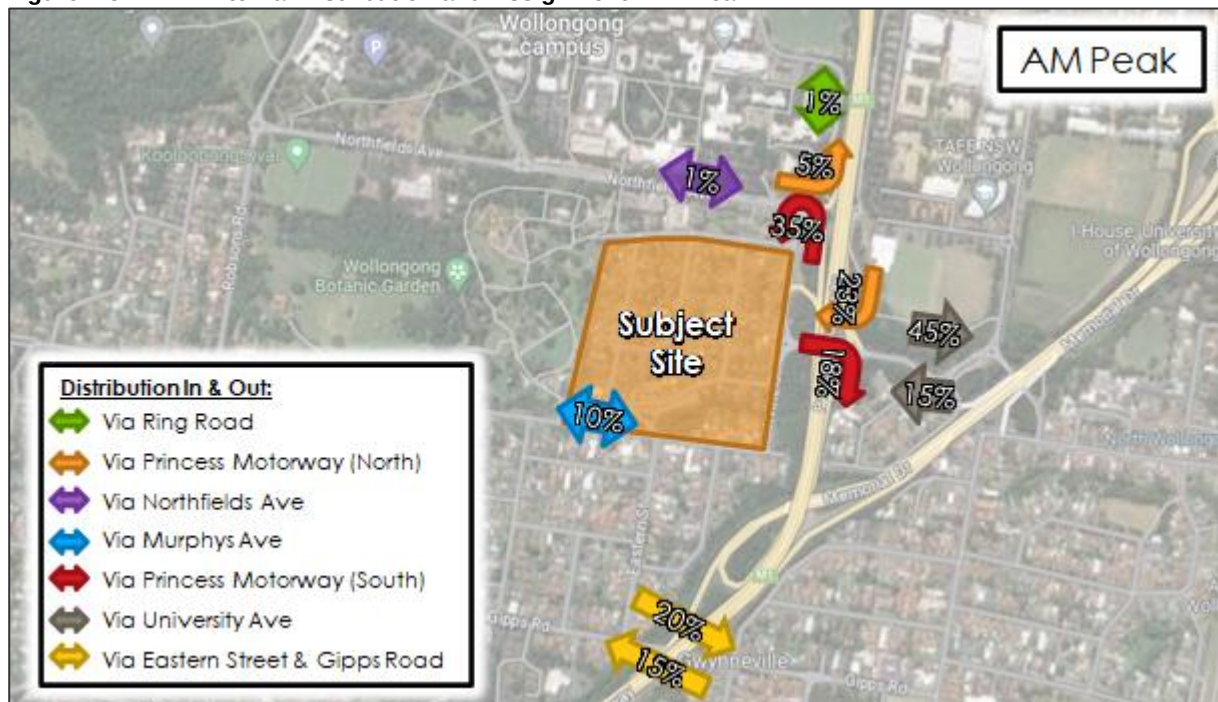


Figure 4-4: External Distribution and Assignment - PM Peak



4.6.2 TEMPORAL DISTRIBUTION

Given the residential nature of the proposal, the temporal distribution in Table 4-4 has been applied to all land uses.

Table 4-4: Temporal Distribution

Peak Hour	Inbound Split	Outbound Split
AM	20%	80%
PM	70%	30%

4.6.3 TRIP ASSIGNMENT

Specific development parcels have not been designated as part of the proposal. As such, the individual land use trip generation rates have been applied holistically to the proposal.

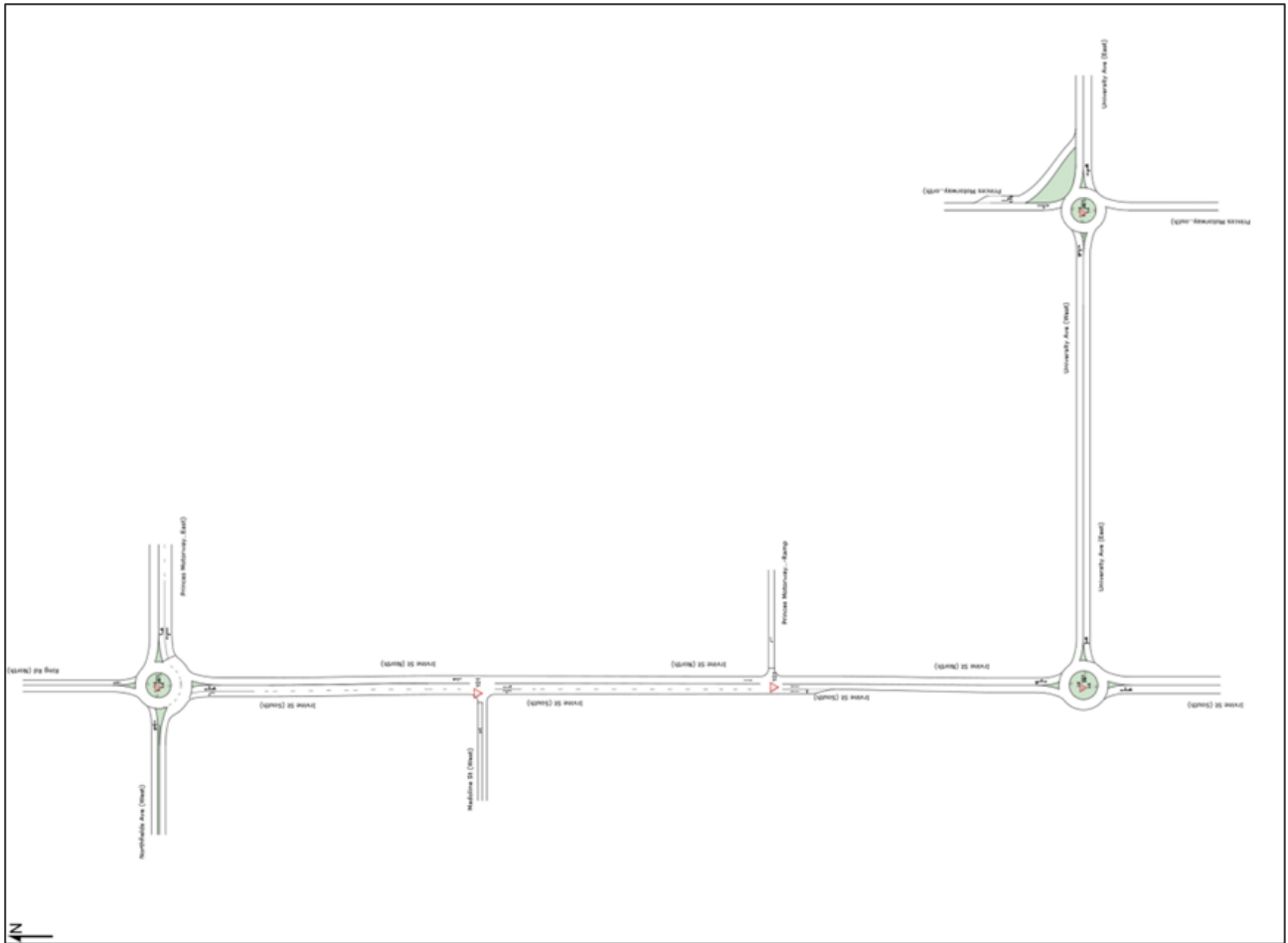
A detailed assignment of the trip generation is outlined in **Appendix C**.

4.7 SIDRA INTERSECTION ASSESSMENT

4.7.1 OVERVIEW

SIDRA assessment has been undertaken for both individual intersections and the Irvine Street network as noted in Section 2. The modelled layout of the Irvine Street network is shown in Figure 4-5.

Figure 4-5: Irvine Street SIDRA Network



4.7.2 IRVINE STREET NETWORK SIDRA DOS RESULTS – CURRENT LAYOUT

Table 4-5 shows the DOS network plots for all four background scenarios and the 2033 & 2038 BG + DEV scenarios, as these proposal scenarios are the only ones where the full proposal volumes are applied to the network. Specific LOS and queuing results have been detailed in the individual intersection analysis.

Table 4-5: SIDRA Network Background DOS Plots – Existing Layout

Scenario	AM Peak	PM Peak
2023 BG		
2028 BG		
2033 BG		

Scenario	AM Peak	PM Peak
2033 BG + DEV		
2038 BG		
2038 BG + DEV		

The Irvine Street southbound approach at the Irvine Street / University Avenue roundabout is expected to experience significant vehicle demands during both the AM & PM peaks, and is shown to exceed intersection capacity beyond 2033 for the Background and Development PM design scenarios. Additionally, significant capacity constraints are noted for the

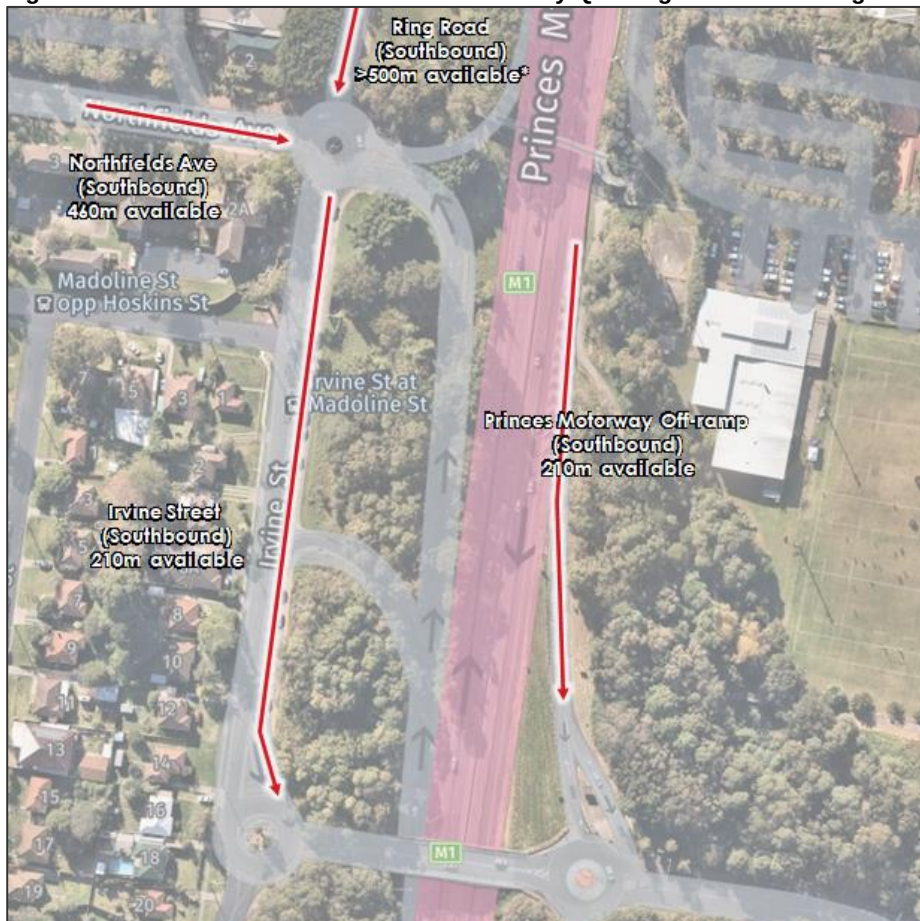


Ring Road and Northfields Avenue in the PM peak hours, and for the Princes Motorway southbound off-ramp during the AM peak hours.

4.7.3 IRVINE STREET NETWORK QUEUING IMPACTS – CURRENT LAYOUT

Based on the network DOS plots, there are four main links that experience significant capacity and queuing impacts during the assessed design scenarios: Irvine Street (Southbound), Ring Road (Southbound), Northfields Avenue (Eastbound) and the Princes Motorway Off-ramp (Southbound). The available queuing at these areas is shown on Figure 4-6, and Table 4-6 details the indicative resulting queues, to determine the level of mitigation that may be required at these areas. Design scenarios with suitable queuing provisions have been denoted as 'NA'.

Figure 4-6: Irvine Street SIDRA Network Key Queuing Areas – Existing Network



*There are no major intersection on Ring Road that would be directly affected by queuing impacts, however it is expected that queues greater than 200m would start to impact university functions.

Table 4-6: Irvine Street SIDRA Network - 95thile Queueing Impacts – Existing Network

Scenario	Ring Road		Northfields Ave		Irvine Street		Princes Mwy Off-ramp	
	AM	PM	AM	PM	AM	PM	AM	PM
2033 BG	NA	550m	NA	90m	110m	180m	40m	NA
2033 BG+DEV	NA	590m	NA	90m	110m	220m	65m	NA
2038 BG	NA	710m	NA	120m	130m	180m	45m	NA
2038 BG+DEV	NA	750m	NA	120m	130m	200m	95m	NA

As noted, the 2033 & 2038 PM development design scenarios result in significant queuing on Irvine Street, which contributes to the significant queuing observed on Ring Road and Northfields Avenue.

4.7.4 INDIVIDUAL INTERSECTION SIDRA ANALYSIS – CURRENT LAYOUTS

Intersection 1 - Northfields Avenue / Ring Road / Irvine Street / Princes Motorway Northbound Off-ramp roundabout

The SIDRA layout used for the Northfields Avenue / Ring Road / Irvine Street / Princess Motorway Northbound Off-ramp roundabout (intersection 1) is outlined in Figure 4-7.

Figure 4-7: Intersection 1 – Current SIDRA Layout



The results for the network SIDRA assessment for intersection 1 are detailed in Table 4-7.

Table 4-7: Intersection 1 – Current Layout SIDRA Network Results

Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	Average Queue	DOS	LOS	Avg Delay	Average Queue
2023 BG	0.60	A	9 sec	12m	0.81	B	16 sec	37m
2028 BG	0.50	A	8 sec	10m	1.04	D	37 sec	116m (N)
2028 BG+DEV	0.50	A	8 sec	10m	1.04	D	38 sec	118m (N)
2033 BG	0.53	A	9 sec	11m	1.17	E	65 sec	200m (N)
2033 BG+DEV	0.54	A	9 sec	11m	1.19	E	68 sec	214m (N)
2038 BG	0.57	A	9 sec	13m	1.29	F	96 sec	285m (N)
2038 BG+DEV	0.58	A	9 sec	13m	1.32	F	100 sec	301m (N)

The adopted performance threshold for a roundabout is a DOS of less than 0.85. The SIDRA results indicate that the Northfields Avenue / Ring Road / Irvine Street / Princess Motorway Northbound Off-ramp roundabout is expected to be exceeded in both the future design and background scenarios. This indicates that capacity upgrades should be considered to mitigate the existing and future indicative 95th percentile queues, which could impact upstream intersections on both Ring Road and Northfields Avenue.

Intersection 2 - Irvine Street / Madoline Street

The SIDRA layout used for the Irvine Street / Madoline Street intersection (Intersection 2) is outlined in Figure 4-8.

Figure 4-8: Intersection 2 – SIDRA Layout



The results for the network SIDRA assessment for intersection 2 are detailed in Table 4-8.

Table 4-8: Intersection 2 – SIDRA Network Results

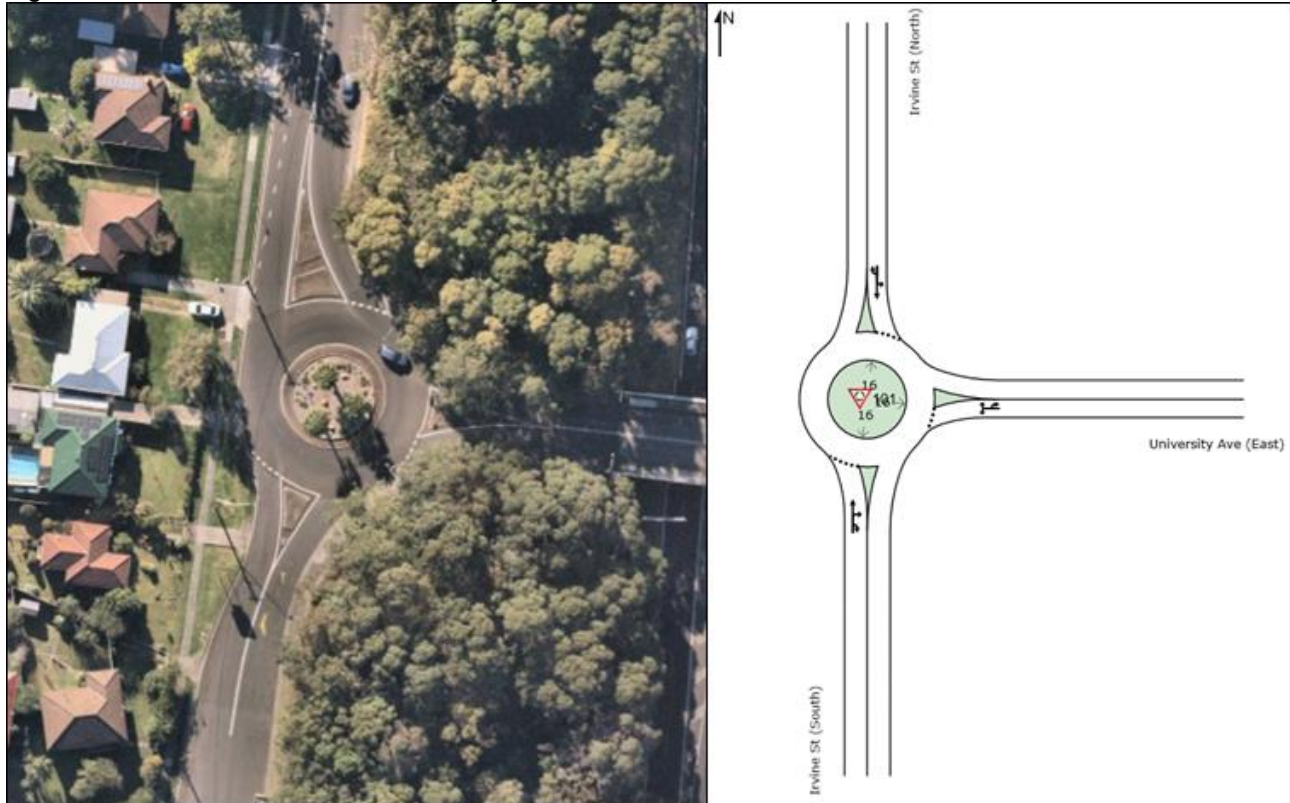
Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	Average Queue	DOS	LOS	Avg Delay	Average Queue
2023 BG	0.20	-	1 sec	1m	0.43	-	1 sec	1m
2028 BG	0.18	-	1 sec	1m	0.46	-	1 sec	1m
2028 BG+DEV	0.18	-	1 sec	1m	0.48	-	1 sec	2m
2033 BG	0.19	-	1 sec	1m	0.46	-	1 sec	2m
2033 BG+DEV	0.47	-	3 sec	6m	0.50	-	3 sec	5m
2038 BG	0.20	-	1 sec	1m	0.46	-	1 sec	2m
2038 BG+DEV	0.51	-	3 sec	7m	0.46	-	3 sec	5m

The performance threshold for a priority intersection is a DOS of less than 0.8. The SIDRA results indicate that the Irvine Street / Madoline Street intersection is expected to continue to perform below the threshold all future scenarios, with a maximum DOS of 0.51. As such, the indicative peak hour volumes generated by the proposal are expected to have acceptable impacts on intersection performance when compared with the background scenarios.

Intersection 3 - Irvine Street / University Avenue Roundabout

The SIDRA layout used for the Irvine Street / University Avenue roundabout (Intersection 3) is outlined in Figure 4-9.

Figure 4-9: Intersection 3 – SIDRA Layout



The results for the network SIDRA assessment for intersection 3 are detailed in Table 4-9.

Table 4-9: Intersection 3 – SIDRA Network Results

Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	Average Queue	DOS	LOS	Avg Delay	Average Queue
2023 BG	0.72	A	8 sec	25m	0.88	A	10 sec	55m (N)
2028 BG	0.68	A	7 sec	22m	0.91	B	11 sec	68m (N)
2028 BG+DEV	0.69	A	8 sec	23m	0.93	B	12 sec	76m (N)
2033 BG	0.72	A	8 sec	26m	0.93	B	13 sec	76m (N)
2033 BG+DEV	0.83	B	12 sec	43m	0.95	B	15 sec	89m (N)
2038 BG	0.76	A	9 sec	32m	0.92	B	12 sec	72m (N)
2038 BG+DEV	0.88	B	14 sec	55m (N)	0.94	B	14 sec	82m (N)

The performance threshold for a roundabout is a DOS of less than 0.85. The SIDRA results indicate that the Irvine Street / University Avenue roundabout currently exceeds this threshold in the background scenario. This indicates that capacity upgrades should be considered to mitigate the existing and future indicative 95thile queues, which could impact upstream intersections on Irvine Street.

Intersection 4 – University Avenue / Princes Motorway Southbound On & Off-ramp roundabout

The SIDRA layout used for the University Avenue / Princes Motorway Southbound On & Off-ramp roundabout (Intersection 4) is outlined in Figure 4-10.

Figure 4-10: Intersection 4 – SIDRA Layout



The results for the network SIDRA assessment for intersection 4 are detailed in Table 4-10.

Table 4-10: Intersection 4 – SIDRA Network Results

Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	Average Queue	DOS	LOS	Avg Delay	Average Queue
2023 BG	0.63	A	9 sec	18m	0.65	A	7 sec	26m
2028 BG	0.56	A	8 sec	14m	0.66	A	8 sec	28m
2028 BG+DEV	0.57	A	8 sec	15m	0.67	A	8 sec	29m
2033 BG	0.61	A	9 sec	17m	0.67	A	8 sec	29m
2033 BG+DEV	0.71	B	11 sec	25m	0.71	A	10 sec	30m
2038 BG	0.68	A	10 sec	21m	0.66	A	9 sec	28m
2038 BG+DEV	0.82	B	15 sec	36m	0.76	B	10 sec	31m

The performance threshold for a roundabout is a DOS of less than 0.85. The SIDRA results indicate that the University Avenue / Princes Motorway Southbound On & Off-ramp roundabout is expected to continue to perform below the threshold all future scenarios, with a maximum DOS of 0.82. As such, the peak hour volumes generated by the proposal are expected to have acceptable impacts on intersection performance when compared with the Background scenarios.

Intersection 5 – Irvine Street / Spearing Parade

The SIDRA layout used for Irvine Street / Spearing Parade intersection (Intersection 5) is outlined in Figure 4-11

Figure 4-11: Intersection 5 – SIDRA Layout



The results for the SIDRA assessment for Intersection 5 are detailed in Table 4-11.

Table 4-11: Intersection 5 – SIDRA Results

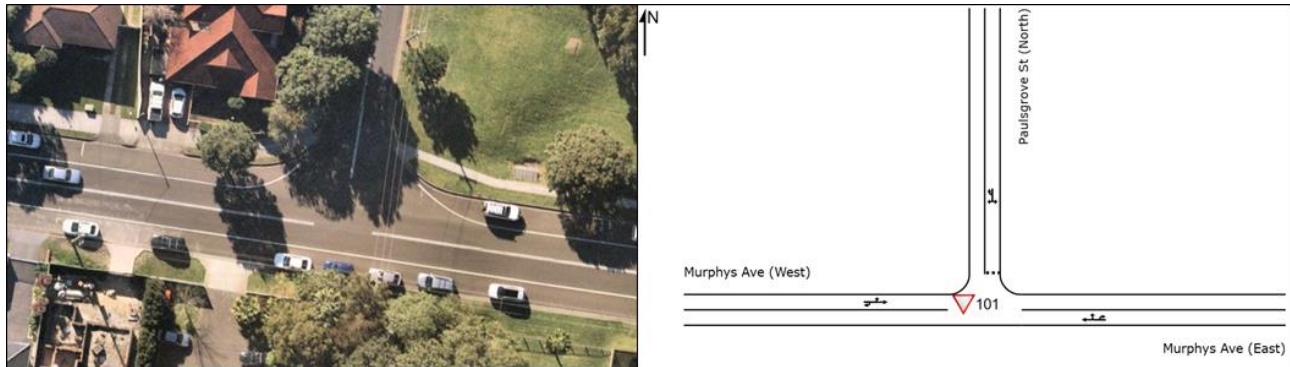
Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	95%ile Queue	DOS	LOS	Avg Delay	95%ile Queue
2023 BG	0.17	A	0 sec	1m	0.16	A	1 sec	1m
2028 BG	0.18	A	0 sec	1m	0.19	A	1 sec	1m
2028 BG+DEV	0.19	A	1 sec	1m	0.19	A	1 sec	2m
2033 BG	0.19	A	0 sec	1m	0.19	A	1 sec	1m
2033 BG+DEV	0.22	A	1 sec	2m	0.24	A	1 sec	6m
2038 BG	0.20	A	0 sec	1m	0.20	A	1 sec	1m
2038 BG+DEV	0.23	A	1 sec	3m	0.25	A	1 sec	6m

The performance threshold for a priority intersection is a DOS of less than 0.8. The SIDRA results indicate that the Irvine Street / Spearing Parade intersection is expected to continue to perform below the threshold all future scenarios, with a maximum DOS of 0.23. As such, the peak hour volumes generated by the proposal are expected to have acceptable impacts on intersection performance when compared with the background scenarios.

Intersection 6 – Murphys Avenue / Paulsgrove Street

The SIDRA layout used for Murphys Avenue / Paulsgrove Street intersection (Intersection 6) is outlined in Figure 4-12

Figure 4-12: Intersection 6 – SIDRA Layout



The results for the network SIDRA assessment for intersection 6 are detailed in Table 4-12

Table 4-12: Intersection 6 – SIDRA Network Results

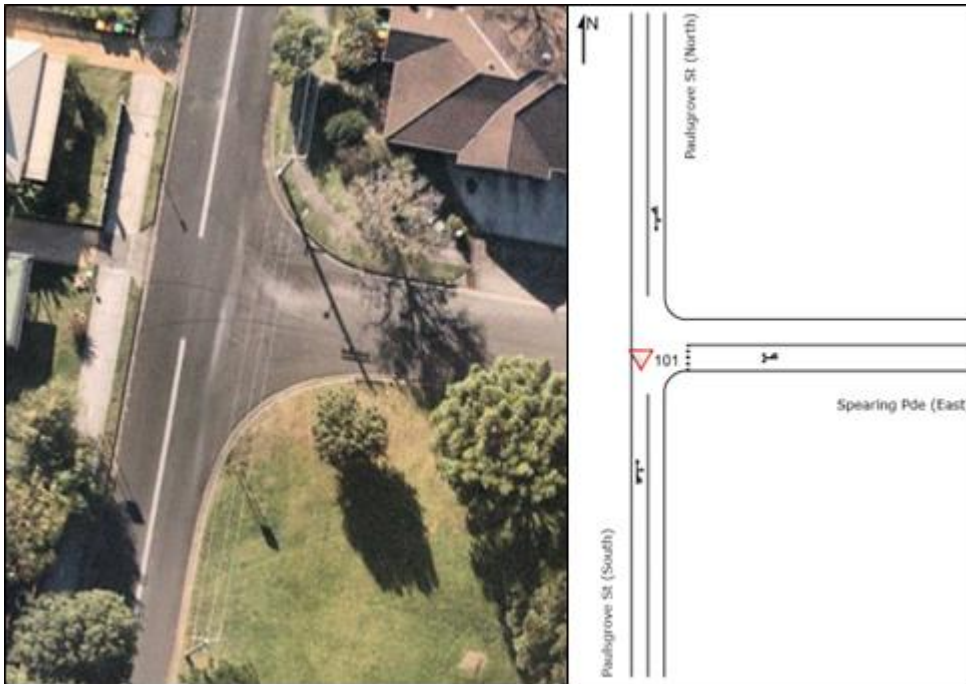
Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	95%ile Queue	DOS	LOS	Avg Delay	95%ile Queue
2023 BG	0.14	-	1 sec	2m	0.14	-	1 sec	1m
2028 BG	0.14	-	1 sec	2m	0.16	-	1 sec	1m
2028 BG+DEV	0.14	-	1 sec	2m	0.17	-	1 sec	2m
2033 BG	0.14	-	1 sec	2m	0.17	-	1 sec	2m
2033 BG+DEV	0.16	-	2 sec	3m	0.20	-	1 sec	3m
2038 BG	0.15	-	1 sec	2m	0.18	-	1 sec	2m
2038 BG+DEV	0.16	-	2 sec	3m	0.20	-	1 sec	3m

The performance threshold for a priority intersection is a DOS of less than 0.8. The SIDRA results indicate that the Murphys Avenue / Paulsgrove Street intersection is expected to continue to perform below the threshold all future scenarios, with a maximum DOS of 0.20. As such, the peak hour volumes generated by the proposal are expected to have acceptable impacts on intersection performance when compared with the background scenarios.

Intersection 7 – Paulsgrove Street / Spearing Parade

The SIDRA layout used for Paulsgrove Street / Spearing Parade intersection (Intersection 7) is outlined in Figure 4-13

Figure 4-13: Intersection 7 – SIDRA Layout



The results for the network SIDRA assessment for intersection 7 are detailed in Table 4-13

Table 4-13: Intersection 7 – SIDRA Network Results

Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	95%ile Queue	DOS	LOS	Avg Delay	95%ile Queue
2023 BG	0.02	-	2 sec	0m	0.02	-	2 sec	1m
2028 BG	0.02	-	2 sec	0m	0.02	-	2 sec	1m
2028 BG+DEV	0.02	-	2 sec	1m	0.03	-	2 sec	1m
2033 BG	0.02	-	2 sec	1m	0.02	-	2 sec	1m
2033 BG+DEV	0.05	-	2 sec	1m	0.05	-	2 sec	1m
2038 BG	0.02	-	2 sec	1m	0.02	-	2 sec	1m
2038 BG+DEV	0.05	-	2 sec	1m	0.05	-	2 sec	1m

The performance threshold for a priority intersection is a DOS of less than 0.8. The SIDRA results indicate that the Paulsgrove Street / Spearing Parade intersection is expected to continue to perform below the threshold all future scenarios, with a maximum DOS of 0.05. As such, the peak hour volumes generated by the proposal are expected to have acceptable impacts on intersection performance when compared with the background scenarios.

Intersection 8 – Paulsgrove Street / Leahy Crescent

The SIDRA layout used for Paulsgrove Street / Leahy Crescent intersection (Intersection 8) is outlined in Figure 4-14

Figure 4-14: Intersection 8 – SIDRA Layout



The results for the network SIDRA assessment for intersection 8 are detailed in Table 4-14

Table 4-14: Intersection 8 – SIDRA Network Results

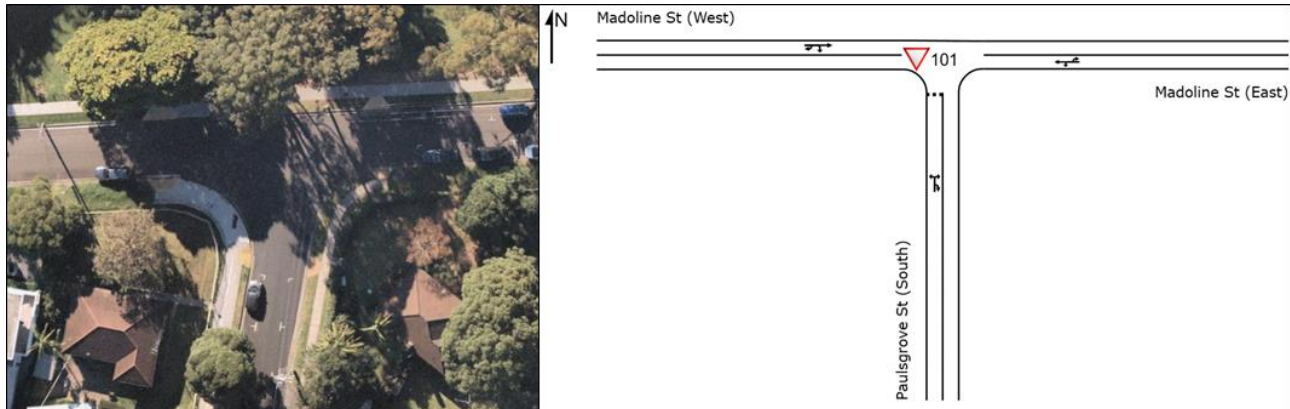
Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	95%ile Queue	DOS	LOS	Avg Delay	95%ile Queue
2023 BG	0.01	-	1 sec	0m	0.01	-	3 sec	0m
2028 BG	0.01	-	1 sec	0m	0.01	-	3 sec	0m
2028 BG+DEV	0.01	-	1 sec	0m	0.02	-	2 sec	0m
2033 BG	0.01	-	1 sec	0m	0.01	-	3 sec	0m
2033 BG+DEV	0.03	-	1 sec	0m	0.03	-	2 sec	1m
2038 BG	0.01	-	1 sec	0m	0.01	-	3 sec	0m
2038 BG+DEV	0.03	-	1 sec	0m	0.03	-	2 sec	1m

The performance threshold for a priority intersection is a DOS of less than 0.8. The SIDRA results indicate that the Paulsgrove Street / Leahy Crescent intersection is expected to continue to perform below the threshold all future scenarios, with a maximum DOS of 0.03. As such, the peak hour volumes generated by the proposal are expected to have acceptable impacts on intersection performance when compared with the background scenarios.

Intersection 9 – Paulsgrove Street / Madoline Street

The SIDRA layout used for Paulsgrove Street / Madoline Street intersection (Intersection 9) is outlined in Figure 4-15.

Figure 4-15: Intersection 9 – SIDRA Layout



The results for the network SIDRA assessment for intersection 9 are detailed in Table 4-15.

Table 4-15: Intersection 9 – SIDRA Network Results

Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	95%ile Queue	DOS	LOS	Avg Delay	95%ile Queue
2023 BG	0.01	-	4 sec	0m	0.01	-	5 sec	0m
2028 BG	0.01	-	4 sec	0m	0.01	-	5 sec	0m
2028 BG+DEV	0.02	-	4 sec	0m	0.02	-	5 sec	0m
2033 BG	0.02	-	4 sec	0m	0.01	-	5 sec	0m
2033 BG+DEV	0.04	-	5 sec	1m	0.03	-	5 sec	1m
2038 BG	0.02	-	4 sec	0m	0.02	-	5 sec	0m
2038 BG+DEV	0.04	-	5 sec	1m	0.03	-	5 sec	1m

The performance threshold for a priority intersection is a DOS of less than 0.8. The SIDRA results indicate that the Paulsgrove Street / Madoline Street intersection is expected to continue to perform below the threshold all future scenarios, with a maximum DOS of 0.03. As such, the peak hour volumes generated by the proposal are expected to have acceptable impacts on intersection performance when compared with the background scenarios.

Intersection 10 – Madoline Street / Sidney Street

The SIDRA layout used for Madoline Street / Sidney Street intersection (Intersection 10) is outlined in Figure 4-16

Figure 4-16: Intersection 10 – SIDRA Layout



The results for the network SIDRA assessment for intersection 10 are detailed in Table 4-16

Table 4-16: Intersection 10 – SIDRA Network Results

Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	95%ile Queue	DOS	LOS	Avg Delay	95%ile Queue
2023 BG	0.02	-	2 sec	0m	0.01	-	2 sec	0m
2028 BG	0.02	-	2 sec	0m	0.01	-	2 sec	0m
2028 BG+DEV	0.02	-	2 sec	0m	0.02	-	2 sec	0m
2033 BG	0.02	-	2 sec	0m	0.01	-	2 sec	0m
2033 BG+DEV	0.04	-	2 sec	1m	0.05	-	2 sec	0m
2038 BG	0.02	-	2 sec	0m	0.01	-	2 sec	0m
2038 BG+DEV	0.04	-	2 sec	1m	0.05	-	2 sec	0m

The performance threshold for a priority intersection is a DOS of less than 0.8. The SIDRA results indicate that the Madoline Street / Sidney Street intersection is expected to continue to perform below the threshold all future scenarios, with a maximum DOS of 0.05. As such, the peak hour volumes generated by the proposal are expected to have acceptable impacts on intersection performance when compared with the background scenarios.

Intersection 11 – Madoline Street / Hoskins Street

The SIDRA layout used for Madoline Street / Hoskins Street intersection (Intersection 11) is outlined in Figure 4-17

Figure 4-17: Intersection 11 – SIDRA Layout



The results for the network SIDRA assessment for intersection 11 are detailed in Table 4-17

Table 4-17: Intersection 11 – SIDRA Network Results

Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	95%ile Queue	DOS	LOS	Avg Delay	95%ile Queue
2023 BG	0.02	-	1 sec	0m	0.02	-	1 sec	0m
2028 BG	0.02	-	1 sec	0m	0.02	-	1 sec	0m
2028 BG+DEV	0.02	-	1 sec	0m	0.03	-	1 sec	0m
2033 BG	0.02	-	1 sec	0m	0.02	-	1 sec	0m
2033 BG+DEV	0.06	-	1 sec	1m	0.06	-	1 sec	0m
2038 BG	0.02	-	1 sec	0m	0.02	-	1 sec	0m
2038 BG+DEV	0.06	-	1 sec	1m	0.06	-	1 sec	0m

The performance threshold for a priority intersection is a DOS of less than 0.8. The SIDRA results indicate that the Madoline Street / Hoskins Street intersection is expected to continue to perform below the threshold all future scenarios, with a maximum DOS of 0.06. As such, the peak hour volumes generated by the proposal are expected to have acceptable impacts on intersection performance when compared with the background scenarios.

4.8 MITIGATING MEASURES AND INTERSECTION WORKS

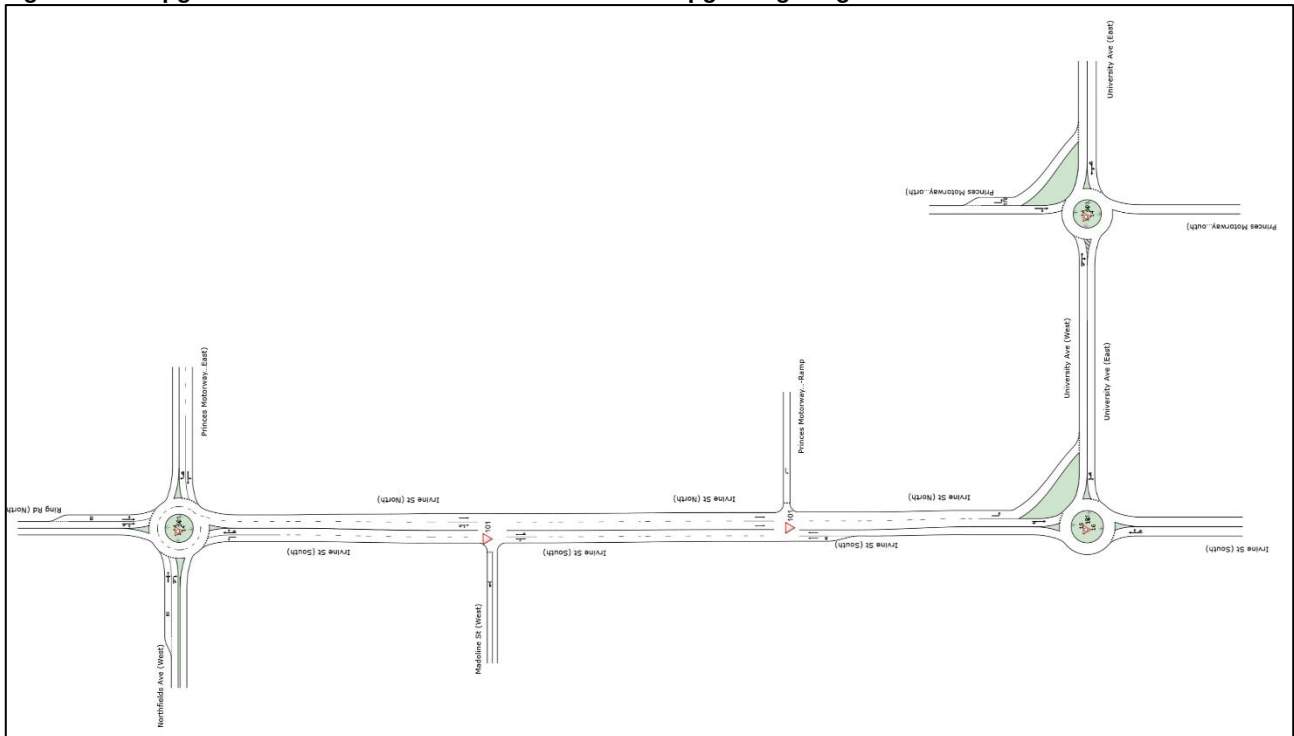
4.8.1 OVERVIEW

Based on the SIDRA network results, indicative DOS and queuing impacts indicate that mitigation works may be required to facilitate the proposal, specifically at the Ring Road / Northfields Avenue roundabout and the Irvine Road / University Avenue roundabout. As such, the following works are recommended:

- a new high entry angle approach to Irvine Street (southbound) to facilitate easy access to University Avenue and reduce queuing on Irvine Street
- an additional lane on Irvine Street (southbound) by removing the current on-street parking provision, increasing the capacity of Irvine Street
- finalising the 2-lane provision of the Ring Road / Northfields Avenue roundabout to facilitate improved performance on Ring Road and Northfields Avenue.

The recommended mitigation works have been detailed below in an updated mitigation SIDRA Network in Figure 4-18.

Figure 4-18: Upgraded Network – Four-lane Irvine Street & Upgrading Ring Road / Northfields Ave Intersection



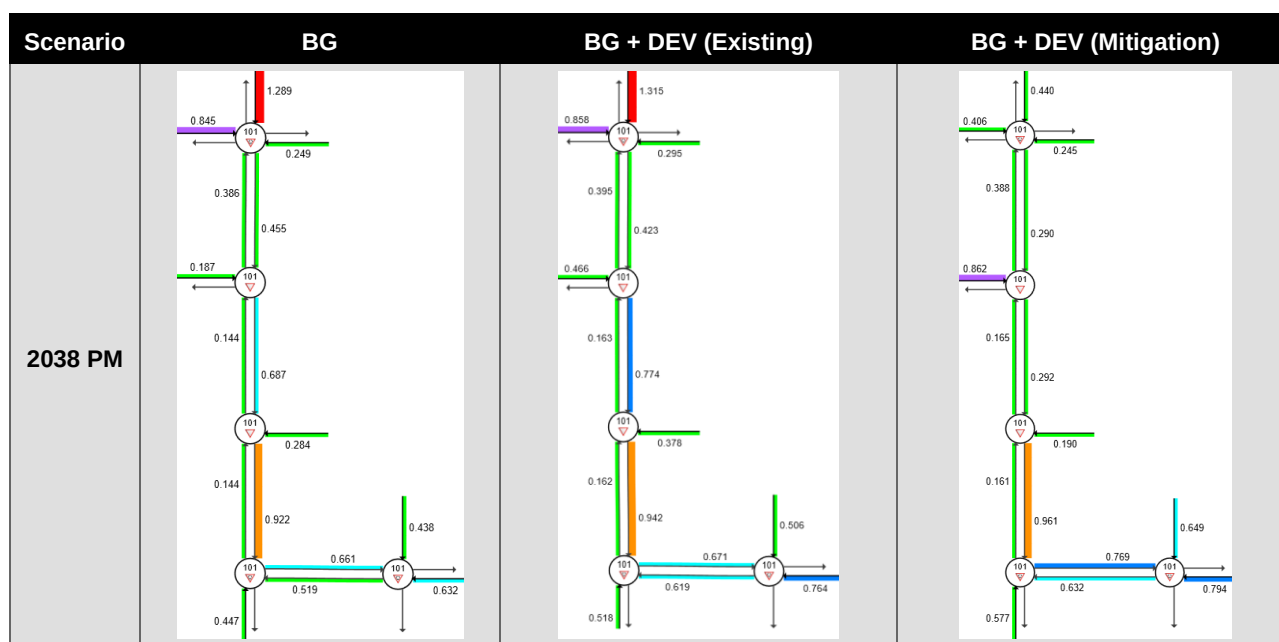
It is worth noting that the analysis undertaken assumes 30% social and affordable housing split, Homes NSW has committed to the delivery of 50% social and affordable housing (i.e. 625 dwellings) and 50% market / private sale homes (i.e. 625 dwellings) at Gwynneville. As a result, the following outputs of this transport model can be viewed as "conservative" and the traffic impacts from the development will be less than anticipated at this preliminary stage. Each Development Application will be required to confirm their individual traffic impact with a Traffic Impact Assessment, or equivalent document. Future upgrade works will be further specified during the Development Application stage to ensure adequate treatment measures are adopted.

4.8.2 IRVINE STREET NETWORK SIDRA DOS RESULTS – MITIGATION LAYOUT

A comparison between the current and mitigation network DOS plots is detailed in Table 4-18.

Table 4-18: SIDRA Network Background DOS Plots – Existing Vs Mitigation

Scenario	BG	BG + DEV (Existing)	BG + DEV (Mitigation)
2033 AM			
2033 PM			
2038 AM			



The mitigation works are expected to reduce the forecast DOS across the network. Whilst there are still capacity issues on Irvine Street (southbound), these are still an improvement over the background scenarios (without proposal scenarios) and allow for significant improvements on the northern portion of the network, where the greatest capacity constraints were noted.

4.8.3 IRVINE STREET NETWORK QUEUING IMPACTS – MITIGATION LAYOUT

A comparison between the current and mitigation network indicative 95th %ile queuing impacts is detailed in Table 4-19.

Table 4-19: Irvine Street SIDRA Network indicative 95%ile queuing impacts – Mitigation Network

Scenario	Ring Road		Northfields Ave		Irvine Street		Princes Mwy Off-ramp	
	AM	PM	AM	PM	AM	PM	AM	PM
2033 BG	NA	550m	NA	90m	110m	180m	40m	NA
2033 BG+DEV (no mitigation)	NA	590m	NA	90m	110m	220m	65m	NA
2033 BG+DEV (with mitigation)	NA	200m	NA	50m	110m	100m	60m	NA
2038 BG	NA	710m	NA	120m	130m	180m	45m	NA
2038 BG+DEV (no mitigation)	NA	750m	NA	120m	130m	200m	95m	NA
2038 BG+DEV (with mitigation)	NA	200m	NA	50m	130m	190m	80m	NA

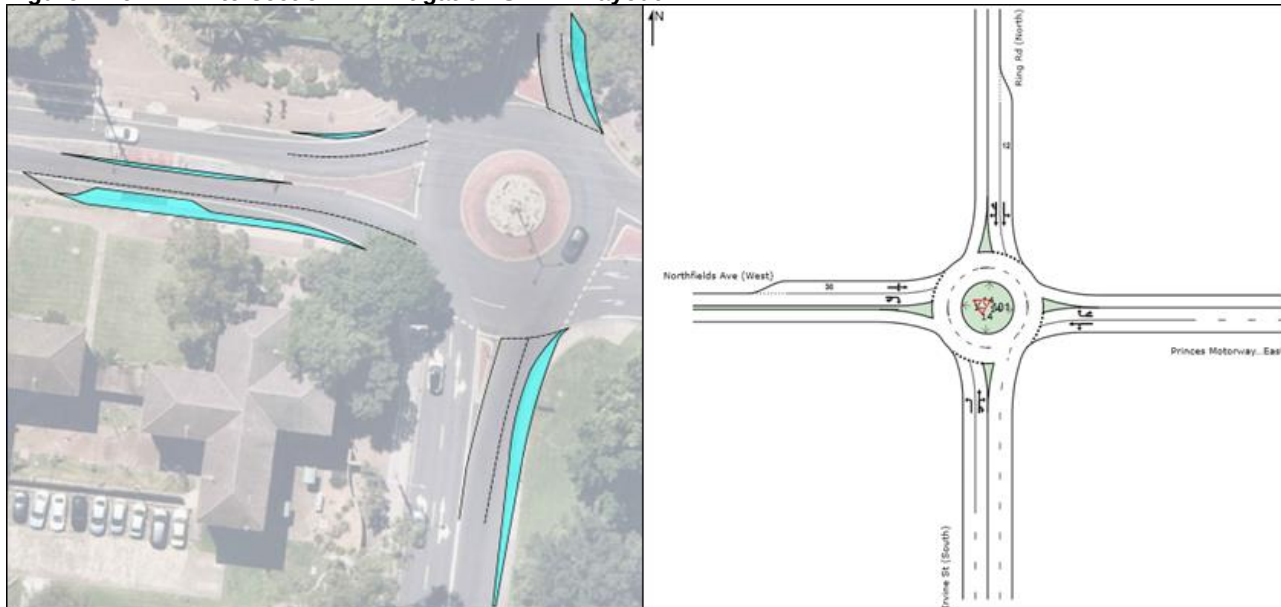
The proposed mitigations significantly reduce the indicative queuing impacts and improve the overall performance of the network to an acceptable standard.

4.8.4 INDIVIDUAL INTERSECTION SIDRA ANALYSIS – MITIGATION LAYOUTS

Intersection 1 – Mitigated Northfields Avenue / Ring Road / Irvine Street / Princess Motorway Northbound Off-ramp roundabout

The SIDRA layout used for the mitigated Northfields Avenue / Ring Road / Irvine Street / Princess Motorway Northbound Off-ramp roundabout (Intersection 1) is outlined in Figure 4-19.

Figure 4-19: Intersection 1 – Mitigation SIDRA Layout



The results for the network SIDRA assessment for the mitigated intersection 1, compared with the expected performance under the existing network configuration (i.e. no mitigation), is detailed in Table 4-20.

Table 4-20: Intersection 1 – Mitigation SIDRA Network Results

Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	Average Queue	DOS	LOS	Avg Delay	Average Queue
2033 BG	0.53	A	9 sec	11m	1.17	E	65 sec	200m (N)
2033 BG+DEV (no mitigation)	0.54	A	9 sec	11m	1.19	E	68 sec	214m (N)
2033 BG+DEV (with mitigation)	0.53	A	8 sec	11m	0.41	A	8 sec	7m
2038 BG	0.57	A	9 sec	13m	1.29	F	96 sec	285m (N)
2038 BG+DEV (no mitigation)	0.58	A	9 sec	13m	1.32	F	100 sec	301m (N)
2038 BG+DEV (with mitigation)	0.57	A	9 sec	12m	0.44	A	8 sec	8m

The SIDRA results indicate that the mitigated Northfields Avenue / Ring Road / Irvine Street / Princess Motorway Northbound Off-ramp roundabout is expected to perform significantly better than the current network layout. This indicates that the mitigation measures would suitably alleviate the expected future impacts.

Intersection 2 - Mitigated Irvine Street / Madoline Street

The SIDRA layout used for the intersection 2 mitigation is outlined in Figure 4-20.

Figure 4-20: Intersection 2 – Mitigation SIDRA Layout



The results for the network SIDRA assessment for the mitigated intersection 2, compared with the expected performance under the existing network configuration (i.e. no mitigation), is detailed in Table 4-21.

Table 4-21: Intersection 2 – Mitigation SIDRA Network Results

Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	Average Queue	DOS	LOS	Avg Delay	Average Queue
2033 BG	0.19	-	1 sec	1m	0.46	-	1 sec	2m
2033 BG+DEV (no mitigation)	0.47	-	3 sec	6m	0.50	-	3 sec	5m
2033 BG+DEV (with mitigation)	0.61	-	4 sec	9m	0.71	-	4 sec	9m
2038 BG	0.20	-	1 sec	1m	0.45	-	1 sec	2m
2038 BG+DEV (no mitigation)	0.51	-	3 sec	7m	0.46	-	3 sec	5m
2038 BG+DEV (with mitigation)	0.68	-	5 sec	10m	0.86	-	6 sec	13m

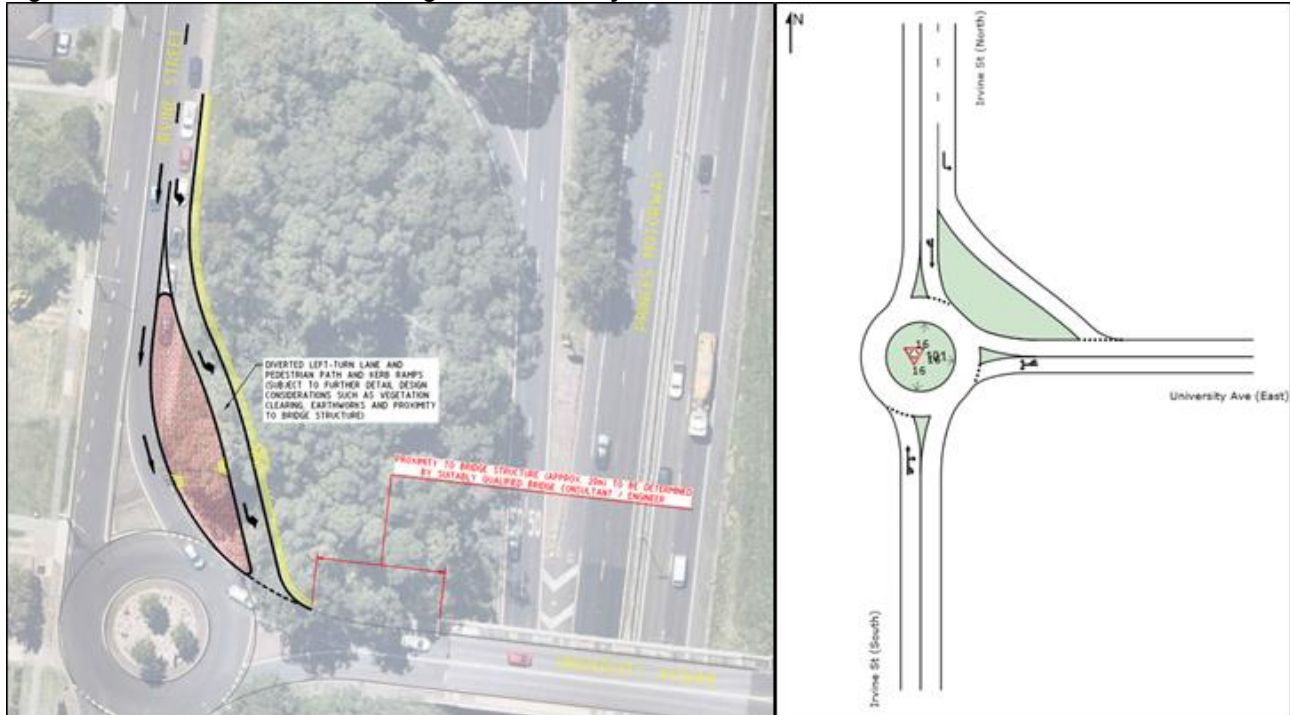
The performance threshold for a priority intersection is a DOS of less than 0.8. The SIDRA results indicate that the mitigated Irvine Street / Madoline Street intersection does exceed the DOS threshold in the 2038 BG + DEV scenario with a maximum DOS of 0.86. However, given the improvements to the other intersections in the network, and the minimal volumes experienced on Madoline Street, the overall network outcome is considered acceptable.

It may be necessary to review the turn warrants at this intersection at a later design stage, once the indicative proposal yields are confirmed.

Intersection 3 - Mitigated Irvine Street / University Avenue Roundabout

The SIDRA layout used for the mitigated Irvine Street / University Avenue roundabout (Intersection 3) is outlined in Figure 4-21.

Figure 4-21: Intersection 3 – Mitigation SIDRA Layout



The results for the network SIDRA assessment for the mitigated intersection 3, compared with the expected performance under the existing network configuration (i.e. no mitigation), is detailed in Table 4-22.

Table 4-22: Intersection 3 – Mitigation SIDRA Network Results

Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	Average Queue	DOS	LOS	Avg Delay	Average Queue
2033 BG	0.72	A	8 sec	26m	0.93	B	13 sec	76m (N)
2033 BG+DEV (no mitigation)	0.83	B	12 sec	43m	0.95	B	15 sec	89m (N)
2033 BG+DEV (with mitigation)	0.76	A	9 sec	31m	0.85	A	9 sec	39m
2038 BG	0.76	A	9 sec	32m	0.92	B	12 sec	72m (N)
2038 BG+DEV (no mitigation)	0.88	B	14 sec	55m	0.94	B	14 sec	82m (N)
2038 BG+DEV (with mitigation)	0.80	A	10 sec	38m	0.96	B	14 sec	75m (N)

The SIDRA results indicate that the mitigated Irvine Street / University Avenue roundabout results in minimal changes to the intersection performance. While the DOS is still above the performance threshold for a roundabout, the LOS and average delay are still within acceptable thresholds, and results in slightly better queues and average delays compared to the current intersection layout.

Intersection 4 – Mitigated University Avenue / Princes Motorway Southbound On & Off-ramp roundabout

The SIDRA layout used for the mitigated University Avenue / Princes Motorway Southbound On & Off-ramp roundabout (Intersection 4) is outlined in Figure 4-22.

Figure 4-22: Intersection 4 – Mitigation SIDRA Layout



The results for the network SIDRA assessment for the mitigated intersection 4, compared with the expected performance under the existing network configuration (i.e. no mitigation), is detailed in Table 4-23

Table 4-23: Intersection 4 – Mitigation SIDRA Network Results

Scenario	AM Peak				PM Peak			
	DOS	LOS	Avg Delay	Average Queue	DOS	LOS	Avg Delay	Average Queue
2033 BG	0.61	A	9 sec	17m	0.67	A	8 sec	29m
2033 BG+DEV (no mitigation)	0.71	B	11 sec	25m	0.71	A	10 sec	30m
2033 BG+DEV (with mitigation)	0.70	B	11sec	24m	0.74	B	11 sec	42m
2038 BG	0.67	A	10 sec	20m	0.66	A	9 sec	28m
2038 BG+DEV (no mitigation)	0.82	B	15 sec	36m	0.76	B	10 sec	31m
2038 BG+DEV (with mitigation)	0.79	B	14 sec	33m	0.79	B	14 sec	50m (W)

The SIDRA results indicate that the mitigated University Avenue / Princes Motorway Southbound On & Off-ramp roundabout results in minimal changes to the intersection performance. The DOS is below the performance threshold for a roundabout in both the current and mitigation layouts, and the LOS and average delay are within acceptable thresholds, resulting in a compliant intersection with minimal changes as a result of the indicative mitigation works.

4.9 SUMMARY

Overall, the mitigation works result in improved network performance which is expected to accommodate the additional traffic demands expected to be generated by the proposal.

It is important to note that the requirement for mitigation works is required as a result of both Background and Background plus Development scenarios. As such, the traffic impacts are not solely the result of the proposal, and a cost sharing approach to mitigation could be appropriate to ensure that that responsibility for upgrade is shared between Homes NSW, UoW and Council.

The subject of cost apportionment for mitigation works should be discussed and agreed as the design progresses.

5.0 GREEN TRAVEL PLAN

Transport is a necessary part of life, but it has economic, public health and environmental consequences. The transport sector is one of the fastest growing emissions sectors in Australia, and therefore is one of the key opportunities for reducing greenhouse gases. As well as delivering better environmental outcomes, providing a range of travel choices with a focus on walking, cycling and public transport will have major public health benefits and will ensure a strong and prosperous community.

The physical infrastructure being provided as part of the proposal is only part of the solution. A green travel plan (GTP) will ensure that the transport infrastructure, services and policies both within and external to the site are tailored to the users and coordinated to achieve the most sustainable outcome possible.

A Green Travel Plan (GTP) is a package of measures aimed at promoting sustainable travel and reducing reliance on the private car. It is not designed to be 'anti-car' however it will encourage and support people's aspirations for carrying out their daily business in a more sustainable way. Travel plans can provide both:

- measures which restrict car use (disincentives or 'sticks')
- measures which encourage or support sustainable travel, reduce the need to travel or make travelling more efficient (incentives or 'carrots').

A GTP would allow all users (visitors, residents, staff, guests) to achieve the above outcomes by providing flexibility around how and when they travel. This is especially important in well planned precincts and town centre environments which attract a high number of visitors for a variety of reasons.

The GTP would seek to understand the existing public transport, cycling and walking catchments to identify gaps (if any) in the network for improvement. Similarly, opportunities would also be identified to provide better connectivity between the site and other key centres. The GTP would also understand the origins and destinations of staff and visitors to understand what targeted actions would bring about the most benefit. This would occur using travel surveys, either by physical means such as interviews or by electronic means such as email/ online survey forms. Future travel conditions, including expected mode shares for different scenarios would be considered prior to the proposal of key actions.

It is recommended that a GTP is developed as part of future design stages to ensure better transport arrangements for people living within the site. The key objectives of a GTP are:

- to encourage walking
- to encourage cycling
- to encourage the use of public transport
- to reduce the use of the car, in particular single car occupancy
- where it is necessary to use the car, encourage more efficient use.

It is the intention therefore that a GTP will deliver the following benefits:

- enable higher public and active travel mode share targets to be achieved
- contribute to greenhouse gas emission reductions and carbon footprint minimisation
- contribute to healthy living for all
- contribute to social equity and reduction in social exclusion
- improve knowledge and contribute to learning.

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 CONCLUSION

The outcomes of this transport assessment are as follows:

- The proposal consists of approximately 1,250 dwellings, at least 50% of which will be a mix of social and affordable housing and student accommodation. Whilst the analysis undertaken in this report assumes 30% social and affordable housing split, Homes NSW has committed to the delivery of 50% social and affordable housing (i.e. 625 dwellings) and 50% market / private sale homes (i.e. 625 dwellings) at Gwynneville. As a result, the outputs of this transport model can be viewed as "conservative" and the traffic impacts from the development will be less than anticipated at this preliminary stage. Each Development Application will be required to confirm their individual traffic impact with a Traffic Impact Assessment, or equivalent document. Further refined recommendations are anticipated to be developed during the Development Application phase of this project. Notwithstanding, the below recommendations have been developed in response to the analysis undertaken within this report.
- Construction of the proposal would begin in 2028 and proceed at a rate of 200-250 dwellings per year, to an ultimate proposed yield of 1,250 dwellings by 2033.
- As part of the proposal 11 existing intersections have been analysed to determine both current local network operations and the potential effect of the indicative proposal yields.
- The local road network currently experiences capacity issues, which are expected to increase up to a peak design year of 2038. These capacity issues are also exacerbated by the delivery of the planned nearby Mount Ousley interchange, which is expected to be completed by 2027.
- A combination of existing background impacts and the indicative proposal result in unacceptable impacts to the local road network, and mitigation works will be required for an improved outcome.
- The proposed mitigation works include the following network modifications:
 - a new high entry angle approach to Irvine Street (southbound) to facilitate easy access to University Avenue and reduce queuing on Irvine Street
 - an additional lane on Irvine Street (southbound) by removing the current on-street parking provision, increasing the capacity of Irvine Street.
 - finalising the 2-lane provision of the Ring Road / Northfields Avenue roundabout to facilitate improved performance on Ring Road and Northfields Avenue.
- The proposed mitigation works result in improved network performance, which is expected to accommodate both the future background volumes and the expected proposal impacts.

6.2 RECOMMENDATIONS

This report addresses the issue of traffic and transport and has been prepared in support of the Gwynneville Precinct Planning Proposal.

This report includes the following recommendations:

Vehicle Access

- direct vehicle access to Irvine Street is not recommended and is instead recommended to be consolidated onto the nearby lower volume roads such as Hoskins Street
- vehicle access design is to be developed in accordance with applicable Australian Standards, Council's Development Control Plan and other relevant guidelines in accordance with good traffic engineering practice.

Carparking

- specific car parking provisions are yet to be determined and will be confirmed in a later design phase, however, it is recommended that the car parking provisions carefully considers the balance of supply so as to achieve the aspired mode share for the precinct, but does not exacerbate existing on-street car parking issues.

Pedestrian Facilities

- it is recommended that additional pedestrian facilities should be provided on all road frontages within the precinct to facilitate active travel
- a review of the existing pedestrian crossing facilities on Northfields Avenue should be undertaken in accordance with the Austroads 'Pedestrian Crossing Facility Selection Tool' to ensure that the most suitable crossing facilities are present to encourage Active Transport mode shift where possible



- it is further recommended that a “Walk Network Plan” is prepared to identify the key pedestrian desire lines within the precinct following full development, and appropriate pedestrian crossing treatments for key routes to ensure safe and efficient access.

Bicycle Facilities

- specific bicycle parking provisions are yet to be determined and will be confirmed in a later design phase, however, it is recommended that statutory bike parking requirements are met (at a minimum) and high-quality end-of-trip provisions are provided internal to the development to help assist with increasing active travel mode share.

Refuse Collection and Heavy Vehicle Servicing

- service vehicle and loading bay provisions are yet to be determined and will be confirmed in a later design phase, however, it is recommended that all service vehicle requirements and associated loading bay provisions (parking aisle width, ramp grades, etc.) are to be provided as per the requirements noted in AS2890.2 and Council's Development Control Plan.

Traffic Impact Mitigation

- based on the results of the traffic modelling which reviewed forecast degrees of saturation, level of service and 95th percentile queues, mitigation treatments are suggested at the Ring Road / Northfields Avenue roundabout and the Irvine Road / University Avenue roundabout. A summary of the recommended improvements are as follows:
 - a new high entry angle approach to Irvine Street (southbound) to facilitate easy access to University Avenue and reduce queuing on Irvine Street
 - an additional lane on Irvine Street (southbound) by removing the current on-street parking provision, increasing the capacity of Irvine Street
 - finalising the 2-lane provision of the Ring Road / Northfields Avenue roundabout to facilitate improved performance on Ring Road and Northfields Avenue.

Green Travel Plan

- it is recommended that a Green Travel Plan is developed as part of future design stages to ensure better transport arrangements for people living within the site.

The amended planning proposal and master plan of February 2025 has not altered any conclusions and recommendations of this report.

Appendix A. Concept Plans

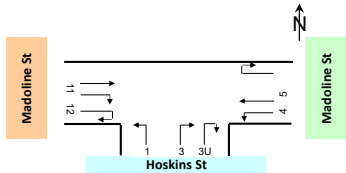


Appendix B. Traffic Surveys



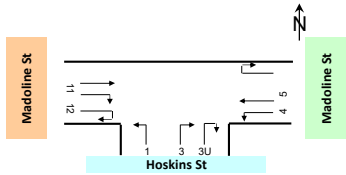
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Suburb : Wollongong
Location : 11. Madoline St / Hoskins St
Day/Date : Wed 17th May 2023
Weather : Fine
Description : Classified Intersection Count
: 15 mins Data

Classifications
Class 1 Lights
Class 2 Heavies



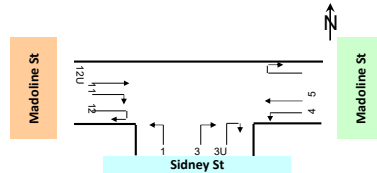
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	Lights	Heavies	Total		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total			Lights	Heavies	Total	Lights	Heavies	Total																
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total																
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Location : 11. Madoline St / Hoskins St
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Description : Classified Intersection Count
: Hourly Summary



Approach		Hoskins St										Madoline St										Madoline St												
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Job No. : AUNSW6508
 Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
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 Location : 10, Madoline St / Sidney St
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 Description : Classified Intersection Count
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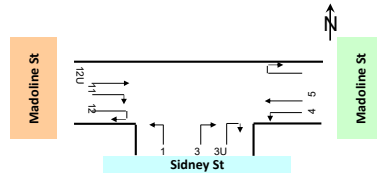


MATRIX
 Traffic and Transport Data

Classifications
 Class 1 : Lights
 Class 2 : Heavies

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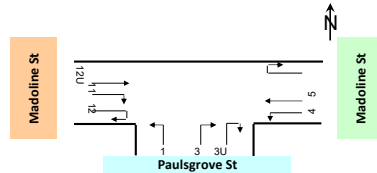
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MATRIX
 Traffic and Transport Data

Approach				Sidney St												Madoline St												Madoline St											
Direction				Direction 1			Direction 3			Direction 3U			Direction 4			Direction 5			Direction 6U			Direction 11			Direction 12			Direction 12U											
Time Period				Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total												
7:00 to 8:00				2	0	2	1	0	1	0	0	0	2	0	2	4	1	5	0	0	0	5	1	6	0	0	0												
7:15 to 8:15				3	0	3	1	0	1	0	0	0	1	0	1	6	0	6	0	0	0	8	0	8	0	0	0												
7:30 to 8:30				2	0	2	1	0	1	0	0	0	3	0	3	8	0	8	1	0	1	11	0	11	1	0	1												
7:45 to 8:45				3	0	3	1	1	2	0	0	0	3	0	3	12	0	12	1	0	1	18	0	18	1	0	1												
8:00 to 9:00				3	0	3	0	1	1	0	0	0	6	0	6	17	0	17	1	0	1	20	0	20	4	0	4												
8:15 to 9:15				2	0	2	1	1	2	0	0	0	6	0	6	24	0	24	1	0	1	22	0	22	4	0	4												
8:30 to 9:30				2	0	2	1	1	2	0	0	0	5	0	5	29	0	29	0	0	0	21	0	21	3	0	3												
8:45 to 9:45				1	0	1	2	0	2	0	0	0	8	0	8	30	0	30	0	0	0	20	0	20	3	0	3												
9:00 to 10:00				0	0	0	3	0	3	0	0	0	7	0	7	27	2	29	1	0	1	18	1	19	3	0	3												
AM Totals				5	0	5	4	1	5	0	0	0	15	0	15	48	3	51	2	0	2	43	2	45	7	0	7												
16:00 to 17:00				0	0	0	6	0	6	0	0	0	7	0	7	11	0	11	2	0	2	19	1	20	6	0	6												
16:15 to 17:15				0	0	0	5	0	5	0	0	0	7	0	7	14	0	14	2	0	2	23	1	24	3	0	3												
16:30 to 17:30				1	0	1	5	0	5	0	0	0	5	0	5	13	0	13	2	0	2	19	0	19	2	0	2												
16:45 to 17:45				1	0	1	5	0	5	0	0	0	4	0	4	15	0	15	2	0	2	16	0	16	2	0	2												
17:00 to 18:00				1	0	1	3	0	3	0	0	0	4	0	4	15	0	15	0	0	0	14	0	14	1	0	1												
17:15 to 18:15				1	0	1	3	0	3	0	0	0	3	0	3	16	0	16	1	0	1	10	0	10	3	0	3												
17:30 to 18:30				0	0	0	2	0	2	0	0	0	3	0	3	13	0	13	1	0	1	13	0	13	2	0	2												
17:45 to 18:45				1	0	1	0	0	0	0	0	1	0	1	10	0	10	1	0	1	11	0	11	3	0	3													
18:00 to 19:00				1	0	1	0	0	0	0	0	0	0	0	0	12	0	12	1	0	1	17	0	17	3	0	3												
PM Totals				2	0	2	9	0	9	0	0	0	11	0	11	38	0	38	3	0	3	50	1	51	10	0	10												

Job No. : AUNSW6508
 Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
 Suburb : Wollongong
 Location : 9. Paulsgrove St / Madoline St
 Day/Date : Wed 17th May 2023
 Weather : Fine
 Description : Classified Intersection Count
 : 15 mins Data

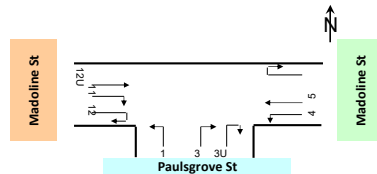


MATRIX
 Traffic and Transport Data

Classifications
 Class 1 : Lights
 Class 2 : Heavies

Approach				Paulsgrove St												Madoline St												Madoline St											
Direction		Direction 1 (Left Turn)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 5 (Through)			Direction 6U (U Turn)			Direction 11 (Through)			Direction 12 (Right Turn)			Direction 12U (U Turn)													
		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total														
Time Period				Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total															
7:00 to 7:15				2	1	3	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	2	0	0	0														
7:15 to 7:30				1	0	1	0	0	0	0	2	0	2	0	0	0	0	0	0	1	1	0	1	0	0														
7:30 to 7:45				0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	1	1	0	0														
7:45 to 8:00				0	0	0	1	0	1	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0														
8:00 to 8:15				1	0	1	2	0	2	0	0	3	0	3	0	0	0	0	0	1	1	0	1	0	0														
8:15 to 8:30				0	0	0	5	0	5	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0														
8:30 to 8:45				0	0	0	3	0	3	0	0	3	0	3	2	0	2	1	0	1	1	0	0	0	0														
8:45 to 9:00				2	0	2	4	0	4	1	0	1	3	0	3	1	0	1	1	0	1	0	0	0	0														
9:00 to 9:15				0	0	0	6	0	6	0	0	5	0	5	3	0	3	0	0	0	0	1	0	1	0														
9:15 to 9:30				0	0	0	2	0	2	0	0	5	0	5	0	0	0	0	0	1	0	1	0	0	0														
9:30 to 9:45				1	0	1	3	0	3	0	0	2	0	2	2	0	2	0	0	0	0	0	0	0	0														
9:45 to 10:00				1	0	1	5	0	5	1	0	1	2	0	2	1	1	2	0	0	0	1	1	2	0														
AM Totals				8	1	9	31	0	31	2	0	2	33	0	33	9	2	11	2	0	2	7	2	9	3														
10:00 to 10:15				3	0	3	8	0	8	0	0	0	3	0	3	1	0	1	0	0	0	2	0	2	0														
10:15 to 10:30				1	0	1	4	0	4	1	0	1	2	0	2	1	0	1	1	0	1	0	1	0	0														
10:30 to 10:45				0	0	0	6	0	6	0	0	2	0	2	0	0	0	0	0	0	0	1	0	1	0														
10:45 to 11:00				1	0	1	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0														
11:00 to 11:15				0	0	0	5	0	5	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0														
11:15 to 11:30				0	0	0	1	0	1	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0														
11:30 to 11:45				0	0	0	3	0	3	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0														
11:45 to 12:00				0	0	0	3	0	3	1	0	1	3	0	3	0	0	0	0	0	0	0	0	0	0														
12:00 to 12:15				0	0	0	3	0	3	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0														
12:15 to 12:30				0	0	0	4	0	4	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0														
12:30 to 12:45				0	0	0	1	0	1	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0														
12:45 to 13:00				0	0	0	3	0	3	0	0	6	0	6	0	0	0	0	0	0	0	0	0	0	0														
PM Totals				5	0	5	43	0	43	2	0	2	27	0	27	3	0	3	8	0	8	3	1	4	4														

Job No. : AUNSW6508
 Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
 Suburb : Wollongong
 Location : 9. Paulsgrove St / Madoline St
 Day/Date : Wed 17th May 2023
 Weather : Fine
 Description : Classified Intersection Count
 : Hourly Summary

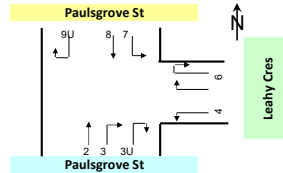


MATRIX
 Traffic and Transport Data

Approach				Paulsgrove St												Madoline St												Madoline St											
Direction				Direction 1			Direction 3			Direction 3U			Direction 4			Direction 5			Direction 6U			Direction 11			Direction 12			Direction 12U											
Time Period				Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total									
7:00 to 8:00				3	1	4	1	0	1	0	0	0	7	0	7	0	0	0	0	0	0	2	1	3	1	1	2	0	0	0									
7:15 to 8:15				2	0	2	3	0	3	0	0	0	10	0	10	0	0	0	0	0	0	2	0	2	2	1	3	0	0	0									
7:30 to 8:30				1	0	1	8	0	8	0	0	0	11	0	11	0	0	0	0	0	0	1	0	1	1	1	2	0	0	0									
7:45 to 8:45				1	0	1	11	0	11	0	0	0	12	0	12	2	0	2	2	0	2	2	0	2	1	0	1	0	0	0									
8:00 to 9:00				3	0	3	14	0	14	1	0	1	12	0	12	3	0	3	2	0	2	3	0	3	1	0	1	0	0	0									
8:15 to 9:15				2	0	2	18	0	18	1	0	1	14	0	14	6	0	6	2	0	2	2	0	2	1	0	1	0	0	0									
8:30 to 9:30				2	0	2	15	0	15	1	0	1	16	0	16	6	0	6	2	0	2	3	0	3	1	0	1	0	0	0									
8:45 to 9:45				3	0	3	15	0	15	1	0	1	15	0	15	6	0	6	1	0	1	2	0	2	1	0	1	0	0	0									
9:00 to 10:00				2	0	2	16	0	16	1	0	1	14	0	14	6	1	7	0	0	0	2	1	3	1	0	1	0	0	0									
AM Totals				8	1	9	31	0	31	2	0	2	33	0	33	9	2	11	2	0	2	7	2	9	3	1	4	0	0	0									
16:00 to 17:00				5	0	5	20	0	20	1	0	1	7	0	7	3	0	3	2	0	2	2	1	3	3	0	3	0	0	0									
16:15 to 17:15				2	0	2	17	0	17	1	0	1	5	0	5	2	0	2	3	0	3	0	1	1	3	0	3	0	0	0									
16:30 to 17:30				1	0	1	14	0	14	0	0	0	6	0	6	1	0	1	4	0	4	0	0	2	3	0	3	0	0	0									
16:45 to 17:45				1	0	1	11	0	11	0	0	0	6	0	6	1	0	1	4	0	4	0	0	2	3	0	3	0	0	0									
17:00 to 18:00				0	0	0	12	0	12	1	0	1	9	0	9	0	0	0	2	0	2	5	0	5	0	1	0	1	0	0									
17:15 to 18:15				0	0	0	10	0	10	1	0	1	10	0	10	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0								
17:30 to 18:30				0	0	0	13	0	13	1	0	1	8	0	8	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0								
17:45 to 18:45				0	0	0	11	0	11	1	0	1	8	0	8	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0								
18:00 to 19:00				0	0	0	11	0	11	0	0	0	11	0	11	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0								
PM Totals				5	0	5	43	0	43	2	0	2	27	0	27	3	0	3	8	0	8	3	1	4	4	0	4	0	0	0	0								

Job No. : AUNSW6508
Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
Suburb : Wollongong
Location : 8. Paulsgrove St / Leahy Cres
Day/Date : Wed 17th May 2023
Weather : Fine
Description : Classified Intersection Count
: 15 mins Data

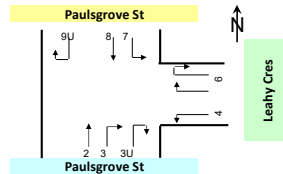
Classifications
Class 1 Lights
Class 2 Heavies



Int 8

Approach		Paulsgrove St									Leahy Cres									Approach		Paulsgrove St								
Direction		Direction 2 (Through)			Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 6 (Right Turn)			Direction 6U (U Turn)			Direction		Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9U (U Turn)		
Time Period		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Time Period		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total
7:00 to 7:15		1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7:00 to 7:15	0	0	0	1	0	1	0	0	0	0
7:15 to 7:30		1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7:15 to 7:30	0	0	0	3	0	3	0	0	0	0
7:30 to 7:45		1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7:30 to 7:45	0	0	0	2	1	3	0	0	0	0
7:45 to 8:00		1	0	1	1	0	1	0	0	0	3	0	3	0	0	0	0	0	0	7:45 to 8:00	1	0	1	1	0	1	0	0	0	0
8:00 to 8:15		4	0	4	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	8:00 to 8:15	0	0	0	4	0	4	0	0	0	0
8:15 to 8:30		6	0	6	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	8:15 to 8:30	0	0	0	4	0	4	0	0	0	0
8:30 to 8:45		4	0	4	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8:30 to 8:45	1	0	1	4	0	4	0	0	0	0
8:45 to 9:00		6	0	6	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0	8:45 to 9:00	0	0	0	3	0	3	0	0	0	0
9:00 to 9:15		6	0	6	1	0	1	1	0	1	2	0	2	0	0	0	1	0	1	9:00 to 9:15	2	0	2	4	0	4	0	0	0	0
9:15 to 9:30		4	0	4	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	9:15 to 9:30	2	0	2	3	0	3	0	1	0	1
9:30 to 9:45		3	0	3	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	9:30 to 9:45	0	0	0	3	0	3	0	0	0	0
9:45 to 10:00		6	0	6	1	0	1	0	0	0	3	0	3	0	0	0	0	0	0	9:45 to 10:00	1	0	1	3	0	3	0	0	0	0
AM Totals		43	1	44	4	0	4	2	0	2	17	0	17	0	0	1	0	1	0	AM Totals	7	0	7	35	1	36	0	1	0	1
16:00 to 16:15		3	0	3	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	16:00 to 16:15	0	0	0	1	0	1	0	0	0	0
16:15 to 16:30		6	0	6	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	16:15 to 16:30	1	0	1	1	0	1	0	0	0	0
16:30 to 16:45		5	0	5	5	0	5	0	0	0	1	0	1	0	0	0	0	0	0	16:30 to 16:45	0	0	0	3	0	3	0	0	0	0
16:45 to 17:00		3	0	3	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	16:45 to 17:00	0	0	0	1	0	1	0	0	0	0
17:00 to 17:15		3	0	3	3	0	3	1	0	1	2	0	2	0	0	0	0	0	0	17:00 to 17:15	1	0	1	3	0	3	0	0	0	0
17:15 to 17:30		1	0	1	1	0	1	0	0	0	3	0	3	0	0	0	0	0	0	17:15 to 17:30	0	0	0	1	0	1	0	0	0	0
17:30 to 17:45		2	0	2	5	0	5	0	0	0	1	0	1	0	0	0	0	0	0	17:30 to 17:45	0	0	0	3	0	3	0	0	0	0
17:45 to 18:00		3	0	3	1	0	1	0	0	0	2	0	2	0	0	0	0	0	0	17:45 to 18:00	1	0	1	3	0	3	0	0	0	0
18:00 to 18:15		1	0	1	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	18:00 to 18:15	0	0	0	1	0	1	0	0	0	0
18:15 to 18:30		1	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	18:15 to 18:30	0	0	0	2	0	2	0	0	0	0
18:30 to 18:45		2	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	18:30 to 18:45	0	0	0	2	0	2	0	0	0	0
18:45 to 19:00		4	0	4	0	0	0	0	0	0	3	0	3	0	0	0	0	0	0	18:45 to 19:00	0	0	0	8	0	8	0	0	0	0
PM Totals		34	0	34	17	0	17	1	0	1	17	0	17	0	0	0	6	0	6	PM Totals	3	0	3	29	0	29	0	0	0	0

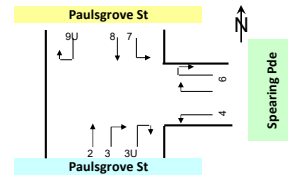
Job No. : AUNSW6508
Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
Suburb : Wollongong
Location : 8. Paulsgrove St / Leahy Cres
Day/Date : Wed 17th May 2023
Weather : Fine
Description : Classified Intersection Count
: Hourly Summary



Approach		Paulsgrove St										Leahy Cres										Approach		Paulsgrove St									
Direction		Direction 2			Direction 3			Direction 3U			Direction 4			Direction 6			Direction 6U			Direction	Direction 7			Direction 8			Direction 9U						
Time Period		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total				
7:00 to 8:00		4	1	5	1	0	1	0	0	0	5	0	5	0	0	0	7:00 to 8:00	1	0	1	7	1	8	0	0	0	0	0	0				
7:15 to 8:15		7	0	7	1	0	1	0	0	0	8	0	8	0	0	0	7:15 to 8:15	1	0	1	10	1	11	0	0	0	0	0	0				
7:30 to 8:30		12	0	12	1	0	1	0	0	0	7	0	7	0	0	0	7:30 to 8:30	1	0	1	11	1	12	0	0	0	0	0	0				
7:45 to 8:45		15	0	15	2	0	2	0	0	0	7	0	7	0	0	0	7:45 to 8:45	2	0	2	13	0	13	0	0	0	0	0	0				
8:00 to 9:00		20	0	20	1	0	1	1	0	1	5	0	5	0	0	0	8:00 to 9:00	1	0	1	15	0	15	0	0	0	0	0	0				
8:15 to 9:15		22	0	22	2	0	2	2	0	2	4	0	4	0	0	0	8:15 to 9:15	3	0	3	15	0	15	0	0	0	0	0	0				
8:30 to 9:30		20	0	20	2	0	2	2	0	2	4	0	4	0	0	0	8:30 to 9:30	5	0	5	14	0	14	0	1	0	1	0	1				
8:45 to 9:45		19	0	19	1	0	1	2	0	2	5	0	5	0	0	0	8:45 to 9:45	4	0	4	13	0	13	0	1	0	1	0	1				
9:00 to 10:00		19	0	19	2	0	2	1	0	1	7	0	7	0	0	0	9:00 to 10:00	5	0	5	13	0	13	0	1	0	1	0	1				
AM Totals		43	1	44	4	0	4	2	0	2	17	0	17	0	0	1	AM Totals	7	0	7	35	1	36	0	1	0	1	0	1				
16:00 to 17:00		17	0	17	6	0	6	0	0	0	4	0	4	0	0	0	16:00 to 17:00	1	0	1	6	0	6	0	0	0	0	0	0				
16:15 to 17:15		17	0	17	9	0	9	1	0	1	4	0	4	0	0	0	16:15 to 17:15	2	0	2	8	0	8	0	0	0	0	0	0				
16:30 to 17:30		12	0	12	9	0	9	1	0	1	7	0	7	0	0	0	16:30 to 17:30	1	0	1	8	0	8	0	0	0	0	0	0				
16:45 to 17:45		9	0	9	9	0	9	1	0	1	7	0	7	0	0	0	16:45 to 17:45	1	0	1	8	0	8	0	0	0	0	0	0				
17:00 to 18:00		9	0	9	10	0	10	1	0	1	8	0	8	0	0	0	17:00 to 18:00	2	0	2	10	0	10	0	0	0	0	0	0				
17:15 to 18:15		7	0	7	8	0	8	0	0	0	6	0	6	0	0	0	17:15 to 18:15	1	0	1	8	0	8	0	0	0	0	0	0				
17:30 to 18:30		7	0	7	7	0	7	0	0	0	4	0	4	0	0	0	17:30 to 18:30	1	0	1	9	0	9	0	0	0	0	0	0				
17:45 to 18:45		7	0	7	2	0	2	0	0	0	4	0	4	0	0	0	17:45 to 18:45	1	0	1	8	0	8	0	0	0	0	0	0				
18:00 to 19:00		8	0	8	1	0	1	0	0	0	5	0	5	0	0	0	18:00 to 19:00	0	0	0	13	0	13	0	0	0	0	0	0				
PM Totals		34	0	34	17	0	17	1	0	1	17	0	17	0	0	0	PM Totals	3	0	3	29	0	29	0	0	0	0	0	0				

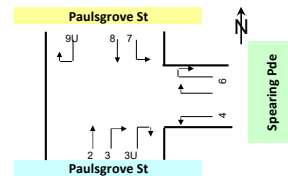
Job No. : AUNSW6508
 Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
 Suburb : Wollongong
 Location : 7. Paulsgrove St / Spearing Pde
 Day/Date : Wed 17th May 2023
 Weather : Fine
 Description : Classified Intersection Count
 : 15 mins Data

Classifications
 Class 1 : Lights
 Class 2 : Heavies



Approach	Paulsgrove St												Spearing Pde												Paulsgrove St											
Direction	Direction 2 (Through)						Direction 3 (Right Turn)			Direction 3U (U Turn)			Direction 4 (Left Turn)			Direction 6 (Right Turn)						Direction 6U (U Turn)			Direction 7 (Left Turn)			Direction 8 (Through)			Direction 9U (U Turn)					
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total			
7:00 to 7:15	1	1	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0			
7:15 to 7:30	1	0	1	0	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0			
7:30 to 7:45	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	2	0	2	0	0	0	0	2	1	3	0	0	0	0	0	0	0				
7:45 to 8:00	2	0	2	2	0	2	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0			
8:00 to 8:15	3	0	3	0	0	0	0	1	0	1	4	0	4	0	4	1	0	1	0	0	0	7	0	7	0	0	0	0	0	0	0	0	0			
8:15 to 8:30	4	0	4	1	0	1	0	0	0	4	0	4	0	4	0	2	0	2	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0			
8:30 to 8:45	5	0	5	2	0	2	0	1	1	1	1	0	1	1	0	1	0	1	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0			
8:45 to 9:00	7	0	7	5	0	5	0	0	0	9	0	9	0	9	0	1	0	1	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0			
9:00 to 9:15	7	0	7	2	0	2	1	0	1	1	1	0	1	1	0	2	0	2	0	0	1	6	0	6	0	0	0	0	0	0	0	0	0			
9:15 to 9:30	5	0	5	1	1	2	1	0	1	4	0	4	1	0	1	0	0	0	0	0	3	0	3	0	3	0	0	0	0	0	0	0	0	0		
9:30 to 9:45	2	0	2	2	0	2	1	0	1	0	0	0	1	0	0	1	0	1	0	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0		
9:45 to 10:00	5	0	5	4	0	4	0	0	0	2	0	2	0	2	0	2	0	2	0	1	5	0	5	0	5	0	0	0	0	0	0	0	0	0		
AM Totals	42	1	43	19	1	20	5	1	6	31	0	31	13	0	13	0	0	3	0	3	50	1	51	0	0	0	0	0	0	0	0	0	0	0		
10:00 to 10:15	3	0	3	2	0	2	0	0	0	5	0	5	0	5	0	0	0	2	0	2	1	0	1	2	0	2	0	0	0	0	0	0	0	0		
10:15 to 10:30	7	0	7	0	0	0	0	0	0	2	0	2	0	2	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10:30 to 10:45	7	0	7	5	0	5	0	0	0	2	0	2	0	2	0	0	0	0	4	0	4	1	0	1	0	0	0	0	0	0	0	0	0	0		
10:45 to 11:00	3	0	3	2	0	2	0	0	0	5	0	5	0	5	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0		
11:00 to 11:15	7	0	7	3	0	3	0	0	0	0	0	0	0	0	0	0	5	0	5	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0		
11:15 to 11:30	2	0	2	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	0	0	0		
11:30 to 11:45	5	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0		
11:45 to 12:00	2	0	2	1	0	1	1	0	1	2	0	2	2	0	2	0	0	0	0	0	0	7	0	7	0	0	0	0	0	0	0	0	0	0	0	
12:00 to 12:15	2	0	2	4	0	4	0	0	0	2	0	2	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0		
12:15 to 12:30	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0		
12:30 to 12:45	1	0	1	0	0	0	0	0	0	2	0	2	1	0	1	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0		
12:45 to 13:00	2	0	2	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	9	0	9	0	0	0	0	0	0	0	0	0	0		
PM Totals	42	0	42	21	0	21	1	0	1	21	0	21	6	0	6	2	0	2	11	0	11	35	0	35	2	0	2	0	0	0	0	0	0	0		

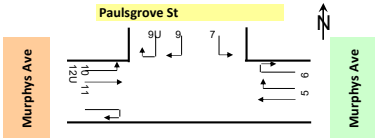
Job No. : AUNSW6508
 Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
 Suburb : Wollongong
 Location : 7. Paulsgrove St / Spearing Pde
 Day/Date : Wed 17th May 2023
 Weather : Fine
 Description : Classified Intersection Count
 : Hourly Summary



Approach	Paulsgrove St												Spearing Pde												Paulsgrove St											
Direction	Direction 2			Direction 3			Direction 3U			Direction 4			Direction 6			Direction 7			Direction 8			Direction 9			Direction 9U											
Time Period	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total									
7:00 to 8:00	4	1	5	2	0	2	1	0	1	5	0	5	2	0	2	1	0	1	12	1	13	0	0	0	0	0	0									
7:15 to 8:15	6	0	6	2	0	2	2	0	2	9	0	9	3	0	3	0	0	0	18	1	19	0	0	0	0	0	0									
7:30 to 8:30	9	0	9	3	0	3	1	0	1	12	0	12	5	0	5	0	0	0	18	1	19	0	0	0	0	0	0									
7:45 to 8:45	14	0	14	5	0	5	1	1	2	10	0	10	4	0	4	0	0	0	21	0	21	0	0	0	0	0	0									
8:00 to 9:00	19	0	19	8	0	8	1	1	2	18	0	18	5	0	5	0	0	0	21	0	21	0	0	0	0	0	0									
8:15 to 9:15	23	0	23	10	0	10	1	1	2	15	0	15	6	0	6	0	0	1	20	0	20	0	0	0	0	0	0									
8:30 to 9:30	24	0	24	10	1	11	2	1	3	15	0	15	5	0	5	0	0	1	19	0	19	0	0	0	0	0	0									
8:45 to 9:45	21	0	21	10	1	11	3	0	3	14	0	14	5	0	5	0	0	1	17	0	17	0	0	0	0	0	0									
9:00 to 10:00	19	0	19	9	1	10	3	0	3	7	0	7	6	0	6	0	0	2	17	0	17	0	0	0	0	0	0									
AM Totals	42	1	43	19	1	20	5	1	6	31	0	31	13	0	13	0	0	3	50	1	51	0	0	0	0	0	0									
10:00 to 17:00	20	0	20	9	0	9	0	0	0	14	0	14	1	0	1	2	0	2	5	0	5	5	0	5	1	0	1									
16:15 to 17:15	24	0	24	10	0	10	0	0	0	9	0	9	1	0	1	0	0	9	4	0	4	1	0	1	1	0	1									
16:30 to 17:30	19	0	19	14	0	14	0	0	0	7	0	7	0	0	0	0	0	9	9	0	9	0	0	0	0	0	0									
16:45 to 17:45	17	0	17	9	0	9	0	0	0	5	0	5	1	0	1	0	0	5	12	0	12	0	0	0	0	0	0									
17:00 to 18:00	16	0	16	8	0	8	1	0	1	2	0	2	3	0	3	0	0	5	17	0	17	0	0	0	0	0	0									
17:15 to 18:15	11	0	11	9	0	9	1	0	1	4	0	4	4	0	4	0	0	1	16	0	16	0	0	0	0	0	0									
17:30 to 18:30	10	0	10	5	0	5	1	0	1	4	0	4	4	0	4	0	0	1	13	0	13	0	0	0	0	0	0									
17:45 to 18:45	6	0	6	5	0	5	1	0	1	6	0	6	4	0	4	0	0	1	11	0	11	0	0	0	0	0	0									
18:00 to 19:00	6	0	6	4	0	4	0	0	0	5	0	5	2	0	2	0	0	1	13	0	13	0	0	0	0	0	0									
PM Totals	42	0	42	21	0	21	1	0	1	21	0	21	6	0	6	2	0	2	11	0	11	35	0	35	2	0	2									

Job No. : AUNSW6508
Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
Suburb : Wollongong
Location : 6. Murphys Ave / Paulsgrove St
Day/Date : Wed 17th May 2023
Weather : Fine
Description : Classified Intersection Count
: 15 mins Data

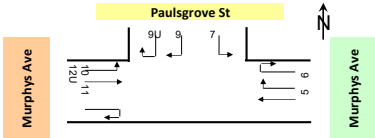
Classifications
Class 1 Lights
Class 2 Heavies



Int 6

Approach		Murphys Ave										Paulsgrove St										Murphys Ave									
Direction		Directio n 5 (Throug h)			Directio n 6 (Right Turn)			Directio n 6U (U Turn)			Directio n 7 (Left Turn)				Directio n 9 (Right Turn)			Directio n 9U (U Turn)			Direction 10 (Left Turn)			Direction 11 (Through)				Direction 12U (U Turn)			
		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total		Lights	Heavies	Total	
Time Period																															
7:00	to 7:15	19	2	21	1	0	1	0	0	0	0	0	0		1	0	1	0	0	0	0	1	1	21	0	21		0	0	0	
7:15	to 7:30	20	1	21	2	0	2	0	0	0	5	0	5		1	0	1	0	0	0	0	0	0	11	0	11		0	0	0	
7:30	to 7:45	32	2	34	0	0	0	2	0	2	4	0	4		1	1	2	0	0	0	0	0	0	32	0	32		0	0	0	
7:45	to 8:00	41	0	41	3	0	3	1	0	1	6	0	6		0	0	0	0	0	0	1	0	1	39	0	39		0	0	0	
8:00	to 8:15	48	0	48	2	0	2	3	0	3	6	0	6		5	0	5	0	0	0	2	0	2	41	4	45		0	0	0	
8:15	to 8:30	52	2	54	4	0	4	2	0	2	5	0	5		3	0	3	0	0	0	1	0	1	38	2	40		0	0	0	
8:30	to 8:45	54	2	56	4	0	4	0	0	0	4	0	4		2	1	3	0	0	0	3	1	4	44	0	44		0	0	0	
8:45	to 9:00	52	0	52	7	0	7	2	0	2	8	0	8		6	0	6	0	0	0	5	0	5	40	0	40		0	0	0	
9:00	to 9:15	62	0	62	6	0	6	1	0	1	3	0	3		4	0	4	0	0	0	4	0	4	30	2	32		0	0	0	
9:15	to 9:30	48	5	53	3	1	4	0	0	0	6	0	6		3	0	3	0	0	0	4	0	4	28	1	29		0	0	0	
9:30	to 9:45	34	0	34	4	0	4	0	0	0	2	0	2		2	0	2	0	0	0	1	0	1	22	1	23		0	0	0	
9:45	to 10:00	46	1	47	4	0	4	1	0	1	4	0	4		3	0	3	0	0	0	4	0	4	33	1	34		0	0	0	
AM Totals		508	15	523	40	1	41	12	0	12	53	0	53		31	2	33	0	0	0	25	2	27	379	11	390		0	0	0	
16:00	to 16:15	52	1	53	3	0	3	0	0	0	2	0	2		3	0	3	0	0	0	2	0	2	46	1	47		0	0	0	
16:15	to 16:30	52	1	53	5	0	5	0	0	0	2	0	2		1	0	1	0	0	0	2	0	2	42	2	44		0	0	0	
16:30	to 16:45	42	0	42	5	0	5	0	0	0	1	0	1		2	0	2	0	0	0	7	0	7	51	0	51		0	0	0	
16:45	to 17:00	58	0	58	3	0	3	2	0	2	3	0	3		4	0	4	0	0	0	2	0	2	53	1	54		0	0	0	
17:00	to 17:15	56	1	57	7	0	7	0	0	0	4	0	4		1	0	1	0	0	0	3	0	3	43	1	44		0	0	0	
17:15	to 17:30	58	2	60	4	0	4	1	0	1	3	0	3		2	0	2	0	0	0	2	0	2	38	1	39		0	0	0	
17:30	to 17:45	60	0	60	3	0	3	0	0	0	2	0	2		2	0	2	0	0	0	2	0	2	45	1	46		0	0	0	
17:45	to 18:00	51	0	51	3	0	3	0	0	0	6	0	6		3	0	3	0	0	0	1	0	1	40	0	40		0	0	0	
18:00	to 18:15	49	1	50	5	0	5	0	0	0	1	0	1		1	0	1	0	0	0	1	0	1	41	1	42		0	0	0	
18:15	to 18:30	45	1	46	1	0	1	0	0	0	2	0	2		0	0	0	0	0	0	0	0	0	26	1	27		0	0	0	
18:30	to 18:45	27	0	27	1	0	1	0	0	0	3	0	3		1	0	1	0	0	0	0	0	0	21	0	21		0	0	0	
18:45	to 19:00	34	0	34	1	0	1	0	0	0	7	0	7		3	0	3	0	0	0	1	0	1	21	0	21		0	0	0	
PM Totals		584	7	591	41	0	41	3	0	3	36	0	36		23	0	23	0	0	0	23	0	23	467	9	476		0	0	0	

Job No. : AUNSW6508
Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
Suburb : Wollongong
Location : 6. Murphys Ave / Paulsgrove St
Day/Date : Wed 17th May 2023
Weather : Fine
Description : Classified Intersection Count
: Hourly Summary

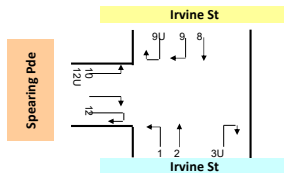


Approach		Murphys Ave												Paulsgrove St												Murphys Ave											
Direction		Directio n 5 (Throug h)			Directio n 6 (Right Turn)			Directio n 6U (U Turn)			Directio n 7 (Left Turn)			Directio n 9 (Right Turn)			Directio n 9U (U Turn)			Directio n 10 (Left Turn)			Directio n 11 (Through)			Directio n 12U (U Turn)											
Time Period		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total									
7:00 to 8:00		112	5	117	6	0	6	3	0	3	15	0	15	3	1	4	0	0	0	1	1	2	103	0	103	0	0	0									
7:15 to 8:15		141	3	144	7	0	7	6	0	6	21	0	21	7	1	8	0	0	3	0	3	123	4	127	0	0	0										
7:30 to 8:30		173	4	177	9	0	9	8	0	8	21	0	21	9	1	10	0	0	4	0	4	150	6	156	0	0	0										
7:45 to 8:45		195	4	199	13	0	13	6	0	6	21	0	21	10	1	11	0	0	7	1	8	162	6	168	0	0	0										
8:00 to 9:00		206	4	210	17	0	17	7	0	7	23	0	23	16	1	17	0	0	11	1	12	163	6	169	0	0	0										
8:15 to 9:15		220	4	224	21	0	21	5	0	5	20	0	20	15	1	16	0	0	13	1	14	152	4	156	0	0	0										
8:30 to 9:30		216	7	223	20	1	21	3	0	3	21	0	21	15	1	16	0	0	16	1	17	142	3	145	0	0	0										
8:45 to 9:45		196	5	201	20	1	21	3	0	3	19	0	19	15	0	15	0	0	14	0	14	120	4	124	0	0	0										
9:00 to 10:00		190	6	196	17	1	18	2	0	2	15	0	15	12	0	12	0	0	13	0	13	113	5	118	0	0	0										
AM Totals		508	15	523	40	1	41	12	0	12	53	0	53	31	2	33	0	0	25	2	27	379	11	390	0	0	0										
16:00 to 17:00		204	2	206	16	0	16	2	0	2	8	0	8	10	0	10	0	0	13	0	13	192	4	196	0	0	0										
16:15 to 17:15		208	2	210	20	0	20	2	0	2	10	0	10	8	0	8	0	0	14	0	14	189	4	193	0	0	0										
16:30 to 17:30		214	3	217	19	0	19	3	0	3	11	0	11	9	0	9	0	0	14	0	14	185	3	188	0	0	0										
16:45 to 17:45		232	3	235	17	0	17	3	0	3	12	0	12	9	0	9	0	0	9	0	9	179	4	183	0	0	0										
17:00 to 18:00		225	3	228	17	0	17	1	0	1	15	0	15	8	0	8	0	0	8	0	8	166	3	169	0	0	0										
17:15 to 18:15		218	3	221	15	0	15	1	0	1	12	0	12	8	0	8	0	0	6	0	6	164	3	167	0	0	0										
17:30 to 18:30		205	2	207	12	0	12	0	0	0	11	0	11	6	0	6	0	0	4	0	4	152	3	155	0	0	0										
17:45 to 18:45		172	2	174	10	0	10	0	0	0	12	0	12	5	0	5	0	0	2	0	2	128	2	130	0	0	0										
18:00 to 19:00		155	2	157	8	0	8	0	0	0	13	0	13	5	0	5	0	0	2	0	2	109	2	111	0	0	0										
PM Totals		584	7	591	41	0	41	3	0	3	36	0	36	23	0	23	0	0	23	0	23	467	9	476	0	0	0										

Job No. : AUNSW6508
 Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
 Suburb : Wollongong
 Location : 5. Irvine St / Spearing Pde

Day/Date : Wed 17th May 2023
 Weather : Partly Rain
 Description : Classified Intersection Count
 : 15 mins Data

Classifications
 Class 1 Lights
 Class 2 Heavies

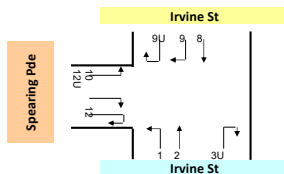


MATRIX
 Traffic and Transport Data

Approach		Irvine St									Irvine St												Spearing Pde											
Direction		Direction 1 (Left Turn)			Direction 2 (Through)			Direction 3U (U Turn)						Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)						Direction 12 (Right Turn)			Direction 12U (U Turn)		
Time Period		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total				Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total				Lights	Heavies	Total			
7:00 to 7:15		0	0	0	36	1	37	0	0	0				31	0	31	2	0	2	0	0	0	2	0	2				0	0	0	0	0	0
7:15 to 7:30		0	0	0	40	0	40	0	0	0				39	2	41	0	0	0	0	0	0	3	0	3				2	0	2	0	0	0
7:30 to 7:45		0	0	0	34	1	35	0	0	0				50	3	53	7	0	7	1	0	1	5	0	5				0	0	0	0	0	0
7:45 to 8:00		0	0	0	53	2	55	0	0	0				61	3	64	3	0	3	0	0	0	2	0	2				0	0	0	0	0	0
8:00 to 8:15		2	0	2	60	3	63	0	0	0				76	0	76	4	0	4	0	0	0	2	0	2				0	0	0	0	0	0
8:15 to 8:30		3	0	3	67	2	69	0	0	0				74	4	78	3	0	3	0	0	0	2	0	2				0	0	0	0	0	0
8:30 to 8:45		0	0	0	73	2	75	0	0	0				82	1	83	1	1	2	0	0	0	5	0	5				1	0	1	0	0	0
8:45 to 9:00		2	0	2	72	0	72	0	0	0				74	0	74	2	0	2	0	0	0	2	0	2				1	0	1	0	0	0
9:00 to 9:15		0	0	0	43	3	46	0	0	0				90	2	92	6	0	6	0	0	0	1	0	1				0	0	0	0	0	0
9:15 to 9:30		1	0	1	45	1	46	0	0	0				74	4	78	4	0	4	0	0	0	1	0	1				1	1	2	0	0	0
9:30 to 9:45		0	0	0	24	1	25	0	0	0				48	2	50	1	0	1	0	0	0	4	0	4				0	0	0	0	0	0
9:45 to 10:00		1	0	1	35	5	40	0	0	0				57	1	58	6	0	6	0	0	0	5	0	5				0	0	0	0	0	0
AM Totals		9	0	9	582	21	603	0	0	0				756	22	778	39	1	40	1	0	1	34	0	34				5	1	6	0	0	0
16:00 to 16:15		2	0	2	70	1	71	0	0	0				64	0	64	2	0	2	0	0	0	5	0	5				1	0	1	0	0	0
16:15 to 16:30		0	0	0	65	2	67	0	0	0				66	1	67	4	0	4	1	0	1	3	0	3				2	0	2	0	0	0
16:30 to 16:45		1	0	1	79	0	79	0	0	0				65	0	65	0	0	0	0	0	0	10	0	10				0	0	0	0	0	0
16:45 to 17:00		2	0	2	83	1	84	0	0	0				80	0	80	4	0	4	0	0	0	6	0	6				0	0	0	0	0	0
17:00 to 17:15		1	0	1	70	1	71	0	0	0				72	1	73	2	0	2	0	0	0	10	0	10				2	0	2	0	0	0
17:15 to 17:30		0	0	0	57	1	58	0	0	0				74	2	76	5	0	5	0	0	0	2	0	2				1	0	1	0	0	0
17:30 to 17:45		0	0	0	68	1	69	0	0	0				77	0	77	4	0	4	0	0	0	8	0	8				0	0	0	0	0	0
17:45 to 18:00		0	0	0	62	0	62	0	0	0				58	0	58	5	0	5	0	0	0	3	0	3				0	0	0	0	0	0
18:00 to 18:15		0	0	0	57	1	58	0	0	0				48	1	49	4	0	4	0	0	0	2	0	2				0	0	0	0	0	0
18:15 to 18:30		0	0	0	44	1	45	0	0	0				61	1	62	5	0	5	0	0	0	4	0	4				0	0	0	0	0	0
18:30 to 18:45		0	0	0	29	0	29	0	0	0				32	0	32	3	0	3	0	0	0	1	0	1				0	0	0	0	0	0
18:45 to 19:00		0	0	0	29	0	29	0	0	0				42	0	42	3	0	3	0	0	0	4	0	4				0	0	0	0	0	0
PM Totals		6	0	6	713	9	722	0	0	0				739	6	745	41	0	41	1	0	1	58	0	58				6	0	6	0	0	0

Job No. : AUNSW6508
 Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
 Suburb : Wollongong
 Location : 5. Irvine St / Spearing Pde

Day/Date : Wed 17th May 2023
 Weather : Partly Rain
 Description : Classified Intersection Count
 : Hourly Summary



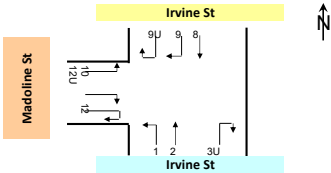
MATRIX
 Traffic and Transport Data

Approach		Irvine St										Irvine St										Spearing Pde															
Direction		Direction 1			Direction 2			Direction 3			Direction 4			Direction 5			Direction 6			Direction 7			Direction 8			Direction 9			Direction 10			Direction 11			Direction 12		
Time Period		lights	heavies	total	lights	heavies	total	lights	heavies	total	lights	heavies	total	lights	heavies	total	lights	heavies	total	lights	heavies	total	lights	heavies	total	lights	heavies	total	lights	heavies	total	lights	heavies	total			
7:00 to 8:00		0	0	0	0	163	4	167	0	0	0	0	0	0	0	0	181	8	189	12	0	12	1	0	1	12	0	12	2	0	2	0	0	0			
7:15 to 8:15		2	0	2	0	187	6	193	0	0	0	0	0	0	0	0	226	8	234	14	0	14	1	0	1	12	0	12	2	0	2	0	0	0			
7:30 to 8:30		5	0	5	0	214	8	222	0	0	0	0	0	0	0	0	261	10	271	17	0	17	1	0	1	11	0	11	0	0	0	0	0	0			
7:45 to 8:45		5	0	5	0	253	9	262	0	0	0	0	0	0	0	0	293	8	301	11	1	12	0	0	0	11	0	11	1	0	1	0	0	0			
8:00 to 9:00		7	0	7	0	272	7	279	0	0	0	0	0	0	0	0	306	5	311	10	1	11	0	0	0	11	0	11	2	0	2	0	0	0			
8:15 to 9:15		5	0	5	0	255	7	262	0	0	0	0	0	0	0	0	320	7	327	12	1	13	0	0	0	10	0	10	2	0	2	0	0	0			
8:30 to 9:30		3	0	3	0	233	6	239	0	0	0	0	0	0	0	0	320	7	327	13	1	14	0	0	0	9	0	9	3	1	4	0	0	0			
8:45 to 9:45		3	0	3	0	184	5	189	0	0	0	0	0	0	0	0	286	8	294	13	0	13	0	0	0	8	0	8	2	1	3	0	0	0			
9:00 to 10:00		2	0	2	0	147	10	157	0	0	0	0	0	0	0	0	269	9	278	17	0	17	0	0	0	11	0	11	1	1	2	0	0	0			
AM Totals		9	0	9	0	582	21	603	0	0	0	0	0	0	0	0	756	22	778	39	1	40	1	0	1	34	0	34	5	1	6	0	0	0			
16:00 to 17:00		5	0	5	0	297	4	301	0	0	0	0	0	0	0	0	275	1	276	10	0	10	1	0	1	24	0	24	3	0	3	0	0	0			
16:15 to 17:15		4	0	4	0	297	4	301	0	0	0	0	0	0	0	0	283	2	285	10	0	10	1	0	1	29	0	29	4	0	4	0	0	0			
16:30 to 17:30		4	0	4	0	289	3	292	0	0	0	0	0	0	0	0	291	3	294	11	0	11	0	0	0	28	0	28	3	0	3	0	0	0			
16:45 to 17:45		3	0	3	0	278	4	282	0	0	0	0	0	0	0	0	302	3	306	15	0	15	0	0	0	26	0	26	3	0	3	0	0	0			
17:00 to 18:00		1	0	1	0	257	3	260	0	0	0	0	0	0	0	0	281	3	284	16	0	16	0	0	0	23	0	23	3	0	3	0	0	0			
17:15 to 18:15		0	0	0	0	244	3	247	0	0	0	0	0	0	0	0	257	3	260	18	0	18	0	0	0	15	0	15	1	0	1	0	0	0			
17:30 to 18:30		0	0	0	0	231	3	234	0	0	0	0	0	0	0	0	244	2	246	18	0	18	0	0	0	17	0	17	0	0	0	0	0	0			
17:45 to 18:45		0	0	0	0	192	2	194	0	0	0	0	0	0	0	0	199	2	201	17	0	17	0	0	0	10	0	10	0	0	0	0	0	0			
18:00 to 19:00		0	0	0	0	159	2	161	0	0	0	0	0	0	0	0	183	2	185	15	0	15	0	0	0	11	0	11	0	0	0	0	0	0			
PM Totals		6	0	6	0	713	9	722	0	0	0	0	0	0	0	0	739	6	745	41	0	41	1	0	1	58	0	58	6	0	6	0	0	0			

Job No. : AUNSW6508
Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
Suburb : Wollongong
Location : 2. Irvine St / Madoline St

Day/Date : Wed 17th May 2023
Weather : Partly Rain
Description : Classified Intersection Count
: 15 mins Data

Classifications
Class 1 Lights
Class 2 Heavies

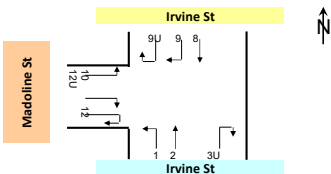


Int 2

Approach		Irvine St										Irvine St										Madoline St									
Direction	Direction 1 (Left Turn)			Direction 2 (Through)				Direction 3U (U Turn)				Direction 8 (Through)			Direction 9 (Right Turn)			Direction 9U (U Turn)			Direction 10 (Left Turn)				Direction 12 (Right Turn)			Direction 12U (U Turn)			
	Lights	Heavies	Total	Lights	Heavies	Total		Lights	Heavies	Total		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total		Lights	Heavies	Total	Lights	Heavies	Total	
Time Period	Lights	Heavies	Total	Lights	Heavies	Total		Lights	Heavies	Total		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total		Lights	Heavies	Total	Lights	Heavies	Total	
7:00 to 7:15	0	1	1	49	3	52		0	0	0		35	4	39	0	0	0	0	0	0	0	1	1		3	0	3	0	0	0	
7:15 to 7:30	0	0	0	82	1	83		0	0	0		43	4	47	3	0	3	0	0	0	0	0	0		0	0	0	0	0	0	
7:30 to 7:45	0	0	0	71	6	77		0	0	0		33	5	38	0	0	0	0	0	0	0	0	0		1	0	1	0	0	0	
7:45 to 8:00	1	0	1	136	5	141		0	0	0		43	8	51	3	0	3	0	0	0	1	0	1		5	0	5	0	0	0	
8:00 to 8:15	3	0	3	176	7	183		0	0	0		58	6	64	0	0	0	0	0	0	2	0	2		3	0	3	0	0	0	
8:15 to 8:30	6	0	6	189	5	194		0	0	0		74	11	85	2	0	2	0	0	0	5	0	5		5	0	5	0	0	0	
8:30 to 8:45	7	0	7	151	3	154		0	0	0		66	4	70	0	0	0	0	0	0	2	1	3		6	0	6	0	0	0	
8:45 to 9:00	7	0	7	157	3	160		0	0	0		59	6	65	2	0	2	0	0	0	1	0	1		5	0	5	0	0	0	
9:00 to 9:15	8	0	8	122	9	131		0	0	0		65	9	74	3	0	3	0	0	0	3	0	3		2	0	2	0	0	0	
9:15 to 9:30	11	0	11	107	6	113		0	0	0		65	12	77	6	0	6	0	0	0	2	0	2		2	0	2	0	0	0	
9:30 to 9:45	7	0	7	70	5	75		0	0	0		70	8	78	4	0	4	0	0	0	1	0	1		7	0	7	0	0	0	
9:45 to 10:00	3	1	4	82	6	88		0	0	0		50	5	55	3	1	4	0	0	0	3	1	4		3	0	3	0	0	0	
AM Totals	53	2	55	1,392	59	1,451		0	0	0		661	82	743	26	1	27	0	0	0	20	3	23		42	0	42	0	0	0	
16:00 to 16:15	1	0	1	88	3	91		0	0	0		185	6	191	1	0	1	1	0	1	0	0	0		5	0	5	0	0	0	
16:15 to 16:30	4	0	4	84	4	88		0	0	0		109	8	117	4	0	4	0	0	0	4	1	5		4	0	4	0	0	0	
16:30 to 16:45	3	0	3	87	2	89		0	0	0		212	7	219	3	0	3	0	0	0	5	0	5		7	0	7	0	0	0	
16:45 to 17:00	8	0	8	97	3	100		0	0	0		188	4	192	3	0	3	0	0	0	1	0	1		5	0	5	0	0	0	
17:00 to 17:15	3	0	3	87	5	92		0	0	0		164	4	168	3	0	3	0	0	0	3	0	3		5	0	5	0	0	0	
17:15 to 17:30	3	0	3	103	3	106		0	0	0		202	6	208	1	0	1	0	0	0	3	0	3		1	0	1	0	0	0	
17:30 to 17:45	3	0	3	75	3	78		0	0	0		208	5	213	5	0	5	0	0	0	4	0	4		2	0	2	0	0	0	
17:45 to 18:00	4	0	4	73	3	76		0	0	0		134	5	139	1	0	1	0	0	0	2	0	2		1	0	1	0	0	0	
18:00 to 18:15	3	0	3	44	4	48		0	0	0		105	5	110	2	0	2	0	0	0	1	0	1		4	0	4	0	0	0	
18:15 to 18:30	3	0	3	44	4	48		0	0	0		107	5	112	0	0	0	0	0	0	3	0	3		3	0	3	0	0	0	
18:30 to 18:45	2	0	2	49	2	51		0	0	0		93	5	98	2	0	2	0	0	0	2	0	2		1	0	1	0	0	0	
18:45 to 19:00	1	0	1	43	1	44		0	0	0		116	3	119	3	0	3	0	0	0	2	0	2		7	0	7	0	0	0	
PM Totals	38	0	38	874	37	911		0	0	0		1,823	63	1,886	28	0	28	1	0	1	30	1	31		45	0	45	0	0	0	

Job No. : AUNSW6508
Client : Stantec - was GTA Consultants (Nsw) Pty Ltd
Suburb : Wollongong
Location : 2. Irvine St / Madoline St

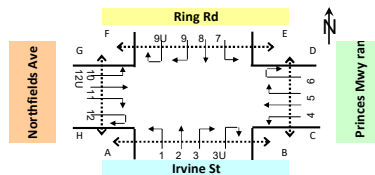
Day/Date : Wed 17th May 2023
Weather : Partly Rain
Description : Classified Intersection Count
: Hourly Summary



Approach		Irvine St										Irvine St										Madoline St															
Direction		Direction 1			Direction 2			Direction 3			Direction 4			Direction 5			Direction 6			Direction 7			Direction 8			Direction 9			Direction 10			Direction 11			Direction 12		
Time Period		Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total			
7:00	to 8:00	1	1	2	338	15	353	0	0	0	154	21	175	6	0	6	0	0	0	1	1	2	9	0	9	0	0	0	0	0	0	0	0	0			
7:15	to 8:15	4	0	4	465	19	484	0	0	0	177	23	200	6	0	6	0	0	0	3	0	3	9	0	9	0	0	0	0	0	0	0	0	0			
7:30	to 8:30	10	0	10	572	23	595	0	0	0	208	30	238	5	0	5	0	0	0	8	0	8	14	0	14	0	0	0	0	0	0	0	0	0			
7:45	to 8:45	17	0	17	652	20	672	0	0	0	241	29	270	5	0	5	0	0	0	10	1	11	19	0	19	0	0	0	0	0	0	0	0	0			
8:00	to 9:00	23	0	23	673	18	691	0	0	0	257	27	284	4	0	4	0	0	0	10	1	11	19	0	19	0	0	0	0	0	0	0	0	0			
8:15	to 9:15	28	0	28	619	20	639	0	0	0	264	30	294	7	0	7	0	0	0	11	1	12	18	0	18	0	0	0	0	0	0	0	0	0			
8:30	to 9:30	33	0	33	537	21	558	0	0	0	255	31	286	11	0	11	0	0	0	8	1	9	15	0	15	0	0	0	0	0	0	0	0	0			
8:45	to 9:45	33	0	33	456	23	479	0	0	0	259	35	294	15	0	15	0	0	0	7	0	7	16	0	16	0	0	0	0	0	0	0	0	0			
9:00	to 10:00	29	1	30	381	26	407	0	0	0	250	34	284	16	1	17	0	0	0	9	1	10	14	0	14	0	0	0	0	0	0	0	0	0			
AM Totals		53	2	55	1,392	59	1,451	0	0	0	661	82	743	26	1	27	0	0	0	20	3	23	42	0	42	0	0	0	0	0	0	0	0	0			
10:00	to 17:00	16	0	16	356	12	368	0	0	0	694	25	719	11	0	11	1	0	1	10	1	11	21	0	21	0	0	0	0	0	0	0	0	0			
16:15	to 17:15	18	0	18	355	14	369	0	0	0	673	23	696	13	0	13	0	0	0	13	1	14	21	0	21	0	0	0	0	0	0	0	0	0			
16:30	to 17:30	17	0	17	374	13	387	0	0	0	766	21	787	10	0	10	0	0	0	12	0	12	18	0	18	0	0	0	0	0	0	0	0	0			
16:45	to 17:45	17	0	17	362	14	376	0	0	0	762	19	781	12	0	12	0	0	0	11	0	11	13	0	13	0	0	0	0	0	0	0	0	0			
17:00	to 18:00	13	0	13	338	14	352	0	0	0	708	20	728	10	0	10	0	0	0	12	0	12	9	0	9	0	0	0	0	0	0	0	0	0			
17:15	to 18:15	13	0	13	295	13	308	0	0	0	649	21	670	9	0	9	0	0	0	10	0	10	8	0	8	0	0	0	0	0	0	0	0	0			
17:30	to 18:30	13	0	13	236	14	250	0	0	0	554	20	574	8	0	8	0	0	0	10	0	10	10	0	10	0	0	0	0	0	0	0	0	0			
17:45	to 18:45	12	0	12	210	13	223	0	0	0	439	20	459	5	0	5	0	0	0	8	0	8	9	0	9	0	0	0	0	0	0	0	0	0			
18:00	to 19:00	9	0	9	180	11	191	0	0	0	421	18	439	7	0	7	0	0	0	8	0	8	15	0	15	0	0	0	0	0	0	0	0	0			
PM Totals		38	0	38	874	37	911	0	0	0	1,823	63	1,886	28	0	28	1	0	1	30	1	31	45	0	45	0	0	0	0	0	0	0	0	0			

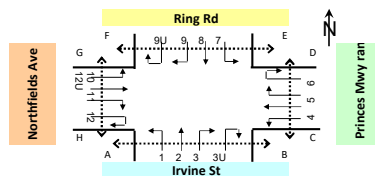


Approach	Irvine St												University Ave												Irvine St											
Direction	Directo S.1				Directo S.2				Directo S.3				Directo S.4				Directo S.5				Directo S.6				Directo S.7				Directo S.8				Directo S.9			
Time Period	Lights	Heavy's	Other's	Total	Lights	Heavy's	Other's	Total	Lights	Heavy's	Other's	Total	Lights	Heavy's	Other's	Total	Lights	Heavy's	Other's	Total	Lights	Heavy's	Other's	Total	Lights	Heavy's	Other's	Total	Lights	Heavy's	Other's	Total				
7:00 to 8:00	60	2	1	63	114	2	0	116	2	0	0	2	86	4	0	90	261	17	0	278	508	4	0	512	1	1	0	2	1	1	0	2				
7:15 to 8:15	69	2	0	71	128	4	0	132	1	0	0	1	111	4	0	115	319	19	0	338	131	4	1	136	3	0	0	3								
7:30 to 8:30	68	3	0	71	158	5	1	164	1	0	0	1	133	4	0	137	361	25	0	386	145	6	1	152	4	0	0	4								
7:45 to 8:45	63	3	1	67	198	6	1	205	1	0	0	1	148	4	0	152	405	25	0	430	153	5	1	159	6	0	0	6								
8:00 to 9:00	71	3	3	77	213	4	1	218	0	0	0	0	155	3	0	158	420	26	0	446	164	3	1	168	8	0	0	8								
8:15 to 9:15	69	4	3	76	198	3	1	202	0	0	0	0	160	4	0	164	405	26	0	431	175	4	0	179	11	0	0	11								
8:30 to 9:30	66	4	3	73	175	2	0	177	1	0	0	1	150	6	0	156	379	30	0	409	184	2	0	186	15	0	0	15								
8:45 to 9:45	58	4	2	64	137	1	0	138	1	0	0	1	132	5	0	137	358	33	0	391	169	3	0	172	16	0	0	16								
9:00 to 10:00	47	5	0	52	111	5	0	116	1	0	0	1	119	5	0	124	300	32	0	332	164	4	0	168	15	0	0	15								
AM Totals	178	10	4	192	438	11	1	450	3	0	0	3	360	12	0	372	981	75	0	1056	436	11	1	448	24	1	0	25								
10:00 to 17:00	180	2	0	182	242	2	0	235	2	0	0	2	145	0	0	145	721	24	0	745	291	1	3	292	2	0	0	2								
16:15 to 17:00	90	2	2	93	235	2	2	237	1	1	0	1	154	1	0	155	710	22	0	732	137	2	2	140	2	2	0	2								
16:30 to 17:30	92	2	1	95	224	1	0	225	2	0	0	2	167	2	0	169	800	20	0	820	130	1	1	132	2	2	0	2								
16:45 to 17:45	85	3	1	89	217	1	0	218	2	0	0	2	172	2	0	174	803	18	1	822	140	1	0	141	1	0	0	1								
17:00 to 18:00	81	3	1	85	203	0	0	203	1	0	0	1	152	2	0	154	757	19	1	777	140	1	0	141	1	0	0	1								
17:15 to 18:15	65	3	0	68	193	0	1	194	2	0	0	2	140	1	0	141	705	19	1	725	132	2	0	134	1	0	0	1								
17:30 to 18:30	60	3	0	63	187	0	1	188	1	0	0	1	129	0	0	129	605	18	1	624	130	2	0	132	1	0	0	1								
17:45 to 18:45	45	2	0	47	155	0	1	156	1	0	0	1	114	0	0	114	488	18	0	506	102	2	0	104	1	0	0	1								
18:00 to 19:00	29	2	0	31	138	0	1	139	1	0	0	1	115	0	0	115	459	16	0	475	86	2	0	88	0	0	0	0								
PM Totals	190	7	1	198	575	2	1	578	4	0	0	4	412	2	0	414	1,937	59	1	1,997	364	4	3	371	3	0	0	3								



	Class 1	Class 2	Class 3	Ped Class 1	Ped Class 2
Classifications	Lights	Heavies	Cyclists	Peds	Cyclists

Approach	Irvine St															Princes Hwy ramps															Ring Rd															Northfields Ave																		
Direction	Direction 1 (Left Turn)				Direction 2 (Through)				Direction 3 (Right Turn)				Direction 3U (U Turn)				Direction 4 (Left Turn)				Direction 5 (Through)				Direction 6 (Right Turn)				Direction 6U (U Turn)				Direction 7 (Left Turn)				Direction 8 (Through)				Direction 9 (Right Turn)				Direction 9U (U Turn)				Direction 10 (Left Turn)				Direction 11 (Through)				Direction 12 (Right Turn)				Direction 12U (U Turn)			
Time Period	Lights	Heavies	0	Total	Lights	Heavies	0	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	0	Total	Lights	Heavies	0	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total	Lights	Heavies	Total																		
7:00 to 7:15	9	3	0	12	17	0	1	18	24	1	25	0	0	0	0	0	0	0	0	19	4	0	23	26	1	27	0	0	0	0	0	0	21	0	21	2	0	2	0	0	0	1	0	1	12	0	12	13	4	17	0	0	0											
7:15 to 7:30	19	1	0	20	24	0	0	24	37	0	0	37	0	0	0	5	0	0	5	21	3	0	24	32	0	32	0	0	0	0	0	20	0	20	0	0	0	0	0	0	4	0	4	4	0	4	22	4	26	0	1	1	0											
7:30 to 7:45	19	3	0	22	21	1	0	22	30	1	31	0	0	0	1	27	2	0	29	43	0	43	0	0	0	43	0	0	0	2	0	2	17	0	17	2	0	2	0	0	0	0	0	0	4	0	4	14	5	19	0	0	0											
7:45 to 8:00	53	4	0	57	54	1	0	55	37	1	38	0	0	0	5	67	1	0	68	79	0	79	0	0	0	79	0	0	0	0	0	17	0	17	1	1	2	0	0	0	2	0	2	3	25	8	33	1	0	1	0													
8:00 to 8:15	94	7	0	101	57	0	0	57	16	0	16	2	0	2	3	113	2	0	115	107	1	108	0	0	0	0	0	0	0	0	0	22	0	22	0	0	0	0	0	0	5	0	5	1	0	1	28	6	34	2	0	2	2											
8:15 to 8:30	99	4	0	103	92	1	0	93	14	0	14	1	0	1	5	112	4	0	116	129	0	129	0	0	0	1	0	1	34	0	34	0	0	0	0	0	0	0	6	0	6	3	37	11	48	3	1	4	0	0														
8:30 to 8:45	68	2	0	70	70	1	1	72	12	1	13	1	0	1	2	84	1	0	85	93	0	93	0	0	0	2	0	2	32	0	32	5	0	5	0	0	0	7	0	7	3	0	3	30	4	34	3	0	3	0														
8:45 to 9:00	80	3	0	83	68	0	0	68	14	0	14	0	0	0	3	82	4	0	86	100	0	100	0	0	0	1	0	1	26	0	26	7	0	7	0	0	0	5	0	5	1	0	1	32	6	38	0	0	0	0														
9:00 to 9:15	57	6	0	63	49	1	0	50	12	2	14	0	0	0	4	84	2	0	86	78	1	79	0	0	0	2	0	2	33	0	33	3	0	3	1	0	1	6	0	6	0	0	0	29	8	37	1	0	1	0														
9:15 to 9:30	57	6	0	63	37	0	0	37	16	0	16	0	0	0	5	84	5	0	89	37	0	37	1	0	0	1	1	0	1	30	1	31	5	0	5	0	0	0	2	0	2	4	0	4	37	11	48	1	1	2	0													
9:30 to 9:45	41	3	0	44	23	2	0	25	8	0	0	0	0	0	5	33	3	0	36	36	0	36	0	0	0	0	0	0	0	0	0	28	1	29	11	0	11	0	0	0	1	0	1	4	0	4	40	8	48	3	0	3	0											
9:45 to 10:00	51	6	0	57	20	1	0	21	14	0	14	0	0	0	3	52	4	0	56	29	0	29	0	0	0	0	0	0	0	0	0	24	0	24	12	1	13	0	0	0	3	0	3	2	1	3	26	4	30	1	0	1	0											
AM Totals	647	48	0	695	532	8	2	542	234	6	240	4	0	4	41	2	0	43	778	35	0	813	789	3	792	1	0	1	9	0	9	304	2	306	48	2	50	1	0	1	42	0	42	41	1	42	333	79	412	15	3	18	0											
16:00 to 16:15	24	3	0	27	20	0	0	20	40	0	0	4	1	0	5	16	3	0	19	31	0	31	0	0	0	10	0	10	0	0	10	89	0	89	1	0	1	1	0	1	1	0	1	18	0	18	90	5	95	0	0	0	0											
16:15 to 16:30	30	5	0	35	31	0	0	31	30	0	30	0	0	0	4	28	5	0	33	25	1	26	0	0	0	9	0	9	51	0	51	6	0	6	0	0	0	3	0	3	17	1	18	58	8	66	4	0	0	4														
16:30 to 16:45	31	2	0	33	16	0	0	16	41	0	41	3	0	3	7	0	0	7	19	1	0	20	32	0	32	0	0	0	16	0	16	74	1	75	2	0	2	0	0	0	5	0	5	29	0	29	132	6	138	1	0	1	0											
16:45 to 17:00	19	3	0	22	24	0	0	24	55	0	55	0	0	0	3	22	3	0	25	18	0	18	0	0	0	20	0	20	84	0	84	16	0	16	2	0	2	0	0	0	0	4	0	4	15	1	16	101	4	105	2	0	2	2										
17:00 to 17:15	27	4	0	31	27	1	1	29	35	0	35	1	0	1	3	18	3	0	21	39	0	39	0	0	0	15	0	15	76	0	76	3	0	3	0	0	0	2	0	2	24	0	24	87	5	92	2	0	2	0														
17:15 to 17:30	32	2	0	34	35	0	0	35	38	1	39	1	0	1	1	34	2	0	36	37	0	37	0	0	0	16	0	16	96	0	96	4	0	4	0	0	0	3	0	3	27	0	27	103	5	108	1	0	1	0														
17:30 to 17:45	18	2	0	20	28	0	0	28	31	1	32	2	0	2	5	0	0	5	26	3	0	29	26	0	26	0	0	0	19	0	19	92	0	92	0	0	0	0	0	1	0	1	28	0	28	112	5	117	5	0	5	0												
17:45 to 18:00	30	3	0	33	24	0	0	24	21	0	21	1	0	1	2	27	4	0	31	29	0	29	0	0	0	7	0	7	64	0	64	3	0	3	0	0	0	0	0	0	0	0	0	14	1	15	64	5	69	2	0	2	2											
18:00 to 18:15	17	4	0	21	8	0	0	8	21	0	21	0	0	0	4	20	1	0	21	16	0	16	0	0	0	4	0	4	43	0	43	3	0	3	0	0	0	5	0	5	8	0	8	61	5	66	4	0	4	0														
18:15 to 18:30	15	3	0	18	20	1	0	21	11	0	11	0	0	0	1	28	2	0	30	29	0	29	0	0	0	7	0	7	49	0	49	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8	56	5	61	0	1	1	1											
18:30 to 18:45	21	2	0	23	16	0	0	16	15	0	15	0	0	0	2	8	2	0	10	20	0	20	0	0	0	4	0	4	45	0	45	0	0	0	0	0	0	1	0	1	7	0	7	50	5	55	0	1	1	0														
18:45 to 19:00	14	1	0	15	21	0	0	21	10	0	10	0	0	0	3	11	0	0	11	18	0	18	0	0	0	1	1	2	70	0	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2	0										
PM Totals	278	34	0	312	270	2	1	273	348	2	350	8	0	8	39	312	1	0	40	257	29	0	286	320	1	321	0	0	0	128	1	129	833	1	834	24	0	24	1	0	1	25	0	25	200	4	204	959	61	1,020	23	2	25	0										



Approach	Irvine St												Princes Hwy ramps												Ring Rd												Northfields Ave																	
Direction	Directo				Directo				Directo				Directo				Directo				Directo				Directo				Directo				Directo				Directo				Directo													
	lights	heavies	total	0	lights	heavies	total	0	lights	heavies	total	0	lights	heavies	total	0	lights	heavies	total	0	lights	heavies	total	0	lights	heavies	total	0	lights	heavies	total	0	lights	heavies	total	0	lights	heavies	total	0	lights	heavies	total	0										
Time Period																																																						
7:00 to 8:00	100	11	0	111	116	2	0	119	128	3	131	0	0	0	11	134	180	1	181	0	0	0	2	0	2	75	1	0	75	5	1	8	0	0	0	1	0	7	7	0	7	23	0	23	74	21	95	1	2					
7:15 to 8:15	185	15	0	200	156	2	0	158	120	2	122	2	0	2	14	0	0	14	228	8	0	236	261	1	262	0	0	2	0	2	76	0	76	3	1	4	0	0	0	11	0	11	12	0	12	89	23	112	3	1	4			
7:30 to 8:30	265	18	0	283	224	3	0	227	97	2	99	3	0	2	14	0	0	14	319	9	0	328	358	1	359	0	0	0	3	0	3	90	0	90	3	1	4	0	0	0	13	0	13	11	0	11	104	30	134	6	1	7		
7:45 to 8:45	314	17	0	331	273	3	1	277	79	2	81	4	0	4	15	0	0	15	376	8	0	384	408	1	409	0	0	0	3	0	3	105	0	105	6	1	7	0	0	0	20	0	20	10	0	10	120	29	149	9	1	10		
8:00 to 9:00	341	16	0	357	287	2	1	290	56	1	57	4	0	4	13	0	0	13	391	11	0	402	429	1	430	0	0	0	4	0	4	114	0	114	12	0	12	0	0	0	23	0	23	8	0	8	127	27	154	8	1	9		
8:15 to 9:15	304	15	0	319	279	3	1	283	52	3	55	2	0	2	14	1	0	15	362	11	0	373	400	1	401	0	0	6	0	6	125	0	125	15	0	15	1	0	1	24	0	24	7	0	7	128	29	157	7	1	8			
8:30 to 9:30	262	17	0	279	224	2	1	227	54	3	57	1	0	1	14	1	0	15	334	12	0	346	308	1	309	1	0	1	6	0	6	121	1	122	20	0	20	1	0	1	20	0	20	8	0	8	128	29	157	5	1	6		
8:45 to 9:45	235	18	0	253	177	3	0	180	50	2	52	0	0	0	17	1	0	18	283	14	0	297	251	1	252	1	0	1	4	0	4	117	2	119	26	0	26	1	0	1	14	0	14	9	0	9	138	33	171	5	1	6		
9:00 to 10:00	206	21	0	227	129	4	0	133	50	2	52	0	0	0	17	2	0	19	253	14	0	267	180	1	181	1	0	1	3	0	3	115	2	117	31	1	32	1	0	1	12	0	12	10	0	11	132	31	163	6	1	7		
AM Totals	647	48	0	695	532	8	2	542	236	6	240	4	0	4	41	2	0	43	778	35	0	813	789	3	792	1	0	1	9	0	9	304	2	306	48	2	50	1	0	1	42	0	42	41	1	42	383	79	412	15	3	18		
16:00 to 17:00	104	13	0	117	91	0	0	91	134	0	166	3	0	3	18	1	0	19	85	12	0	97	106	1	107	0	0	0	55	0	55	298	1	299	11	0	11	1	0	1	13	0	13	79	2	81	381	23	404	7	0	7		
16:15 to 17:15	107	14	0	121	98	1	1	100	161	0	161	4	0	4	17	0	0	17	87	12	0	99	114	1	115	0	0	0	60	0	60	285	1	286	13	0	13	0	0	14	0	14	85	2	87	378	23	401	9	0	9			
16:30 to 17:30	109	11	0	120	101	1	1	105	151	0	161	5	0	5	18	0	0	19	89	10	0	99	116	0	116	0	0	0	60	0	60	286	1	287	13	0	13	0	0	14	0	14	85	2	87	378	23	401	9	0	9			
16:45 to 17:45	96	11	0	107	114	1	1	116	159	2	161	4	0	4	11	0	0	12	100	11	0	111	120	0	120	0	0	0	70	0	70	248	0	248	9	0	9	0	0	10	14	0	10	94	1	96	445	20	463	6	0	6		
17:00 to 18:00	107	11	0	118	114	1	1	116	125	2	127	5	0	5	11	0	0	11	105	12	0	117	131	0	131	0	0	0	57	0	57	328	0	328	10	0	10	0	0	6	0	6	0	0	6	93	1	94	366	20	386	10	0	10
17:15 to 18:15	97	11	0	108	95	0	0	95	111	2	113	4	0	4	12	0	0	12	107	12	0	117	108	0	108	0	0	0	46	0	46	295	0	295	10	0	10	0	0	0	9	0	9	77	1	78	340	20	360	12	0	12		
17:30 to 18:30	80	12	0	92	80	1	0	81	84	1	85	3	0	3	12	0	0	12	101	10	0	111	100	0	100	0	0	0	37	0	37	248	0	248	6	0	6	0	0	0	6	0	6	58	1	59	293	20	313	11	1	12		
17:45 to 18:45	83	12	0	95	68	1	0	69	68	0	68	1	0	1	9	0	0	9	83	9	0	92	94	0	94	0	0	0	22	0	22	201	0	201	6	0	6	0	0	0	6	0	6	37	1	38	231	20	251	6	2	8		
18:00 to 19:00	67	10	0	77	65	1	0	66	57	0	57	0	0	0	10	0	0	10	67	5	0	72	83	0	83	0	0	0	16	1	17	207	0	207	3	0	3	0	0	0	6	0	6	28	1	29	212	18	230	6	2	8		
PM Totals	278	34	0	312	270	2	1	273	348	2	350	8	0	8	39	1	0	40	257	29	0	286	320	1	321	0	0	0	128	1	129	833	1	834	24	0	24	1	0	1	25	0	25	200	4	204	959	61	1,020	23	2	25		

Appendix C. SIDRA Results

MOVEMENT SUMMARY

 **Site: 101 [2023 BG AM - Northfields Ave / Irvine St / Ring Rd / Princes Motorway - Import (Site Folder: Irvine St Network BG)]**  **Network: N101 [2023 AM BG (Network Folder: BG Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	376	4.0	376	4.0	0.564	9.5	LOS A	1.6	11.2	0.82	1.00	1.05	34.4
2	T1	305	1.0	305	1.0	0.597	10.2	LOS B	1.7	11.9	0.84	1.01	1.11	35.1
3	R2	60	2.0	60	2.0	0.597	14.0	LOS B	1.7	11.9	0.84	1.01	1.11	49.9
3u	U	4	1.0	4	1.0	0.597	15.6	LOS B	1.7	11.9	0.84	1.01	1.11	17.7
Approach		745	2.6	745	2.6	0.597	10.2	LOS B	1.7	11.9	0.83	1.01	1.08	35.6
East: Princes Motorway On/Off Ramp (East)														
4	L2	14	1.0	14	1.0	0.423	6.2	LOS A	1.3	9.0	0.65	0.64	0.65	42.2
5	T1	423	3.0	423	3.0	0.423	5.9	LOS A	1.3	9.0	0.65	0.64	0.65	42.0
6	R2	453	1.0	453	1.0	0.382	8.9	LOS A	1.1	8.0	0.61	0.69	0.61	41.1
6u	U	1	1.0	1	1.0	0.382	10.6	LOS B	1.1	8.0	0.61	0.69	0.61	51.5
Approach		891	2.0	891	2.0	0.423	7.4	LOS A	1.3	9.0	0.63	0.67	0.63	41.5
North: Ring Rd (North)														
7	L2	4	1.0	4	1.0	0.145	3.9	LOS A	0.4	2.8	0.56	0.51	0.56	47.2
8	T1	121	1.0	121	1.0	0.145	3.9	LOS A	0.4	2.8	0.56	0.51	0.56	36.1
9	R2	13	1.0	13	1.0	0.145	7.5	LOS A	0.4	2.8	0.56	0.51	0.56	38.7
9u	U	1	1.0	1	1.0	0.145	8.9	LOS A	0.4	2.8	0.56	0.51	0.56	39.4
Approach		139	1.0	139	1.0	0.145	4.3	LOS A	0.4	2.8	0.56	0.51	0.56	37.0
West: Northfields Ave (West)														
10	L2	24	1.0	24	1.0	0.384	9.8	LOS A	1.1	8.6	0.88	0.96	0.93	35.1
11	T1	8	1.0	8	1.0	0.384	9.5	LOS A	1.1	8.6	0.88	0.96	0.93	43.2
12	R2	162	18.0	162	18.0	0.384	14.6	LOS B	1.1	8.6	0.88	0.96	0.93	31.2
12u	U	9	11.0	9	11.0	0.384	15.5	LOS B	1.1	8.6	0.88	0.96	0.93	36.1
Approach		204	15.0	204	15.0	0.384	13.8	LOS B	1.1	8.6	0.88	0.96	0.93	32.8
All Vehicles		1979	3.5	1979	3.5	0.597	8.9	LOS A	1.7	11.9	0.73	0.81	0.82	38.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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Project: \\Au2005-ppfss01\shared_projects\304000956\technical\modelling\23 07 14 - 304000956 - Gwynneville (Network Only).sip9

MOVEMENT SUMMARY

▼ Site: 101 [2023 BG AM - Irvine St / Madoline St - Import (Site Folder: Irvine St Network BG)]

■ Network: N101 [2023 AM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	24	1.0	24	1.0	0.200	4.6	LOS A	0.0	0.0	0.00	0.04	0.00	48.2
2	T1	727	3.0	727	3.0	0.200	0.0	LOS A	0.0	0.1	0.00	0.02	0.00	48.6
3u	U	1	1.0	1	1.0	0.200	8.5	LOS A	0.0	0.1	0.00	0.00	0.00	49.7
Approach		753	2.9	753	2.9	0.200	0.2	NA	0.0	0.1	0.00	0.02	0.00	48.5
North: Irvine St (North)														
8	T1	299	10.0	299	10.0	0.166	0.3	LOS A	0.1	0.4	0.04	0.01	0.04	45.3
9	R2	4	1.0	4	1.0	0.166	9.4	LOS A	0.1	0.4	0.04	0.01	0.04	47.0
9u	U	1	1.0	1	1.0	0.166	16.0	LOS C	0.1	0.4	0.04	0.01	0.04	45.3
Approach		304	9.8	304	9.8	0.166	0.5	NA	0.1	0.4	0.04	0.01	0.04	45.4
West: Madoline St (West)														
10	L2	12	9.0	12	9.0	0.079	6.0	LOS A	0.1	0.8	0.44	0.69	0.44	33.4
12	R2	20	1.0	20	1.0	0.079	16.0	LOS C	0.1	0.8	0.44	0.69	0.44	33.4
12u	U	1	1.0	1	1.0	0.079	5.9	LOS A	0.1	0.8	0.44	0.69	0.44	39.0
Approach		33	3.8	33	3.8	0.079	12.1	LOS B	0.1	0.8	0.44	0.69	0.44	33.6
All Vehicles		1089	4.9	1089	4.9	0.200	0.6	NA	0.1	0.8	0.03	0.04	0.03	45.6

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

MOVEMENT SUMMARY

Site: 101 [2023 BG AM - Irvine St / Princes Motorway On-Ramp - Import (Site Folder: Irvine St Network BG)]

Network: N101 [2023 AM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	752	1.0	752	1.0	0.199	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		752	1.0	752	1.0	0.199	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	336	1.0	336	1.0	0.277	5.9	LOS A	0.5	3.6	0.44	0.63	0.44	24.3
Approach		336	1.0	336	1.0	0.277	5.9	LOS A	0.5	3.6	0.44	0.63	0.44	24.3
North: Irvine St (North)														
8	T1	319	1.0	319	1.0	0.157	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		319	1.0	319	1.0	0.157	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
All Vehicles		1406	1.0	1406	1.0	0.277	1.4	NA	0.5	3.6	0.10	0.15	0.10	40.6

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

MOVEMENT SUMMARY

 **Site: 101 [2023 BG AM - Irvine St / University Ave - Import**
(Site Folder: Irvine St Network BG)]

 **Network: N101 [2023 AM BG**
(Network Folder: BG Networks)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	81	4.0	81	4.0	0.447	8.2	LOS A	1.4	9.7	0.85	0.92	0.91	29.2
3	R2	229	2.0	229	2.0	0.447	12.2	LOS B	1.4	9.7	0.85	0.92	0.91	29.2
3u	U	1	1.0	1	1.0	0.447	13.9	LOS B	1.4	9.7	0.85	0.92	0.91	38.2
Approach		312	2.5	312	2.5	0.447	11.2	LOS B	1.4	9.7	0.85	0.92	0.91	29.3
East: University Ave (East)														
4	L2	166	2.0	166	2.0	0.716	5.5	LOS A	3.5	25.4	0.78	0.67	0.80	34.6
6	R2	673	3.0	673	3.0	0.716	9.6	LOS A	3.5	25.4	0.78	0.67	0.80	24.6
6u	U	1	1.0	1	1.0	0.716	11.3	LOS B	3.5	25.4	0.78	0.67	0.80	24.6
Approach		840	2.8	840	2.8	0.716	8.8	LOS A	3.5	25.4	0.78	0.67	0.80	27.6
North: Irvine St (North)														
7	L2	469	6.0	469	6.0	0.606	5.3	LOS A	2.3	16.7	0.71	0.64	0.72	27.4
8	T1	177	2.0	177	2.0	0.606	5.1	LOS A	2.3	16.7	0.71	0.64	0.72	40.0
9u	U	8	1.0	8	1.0	0.606	10.8	LOS B	2.3	16.7	0.71	0.64	0.72	27.4
Approach		655	4.9	655	4.9	0.606	5.3	LOS A	2.3	16.7	0.71	0.64	0.72	32.5
All Vehicles		1806	3.5	1806	3.5	0.716	7.9	LOS A	3.5	25.4	0.77	0.70	0.79	29.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 BG AM - University Ave / Princes Motorway - Import (Site Folder: Irvine St Network BG)]**  **Network: N101 [2023 AM BG (Network Folder: BG Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	141	3.0	141	3.0	0.629	12.1	LOS B	2.5	17.9	0.93	1.08	1.21	36.6
5	T1	283	5.0	283	5.0	0.629	12.2	LOS B	2.5	17.9	0.93	1.08	1.21	25.2
6u	U	1	1.0	1	1.0	0.629	17.5	LOS B	2.5	17.9	0.93	1.08	1.21	34.6
Approach		425	4.3	425	4.3	0.629	12.2	LOS B	2.5	17.9	0.93	1.08	1.21	30.1
North: Princes Motorway Off-ramp (North)														
7	L2	409	9.0	409	9.0	0.403	6.6	LOS A	1.0	7.9	0.68	0.73	0.68	43.4
8	T1	1	1.0	1	1.0	0.575	10.2	LOS B	2.2	15.6	0.83	0.98	1.05	41.9
9	R2	558	1.0	558	1.0	0.575	14.0	LOS B	2.2	15.6	0.83	0.98	1.05	36.7
Approach		968	4.4	968	4.4	0.575	10.9	LOS B	2.2	15.6	0.77	0.87	0.89	39.6
West: University Ave (West)														
11	T1	562	1.0	562	1.0	0.414	3.2	LOS A	1.6	11.6	0.03	0.43	0.03	42.9
12	R2	139	5.0	139	5.0	0.414	7.1	LOS A	1.6	11.6	0.03	0.43	0.03	47.4
12u	U	1	2.0	1	2.0	0.414	8.7	LOS A	1.6	11.6	0.03	0.43	0.03	33.7
Approach		702	1.8	702	1.8	0.414	4.0	LOS A	1.6	11.6	0.03	0.43	0.03	43.8
All Vehicles		2096	3.5	2096	3.5	0.629	8.8	LOS A	2.5	17.9	0.55	0.77	0.67	39.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 Site: 101 [2023 BG PM - Northfields Ave / Irvine St / Ring Rd / Princes Motorway - Import (Site Folder: Irvine St Network BG)]  Network: N101 [2023 PM BG (Network Folder: BG Networks)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	126	9.0	126	9.0	0.169	5.4	LOS A	0.4	2.7	0.52	0.63	0.52	37.0
2	T1	109	1.0	109	1.0	0.283	4.4	LOS A	0.7	4.8	0.52	0.65	0.52	37.4
3	R2	179	1.0	179	1.0	0.283	8.0	LOS A	0.7	4.8	0.52	0.65	0.52	54.9
3u	U	5	1.0	5	1.0	0.283	9.6	LOS A	0.7	4.8	0.52	0.65	0.52	23.4
Approach		420	3.4	420	3.4	0.283	6.3	LOS A	0.7	4.8	0.52	0.64	0.52	43.2
East: Princes Motorway On/Off Ramp (East)														
4	L2	15	1.0	15	1.0	0.226	10.3	LOS B	0.6	4.5	0.85	0.85	0.85	39.1
5	T1	107	9.0	107	9.0	0.226	10.6	LOS B	0.6	4.5	0.85	0.85	0.85	40.3
6	R2	133	1.0	133	1.0	0.192	12.6	LOS B	0.6	4.0	0.85	0.83	0.85	39.6
6u	U	1	1.0	1	1.0	0.192	14.3	LOS B	0.6	4.0	0.85	0.83	0.85	49.4
Approach		256	4.4	256	4.4	0.226	11.6	LOS B	0.6	4.5	0.85	0.84	0.85	39.9
North: Ring Rd (North)														
7	L2	71	1.0	71	1.0	0.813	29.7	LOS C	5.2	37.1	1.00	1.52	1.96	36.0
8	T1	349	1.0	349	1.0	0.813	29.6	LOS C	5.2	37.1	1.00	1.52	1.96	24.5
9	R2	12	1.0	12	1.0	0.813	33.5	LOS C	5.2	37.1	1.00	1.52	1.96	30.8
9u	U	1	1.0	1	1.0	0.813	34.8	LOS C	5.2	37.1	1.00	1.52	1.96	31.2
Approach		433	1.0	433	1.0	0.813	29.7	LOS C	5.2	37.1	1.00	1.52	1.96	27.1
West: Northfields Ave (West)														
10	L2	15	1.0	15	1.0	0.703	10.7	LOS B	3.5	25.6	0.91	1.05	1.21	35.0
11	T1	101	1.0	101	1.0	0.703	10.2	LOS B	3.5	25.6	0.91	1.05	1.21	43.2
12	R2	466	5.0	466	5.0	0.703	14.3	LOS B	3.5	25.6	0.91	1.05	1.21	31.3
12u	U	6	1.0	6	1.0	0.703	15.5	LOS B	3.5	25.6	0.91	1.05	1.21	36.2
Approach		588	4.2	588	4.2	0.703	13.5	LOS B	3.5	25.6	0.91	1.05	1.21	34.1
All Vehicles		1697	3.2	1697	3.2	0.813	15.6	LOS B	5.2	37.1	0.83	1.04	1.18	34.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

▼ Site: 101 [2023 BG PM - Irvine St / Madoline St - Import (Site Folder: Irvine St Network BG)]

■ Network: N101 [2023 PM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	18	1.0	18	1.0	0.115	4.6	LOS A	0.0	0.0	0.00	0.05	0.00	48.1
2	T1	407	3.0	407	3.0	0.115	0.1	LOS A	0.0	0.2	0.01	0.02	0.01	46.9
3u	U	1	1.0	1	1.0	0.115	19.3	LOS C	0.0	0.2	0.02	0.00	0.02	46.9
Approach		426	2.9	426	2.9	0.115	0.4	NA	0.0	0.2	0.01	0.02	0.01	47.1
North: Irvine St (North)														
8	T1	828	3.0	828	3.0	0.427	0.1	LOS A	0.1	0.8	0.03	0.01	0.03	47.6
9	R2	11	1.0	11	1.0	0.427	7.6	LOS A	0.1	0.8	0.03	0.01	0.03	47.4
9u	U	1	1.0	1	1.0	0.427	11.7	LOS B	0.1	0.8	0.03	0.01	0.03	47.6
Approach		840	3.0	840	3.0	0.427	0.2	NA	0.1	0.8	0.03	0.01	0.03	47.6
West: Madoline St (West)														
10	L2	13	1.0	13	1.0	0.122	5.2	LOS A	0.2	1.1	0.50	0.68	0.50	29.2
12	R2	19	1.0	19	1.0	0.122	25.8	LOS D	0.2	1.1	0.50	0.68	0.50	29.2
12u	U	1	1.0	1	1.0	0.122	5.9	LOS A	0.2	1.1	0.50	0.68	0.50	36.0
Approach		33	1.0	33	1.0	0.122	17.2	LOS C	0.2	1.1	0.50	0.68	0.50	29.6
All Vehicles		1299	2.9	1299	2.9	0.427	0.7	NA	0.2	1.1	0.03	0.03	0.04	44.6

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

MOVEMENT SUMMARY

Site: 101 [2023 BG PM - Irvine St / Princes Motorway On-Ramp - Import (Site Folder: Irvine St Network BG)]

Network: N101 [2023 PM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	425	1.0	425	1.0	0.115	0.1	LOS A	0.0	0.2	0.01	0.00	0.01	48.7
3u	U	1	1.0	1	1.0	0.115	19.8	LOS C	0.0	0.2	0.02	0.00	0.02	47.4
Approach		426	1.0	426	1.0	0.115	0.2	NA	0.0	0.2	0.01	0.00	0.01	48.6
East: Princes Motorway On-Ramp														
4	L2	157	1.0	157	1.0	0.333	10.9	LOS B	0.4	3.1	0.71	0.91	0.86	17.8
Approach		157	1.0	157	1.0	0.333	10.9	LOS B	0.4	3.1	0.71	0.91	0.86	17.8
North: Irvine St (North)														
8	T1	847	1.0	847	1.0	0.523	0.0	LOS A	0.0	0.1	0.00	0.00	0.01	49.6
9u	U	1	1.0	1	1.0	0.523	12.5	LOS B	0.0	0.1	0.00	0.00	0.01	49.6
Approach		848	1.0	848	1.0	0.523	0.0	NA	0.0	0.1	0.00	0.00	0.01	49.6
All Vehicles		1432	1.0	1432	1.0	0.523	1.3	NA	0.4	3.1	0.08	0.10	0.10	41.4

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

MOVEMENT SUMMARY

 **Site: 101 [2023 BG PM - Irvine St / University Ave - Import**
(Site Folder: Irvine St Network BG)]

 **Network: N101 [2023 PM BG**
(Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	100	2.0	100	2.0	0.332	4.8	LOS A	0.8	5.6	0.55	0.68	0.55	32.9
3	R2	237	1.0	237	1.0	0.332	8.9	LOS A	0.8	5.6	0.55	0.68	0.55	32.9
3u	U	2	1.0	2	1.0	0.332	10.6	LOS B	0.8	5.6	0.55	0.68	0.55	41.5
Approach		339	1.3	339	1.3	0.332	7.7	LOS A	0.8	5.6	0.55	0.68	0.55	33.0
East: University Ave (East)														
4	L2	178	1.0	178	1.0	0.420	4.1	LOS A	1.5	10.5	0.51	0.59	0.51	36.5
6	R2	325	4.0	325	4.0	0.420	8.2	LOS A	1.5	10.5	0.51	0.59	0.51	26.7
6u	U	1	1.0	1	1.0	0.420	9.9	LOS A	1.5	10.5	0.51	0.59	0.51	26.7
Approach		504	2.9	504	2.9	0.420	6.8	LOS A	1.5	10.5	0.51	0.59	0.51	31.6
North: Irvine St (North)														
7	L2	863	2.0	863	2.0	0.880	11.6	LOS B	7.8	55.2	1.00	0.93	1.30	19.4
8	T1	139	1.0	139	1.0	0.880	11.6	LOS B	7.8	55.2	1.00	0.93	1.30	33.0
9u	U	2	1.0	2	1.0	0.880	17.3	LOS B	7.8	55.2	1.00	0.93	1.30	19.4
Approach		1004	1.9	1004	1.9	0.880	11.6	LOS B	7.8	55.2	1.00	0.93	1.30	22.2
All Vehicles		1847	2.0	1847	2.0	0.880	9.6	LOS A	7.8	55.2	0.78	0.79	0.95	26.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2023 BG PM - University Ave / Princes Motorway - Import (Site Folder: Irvine St Network BG)]**  **Network: N101 [2023 PM BG (Network Folder: BG Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	125	1.0	125	1.0	0.495	8.4	LOS A	1.5	10.7	0.77	0.87	0.87	40.9
5	T1	274	4.0	274	4.0	0.495	8.5	LOS A	1.5	10.7	0.77	0.87	0.87	29.7
6u	U	2	1.0	2	1.0	0.495	13.8	LOS B	1.5	10.7	0.77	0.87	0.87	38.9
Approach		401	3.0	401	3.0	0.495	8.5	LOS A	1.5	10.7	0.77	0.87	0.87	34.4
North: Princes Motorway Off-ramp (North)														
7	L2	246	1.0	246	1.0	0.260	7.3	LOS A	0.7	4.7	0.71	0.74	0.71	42.9
8	T1	1	1.0	1	1.0	0.344	13.0	LOS B	1.0	7.2	0.91	0.92	0.91	40.2
9	R2	231	1.0	231	1.0	0.344	16.8	LOS B	1.0	7.2	0.91	0.92	0.91	34.9
Approach		478	1.0	478	1.0	0.344	11.9	LOS B	1.0	7.2	0.81	0.83	0.81	39.1
West: University Ave (West)														
11	T1	732	1.0	732	1.0	0.650	3.2	LOS A	3.7	26.3	0.06	0.46	0.06	41.7
12	R2	367	3.0	367	3.0	0.650	7.1	LOS A	3.7	26.3	0.06	0.46	0.06	46.6
12u	U	1	1.0	1	1.0	0.650	8.7	LOS A	3.7	26.3	0.06	0.46	0.06	32.1
Approach		1100	1.7	1100	1.7	0.650	4.5	LOS A	3.7	26.3	0.06	0.46	0.06	43.4
All Vehicles		1979	1.8	1979	1.8	0.650	7.1	LOS A	3.7	26.3	0.39	0.63	0.41	40.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2028 BG AM - Northfields Ave / Irvine St / Ring Rd / Princes Motorway (Site Folder: Irvine St Network BG)]**  **Network: N101 [2028 AM BG (Network Folder: BG Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	380	4.0	380	4.0	0.496	7.9	LOS A	1.4	9.9	0.77	0.93	0.89	35.3
2	T1	225	1.0	225	1.0	0.417	7.4	LOS A	1.0	7.1	0.74	0.88	0.81	36.8
3	R2	57	2.0	57	2.0	0.417	11.2	LOS B	1.0	7.1	0.74	0.88	0.81	53.2
3u	U	4	1.0	4	1.0	0.417	12.8	LOS B	1.0	7.1	0.74	0.88	0.81	21.1
Approach		666	2.8	666	2.8	0.496	8.1	LOS A	1.4	9.9	0.76	0.91	0.85	36.9
East: Princes Motorway On/Off Ramp (East)														
4	L2	16	1.0	16	1.0	0.236	6.4	LOS A	0.6	4.1	0.59	0.62	0.59	42.6
5	T1	193	3.0	193	3.0	0.236	6.0	LOS A	0.6	4.1	0.59	0.62	0.59	42.2
6	R2	457	1.0	457	1.0	0.390	9.1	LOS A	1.2	8.1	0.62	0.70	0.62	41.1
6u	U	1	1.0	1	1.0	0.390	10.7	LOS B	1.2	8.1	0.62	0.70	0.62	51.4
Approach		666	1.6	666	1.6	0.390	8.1	LOS A	1.2	8.1	0.61	0.68	0.61	41.4
North: Ring Rd (North)														
7	L2	4	1.0	4	1.0	0.173	3.8	LOS A	0.5	3.4	0.56	0.50	0.56	47.2
8	T1	151	1.0	151	1.0	0.173	3.9	LOS A	0.5	3.4	0.56	0.50	0.56	36.1
9	R2	13	1.0	13	1.0	0.173	7.5	LOS A	0.5	3.4	0.56	0.50	0.56	38.8
9u	U	1	1.0	1	1.0	0.173	8.8	LOS A	0.5	3.4	0.56	0.50	0.56	39.4
Approach		168	1.0	168	1.0	0.173	4.2	LOS A	0.5	3.4	0.56	0.50	0.56	36.9
West: Northfields Ave (West)														
10	L2	24	1.0	24	1.0	0.324	8.1	LOS A	0.9	6.5	0.84	0.87	0.84	35.8
11	T1	5	1.0	5	1.0	0.324	7.8	LOS A	0.9	6.5	0.84	0.87	0.84	44.3
12	R2	164	5.0	164	5.0	0.324	12.1	LOS B	0.9	6.5	0.84	0.87	0.84	32.3
12u	U	9	11.0	9	11.0	0.324	13.8	LOS B	0.9	6.5	0.84	0.87	0.84	36.9
Approach		203	4.7	203	4.7	0.324	11.6	LOS B	0.9	6.5	0.84	0.87	0.84	33.6
All Vehicles		1704	2.4	1704	2.4	0.496	8.1	LOS A	1.4	9.9	0.69	0.78	0.73	38.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

▼ Site: 101 [2028 BG AM - Irvine St / Madoline St (Site Folder: Irvine St Network BG)]

■ Network: N101 [2028 AM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	24	1.0	24	1.0	0.180	4.6	LOS A	0.0	0.0	0.00	0.04	0.00	48.2
2	T1	654	3.0	654	3.0	0.180	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	48.6
Approach		678	2.9	678	2.9	0.180	0.2	NA	0.0	0.0	0.00	0.02	0.00	48.5
North: Irvine St (North)														
8	T1	326	10.0	326	10.0	0.176	0.1	LOS A	0.0	0.3	0.03	0.01	0.03	47.5
9	R2	4	1.0	4	1.0	0.176	8.7	LOS A	0.0	0.3	0.03	0.01	0.03	47.4
Approach		331	9.9	331	9.9	0.176	0.2	NA	0.0	0.3	0.03	0.01	0.03	47.5
West: Madoline St (West)														
10	L2	12	9.0	12	9.0	0.073	5.8	LOS A	0.1	0.7	0.59	0.74	0.59	33.9
12	R2	20	1.0	20	1.0	0.073	14.9	LOS B	0.1	0.7	0.59	0.74	0.59	33.9
Approach		32	3.9	32	3.9	0.073	11.5	LOS B	0.1	0.7	0.59	0.74	0.59	33.9
All Vehicles		1040	5.2	1040	5.2	0.180	0.5	NA	0.1	0.7	0.03	0.04	0.03	46.1

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

MOVEMENT SUMMARY

Site: 101 [2028 BG AM - Irvine St / Princes Motorway On-Ramp (Site Folder: Irvine St Network BG)]

Network: N101 [2028 AM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	678	1.0	678	1.0	0.180	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		678	1.0	678	1.0	0.180	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	329	1.0	329	1.0	0.280	6.1	LOS A	0.5	3.6	0.46	0.65	0.46	24.2
Approach		329	1.0	329	1.0	0.280	6.1	LOS A	0.5	3.6	0.46	0.65	0.46	24.2
North: Irvine St (North)														
8	T1	346	1.0	346	1.0	0.171	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		346	1.0	346	1.0	0.171	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
All Vehicles		1354	1.0	1354	1.0	0.280	1.5	NA	0.5	3.6	0.11	0.16	0.11	40.3

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

MOVEMENT SUMMARY

 **Site: 101 [2028 BG AM - Irvine St / University Ave (Site Folder: Irvine St Network BG)]**

 **Network: N101 [2028 AM BG (Network Folder: BG Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	73	4.0	73	4.0	0.363	6.7	LOS A	1.0	6.9	0.76	0.83	0.76	30.7
3	R2	203	2.0	203	2.0	0.363	10.8	LOS B	1.0	6.9	0.76	0.83	0.76	30.7
3u	U	1	1.0	1	1.0	0.363	12.5	LOS B	1.0	6.9	0.76	0.83	0.76	39.6
Approach		277	2.5	277	2.5	0.363	9.7	LOS A	1.0	6.9	0.76	0.83	0.76	30.7
East: University Ave (East)														
4	L2	177	2.0	177	2.0	0.676	5.4	LOS A	3.0	21.6	0.75	0.68	0.76	34.9
6	R2	597	3.0	597	3.0	0.676	9.5	LOS A	3.0	21.6	0.75	0.68	0.76	24.9
6u	U	1	1.0	1	1.0	0.676	11.2	LOS B	3.0	21.6	0.75	0.68	0.76	24.9
Approach		775	2.8	775	2.8	0.676	8.6	LOS A	3.0	21.6	0.75	0.68	0.76	28.3
North: Irvine St (North)														
7	L2	474	6.0	474	6.0	0.600	5.0	LOS A	2.3	16.5	0.67	0.61	0.67	27.7
8	T1	193	2.0	193	2.0	0.600	4.9	LOS A	2.3	16.5	0.67	0.61	0.67	40.2
9u	U	8	1.0	8	1.0	0.600	10.6	LOS B	2.3	16.5	0.67	0.61	0.67	27.7
Approach		675	4.8	675	4.8	0.600	5.1	LOS A	2.3	16.5	0.67	0.61	0.67	33.1
All Vehicles		1726	3.5	1726	3.5	0.676	7.4	LOS A	3.0	21.6	0.72	0.68	0.73	30.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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Project: \\Au2005-pfss01\shared_projects\304000956\technical\modelling\23 07 14 - 304000956 - Gwynneville (Network Only).sip9

MOVEMENT SUMMARY

 **Site: 101 [2028 BG AM - University Ave / Princes Motorway (Site Folder: Irvine St Network BG)]**

 **Network: N101 [2028 AM BG (Network Folder: BG Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	142	3.0	142	3.0	0.556	9.8	LOS A	1.9	14.0	0.86	0.97	1.03	39.0
5	T1	261	5.0	261	5.0	0.556	9.9	LOS A	1.9	14.0	0.86	0.97	1.03	27.7
6u	U	1	1.0	1	1.0	0.556	15.2	LOS B	1.9	14.0	0.86	0.97	1.03	37.1
Approach		404	4.3	404	4.3	0.556	9.9	LOS A	1.9	14.0	0.86	0.97	1.03	32.9
North: Princes Motorway Off-ramp (North)														
7	L2	414	9.0	414	9.0	0.403	6.5	LOS A	1.0	7.9	0.67	0.73	0.67	43.5
8	T1	1	1.0	1	1.0	0.520	8.9	LOS A	1.8	12.4	0.79	0.91	0.92	42.8
9	R2	514	1.0	514	1.0	0.520	12.7	LOS B	1.8	12.4	0.79	0.91	0.92	37.7
Approach		928	4.6	928	4.6	0.520	9.9	LOS A	1.8	12.4	0.74	0.83	0.81	40.4
West: University Ave (West)														
11	T1	546	1.0	546	1.0	0.399	3.2	LOS A	1.5	10.7	0.03	0.43	0.03	43.0
12	R2	128	5.0	128	5.0	0.399	7.1	LOS A	1.5	10.7	0.03	0.43	0.03	47.4
12u	U	1	2.0	1	2.0	0.399	8.7	LOS A	1.5	10.7	0.03	0.43	0.03	33.8
Approach		676	1.8	676	1.8	0.399	4.0	LOS A	1.5	10.7	0.03	0.43	0.03	43.9
All Vehicles		2008	3.6	2008	3.6	0.556	7.9	LOS A	1.9	14.0	0.52	0.72	0.59	40.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2028 BG PM - Northfields Ave / Irvine St / Ring Rd / Princes Motorway (Site Folder: Irvine St Network BG)]**  **Network: N101 [2028 PM BG (Network Folder: BG Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	127	9.0	127	9.0	0.185	5.5	LOS A	0.4	2.9	0.52	0.63	0.52	36.9
2	T1	148	1.0	148	1.0	0.344	4.2	LOS A	0.9	6.3	0.53	0.64	0.53	37.6
3	R2	209	1.0	209	1.0	0.344	8.0	LOS A	0.9	6.3	0.53	0.64	0.53	55.3
3u	U	5	1.0	5	1.0	0.344	9.6	LOS A	0.9	6.3	0.53	0.64	0.53	23.8
Approach		491	3.1	491	3.1	0.344	6.2	LOS A	0.9	6.3	0.53	0.64	0.53	43.4
East: Princes Motorway On/Off Ramp (East)														
4	L2	19	1.0	19	1.0	0.215	11.8	LOS B	0.6	4.3	0.88	0.87	0.88	38.0
5	T1	86	9.0	86	9.0	0.215	11.9	LOS B	0.6	4.3	0.88	0.87	0.88	39.8
6	R2	134	1.0	134	1.0	0.204	13.5	LOS B	0.6	4.4	0.90	0.85	0.90	39.4
6u	U	1	1.0	1	1.0	0.204	15.2	LOS B	0.6	4.4	0.90	0.85	0.90	48.8
Approach		240	3.9	240	3.9	0.215	12.8	LOS B	0.6	4.4	0.89	0.86	0.89	39.5
North: Ring Rd (North)														
7	L2	72	1.0	72	1.0	1.038	101.7	LOS F	16.4	116.0	1.00	2.97	4.68	21.1
8	T1	441	1.0	441	1.0	1.038	101.7	LOS F	16.4	116.0	1.00	2.97	4.68	12.6
9	R2	12	1.0	12	1.0	1.038	105.3	LOS F	16.4	116.0	1.00	2.97	4.68	19.2
9u	U	1	1.0	1	1.0	1.038	106.7	LOS F	16.4	116.0	1.00	2.97	4.68	19.3
Approach		525	1.0	525	1.0	1.038	101.8	LOS F	16.4	116.0	1.00	2.97	4.68	14.1
West: Northfields Ave (West)														
10	L2	15	1.0	15	1.0	0.727	12.4	LOS B	3.9	28.1	0.96	1.15	1.36	34.5
11	T1	91	1.0	91	1.0	0.727	12.1	LOS B	3.9	28.1	0.96	1.15	1.36	42.3
12	R2	471	5.0	471	5.0	0.727	16.3	LOS B	3.9	28.1	0.96	1.15	1.36	30.3
12u	U	6	1.0	6	1.0	0.727	17.4	LOS B	3.9	28.1	0.96	1.15	1.36	35.5
Approach		582	4.2	582	4.2	0.727	15.5	LOS B	3.9	28.1	0.96	1.15	1.36	32.9
All Vehicles		1838	3.0	1838	3.0	1.038	37.3	LOS D	16.4	116.0	0.85	1.50	2.03	26.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

▼ Site: 101 [2028 BG PM - Irvine St / Madoline St (Site Folder: Irvine St Network BG)]

■ Network: N101 [2028 PM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	18	1.0	18	1.0	0.131	4.6	LOS A	0.0	0.0	0.00	0.04	0.00	48.2
2	T1	477	3.0	477	3.0	0.131	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	48.6
Approach		495	2.9	495	2.9	0.131	0.2	NA	0.0	0.0	0.00	0.02	0.00	48.5
North: Irvine St (North)														
8	T1	920	3.0	904	3.0	0.464	0.1	LOS A	0.1	0.8	0.02	0.01	0.03	47.7
9	R2	11	1.0	10	1.0	0.464	8.7	LOS A	0.1	0.8	0.02	0.01	0.03	47.4
Approach		931	3.0	915 ^{N1}	3.0	0.464	0.2	NA	0.1	0.8	0.02	0.01	0.03	47.7
West: Madoline St (West)														
10	L2	13	1.0	13	1.0	0.163	5.3	LOS A	0.2	1.4	0.71	0.76	0.71	25.9
12	R2	19	1.0	19	1.0	0.163	34.0	LOS D	0.2	1.4	0.71	0.76	0.71	25.9
Approach		32	1.0	32	1.0	0.163	22.5	LOS C	0.2	1.4	0.71	0.76	0.71	25.9
All Vehicles		1457	2.9	1441 ^{N1}	3.0	0.464	0.7	NA	0.2	1.4	0.03	0.03	0.04	44.6

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

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

MOVEMENT SUMMARY

Site: 101 [2028 BG PM - Irvine St / Princes Motorway On-Ramp (Site Folder: Irvine St Network BG)]

Network: N101 [2028 PM BG (Network Folder: BG Networks)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	496	1.0	496	1.0	0.131	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		496	1.0	496	1.0	0.131	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	88	1.0	88	1.0	0.245	11.3	LOS B	0.3	1.8	0.73	0.89	0.79	17.4
Approach		88	1.0	88	1.0	0.245	11.3	LOS B	0.3	1.8	0.73	0.89	0.79	17.4
North: Irvine St (North)														
8	T1	940	1.0	924	1.0	0.645	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.2
Approach		940	1.0	924 ^{N1}	1.0	0.645	0.1	NA	0.0	0.0	0.00	0.00	0.00	49.2
All Vehicles		1524	1.0	1508 ^{N1}	1.0	0.645	0.7	NA	0.3	1.8	0.04	0.05	0.05	44.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

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

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

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

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MOVEMENT SUMMARY

 **Site: 101 [2028 BG PM - Irvine St / University Ave (Site Folder: Irvine St Network BG)]**

 **Network: N101 [2028 PM BG (Network Folder: BG Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Irvine St (South)														
2	T1	128	2.0	128	2.0	0.395	5.2	LOS A	1.0	7.2	0.61	0.71	0.61	32.6
3	R2	259	1.0	259	1.0	0.395	9.3	LOS A	1.0	7.2	0.61	0.71	0.61	32.6
3u	U	2	1.0	2	1.0	0.395	11.0	LOS B	1.0	7.2	0.61	0.71	0.61	41.3
Approach		389	1.3	389	1.3	0.395	7.9	LOS A	1.0	7.2	0.61	0.71	0.61	32.7
East: University Ave (East)														
4	L2	201	1.0	201	1.0	0.478	4.3	LOS A	1.8	12.7	0.57	0.60	0.57	36.3
6	R2	364	4.0	364	4.0	0.478	8.4	LOS A	1.8	12.7	0.57	0.60	0.57	26.4
6u	U	1	1.0	1	1.0	0.478	10.1	LOS B	1.8	12.7	0.57	0.60	0.57	26.4
Approach		566	2.9	566	2.9	0.478	7.0	LOS A	1.8	12.7	0.57	0.60	0.57	31.3
North: Irvine St (North)														
7	L2	872	2.0	858	2.0	0.912	15.0	LOS B	9.5	67.8	1.00	1.06	1.48	16.5
8	T1	155	1.0	152	1.0	0.912	15.0	LOS B	9.5	67.8	1.00	1.06	1.48	29.7
9u	U	2	1.0	2	1.0	0.912	20.7	LOS C	9.5	67.8	1.00	1.06	1.48	16.5
Approach		1028	1.8	1013 ^N ₁	1.9	0.912	15.0	LOS B	9.5	67.8	1.00	1.06	1.48	19.3
All Vehicles		1984	2.1	1969 ^N ₁	2.1	0.912	11.3	LOS B	9.5	67.8	0.80	0.86	1.04	25.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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

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

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

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

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MOVEMENT SUMMARY

 **Site: 101 [2028 BG PM - University Ave / Princes Motorway (Site Folder: Irvine St Network BG)]**

 **Network: N101 [2028 PM BG (Network Folder: BG Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	126	1.0	126	1.0	0.559	9.8	LOS A	1.9	13.7	0.83	0.95	1.01	39.2
5	T1	305	4.0	305	4.0	0.559	9.9	LOS A	1.9	13.7	0.83	0.95	1.01	27.8
6u	U	2	1.0	2	1.0	0.559	15.2	LOS B	1.9	13.7	0.83	0.95	1.01	37.2
Approach		434	3.1	434	3.1	0.559	9.9	LOS A	1.9	13.7	0.83	0.95	1.01	32.4
North: Princes Motorway Off-ramp (North)														
7	L2	248	1.0	248	1.0	0.265	7.4	LOS A	0.7	4.8	0.72	0.75	0.72	42.8
8	T1	1	1.0	1	1.0	0.398	14.2	LOS B	1.3	8.9	0.94	0.96	0.99	39.4
9	R2	260	1.0	260	1.0	0.398	18.0	LOS B	1.3	8.9	0.94	0.96	0.99	34.1
Approach		509	1.0	509	1.0	0.398	12.8	LOS B	1.3	8.9	0.83	0.86	0.86	38.4
West: University Ave (West)														
11	T1	753	1.0	744	1.0	0.661	3.2	LOS A	3.9	27.9	0.07	0.46	0.07	41.7
12	R2	378	3.0	374	3.0	0.661	7.1	LOS A	3.9	27.9	0.07	0.46	0.07	46.5
12u	U	1	1.0	1	1.0	0.661	8.7	LOS A	3.9	27.9	0.07	0.46	0.07	32.1
Approach		1132	1.7	1118 ^N ₁	1.7	0.661	4.5	LOS A	3.9	27.9	0.07	0.46	0.07	43.4
All Vehicles		2075	1.8	2062 ^N ₁	1.8	0.661	7.7	LOS A	3.9	27.9	0.42	0.66	0.46	39.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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

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

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

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

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MOVEMENT SUMMARY

 **Site: 101 [2033 BG AM - Northfields Ave / Irvine St / Ring Rd / Princes Motorway (Site Folder: Irvine St Network BG)]**  **Network: N101 [2033 AM BG (Network Folder: BG Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	398	4.0	398	4.0	0.534	8.6	LOS A	1.5	11.2	0.80	0.97	0.96	34.9
2	T1	239	1.0	239	1.0	0.450	8.0	LOS A	1.1	8.0	0.77	0.91	0.87	36.4
3	R2	57	2.0	57	2.0	0.450	11.8	LOS B	1.1	8.0	0.77	0.91	0.87	52.5
3u	U	4	1.0	4	1.0	0.450	13.4	LOS B	1.1	8.0	0.77	0.91	0.87	20.3
Approach		698	2.8	698	2.8	0.534	8.7	LOS A	1.5	11.2	0.79	0.94	0.92	36.4
East: Princes Motorway On/Off Ramp (East)														
4	L2	17	1.0	17	1.0	0.252	6.6	LOS A	0.6	4.5	0.61	0.64	0.61	42.4
5	T1	202	3.0	202	3.0	0.252	6.2	LOS A	0.6	4.5	0.61	0.64	0.61	42.1
6	R2	480	1.0	480	1.0	0.416	9.2	LOS A	1.3	8.9	0.65	0.72	0.65	41.0
6u	U	1	1.0	1	1.0	0.416	10.9	LOS B	1.3	8.9	0.65	0.72	0.65	51.4
Approach		700	1.6	700	1.6	0.416	8.3	LOS A	1.3	8.9	0.64	0.69	0.64	41.4
North: Ring Rd (North)														
7	L2	4	1.0	4	1.0	0.185	3.9	LOS A	0.5	3.6	0.57	0.51	0.57	47.2
8	T1	159	1.0	159	1.0	0.185	4.0	LOS A	0.5	3.6	0.57	0.51	0.57	36.0
9	R2	14	1.0	14	1.0	0.185	7.6	LOS A	0.5	3.6	0.57	0.51	0.57	38.7
9u	U	1	1.0	1	1.0	0.185	9.0	LOS A	0.5	3.6	0.57	0.51	0.57	39.4
Approach		178	1.0	178	1.0	0.185	4.3	LOS A	0.5	3.6	0.57	0.51	0.57	36.8
West: Northfields Ave (West)														
10	L2	25	1.0	25	1.0	0.357	8.7	LOS A	1.0	7.3	0.87	0.90	0.87	35.6
11	T1	6	1.0	6	1.0	0.357	8.4	LOS A	1.0	7.3	0.87	0.90	0.87	44.0
12	R2	172	5.0	172	5.0	0.357	12.7	LOS B	1.0	7.3	0.87	0.90	0.87	32.0
12u	U	11	11.0	11	11.0	0.357	14.4	LOS B	1.0	7.3	0.87	0.90	0.87	36.7
Approach		214	4.7	214	4.7	0.357	12.1	LOS B	1.0	7.3	0.87	0.90	0.87	33.4
All Vehicles		1789	2.4	1789	2.4	0.534	8.5	LOS A	1.5	11.2	0.72	0.80	0.77	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

Site: 101 [2033 BG AM - Irvine St / Madoline St (Site Folder: Irvine St Network BG)]

Network: N101 [2033 AM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	25	1.0	25	1.0	0.189	4.6	LOS A	0.0	0.0	0.00	0.04	0.00	48.2
2	T1	686	3.0	686	3.0	0.189	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	48.6
Approach		712	2.9	712	2.9	0.189	0.2	NA	0.0	0.0	0.00	0.02	0.00	48.5
North: Irvine St (North)														
8	T1	342	10.0	342	10.0	0.185	0.1	LOS A	0.0	0.3	0.03	0.01	0.03	47.4
9	R2	4	1.0	4	1.0	0.185	9.1	LOS A	0.0	0.3	0.03	0.01	0.03	47.4
Approach		346	9.9	346	9.9	0.185	0.2	NA	0.0	0.3	0.03	0.01	0.03	47.4
West: Madoline St (West)														
10	L2	13	9.0	13	9.0	0.082	5.9	LOS A	0.1	0.8	0.61	0.75	0.61	33.3
12	R2	21	1.0	21	1.0	0.082	15.9	LOS C	0.1	0.8	0.61	0.75	0.61	33.3
Approach		34	4.0	34	4.0	0.082	12.2	LOS B	0.1	0.8	0.61	0.75	0.61	33.3
All Vehicles		1092	5.2	1092	5.2	0.189	0.6	NA	0.1	0.8	0.03	0.04	0.03	45.9

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

MOVEMENT SUMMARY

Site: 101 [2033 BG AM - Irvine St / Princes Motorway On-Ramp (Site Folder: Irvine St Network BG)]

Network: N101 [2033 AM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	712	1.0	712	1.0	0.189	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		712	1.0	712	1.0	0.189	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	345	1.0	345	1.0	0.298	6.2	LOS A	0.5	3.9	0.47	0.66	0.47	24.1
Approach		345	1.0	345	1.0	0.298	6.2	LOS A	0.5	3.9	0.47	0.66	0.47	24.1
North: Irvine St (North)														
8	T1	363	1.0	363	1.0	0.179	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		363	1.0	363	1.0	0.179	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
All Vehicles		1420	1.0	1420	1.0	0.298	1.5	NA	0.5	3.9	0.12	0.16	0.12	40.2

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

MOVEMENT SUMMARY

 **Site: 101 [2033 BG AM - Irvine St / University Ave (Site Folder: Irvine St Network BG)]**

 **Network: N101 [2033 AM BG (Network Folder: BG Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Irvine St (South)														
2	T1	77	4.0	77	4.0	0.398	7.1	LOS A	1.1	7.9	0.81	0.86	0.81	30.4
3	R2	213	2.0	213	2.0	0.398	11.1	LOS B	1.1	7.9	0.81	0.86	0.81	30.4
3u	U	1	1.0	1	1.0	0.398	12.8	LOS B	1.1	7.9	0.81	0.86	0.81	39.2
Approach		291	2.5	291	2.5	0.398	10.0	LOS B	1.1	7.9	0.81	0.86	0.81	30.4
East: University Ave (East)														
4	L2	184	2.0	184	2.0	0.717	6.2	LOS A	3.7	26.2	0.81	0.72	0.86	34.6
6	R2	626	3.0	626	3.0	0.717	10.3	LOS B	3.7	26.2	0.81	0.72	0.86	24.5
6u	U	1	1.0	1	1.0	0.717	12.0	LOS B	3.7	26.2	0.81	0.72	0.86	24.5
Approach		812	2.8	812	2.8	0.717	9.4	LOS A	3.7	26.2	0.81	0.72	0.86	27.9
North: Irvine St (North)														
7	L2	498	6.0	498	6.0	0.637	5.3	LOS A	2.6	18.6	0.72	0.63	0.72	27.3
8	T1	202	2.0	202	2.0	0.637	5.1	LOS A	2.6	18.6	0.72	0.63	0.72	39.9
9u	U	8	1.0	8	1.0	0.637	10.8	LOS B	2.6	18.6	0.72	0.63	0.72	27.3
Approach		708	4.8	708	4.8	0.637	5.3	LOS A	2.6	18.6	0.72	0.63	0.72	32.7
All Vehicles		1811	3.5	1811	3.5	0.717	7.9	LOS A	3.7	26.2	0.78	0.71	0.80	30.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 BG AM - University Ave / Princes Motorway
(Site Folder: Irvine St Network BG)]**

 **Network: N101 [2033 AM BG
(Network Folder: BG Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	149	3.0	149	3.0	0.611	11.4	LOS B	2.3	16.8	0.91	1.05	1.16	37.3
5	T1	274	5.0	274	5.0	0.611	11.4	LOS B	2.3	16.8	0.91	1.05	1.16	26.0
6u	U	1	1.0	1	1.0	0.611	16.7	LOS B	2.3	16.8	0.91	1.05	1.16	35.4
Approach		424	4.3	424	4.3	0.611	11.4	LOS B	2.3	16.8	0.91	1.05	1.16	31.2
North: Princes Motorway Off-ramp (North)														
7	L2	434	9.0	434	9.0	0.431	6.8	LOS A	1.1	8.6	0.70	0.75	0.70	43.3
8	T1	1	1.0	1	1.0	0.559	10.0	LOS B	2.1	14.7	0.83	0.97	1.03	42.0
9	R2	539	1.0	539	1.0	0.559	13.9	LOS B	2.1	14.7	0.83	0.97	1.03	36.8
Approach		974	4.6	974	4.6	0.559	10.7	LOS B	2.1	14.7	0.77	0.87	0.88	39.8
West: University Ave (West)														
11	T1	575	1.0	575	1.0	0.420	3.2	LOS A	1.7	11.8	0.03	0.43	0.03	42.9
12	R2	136	5.0	136	5.0	0.420	7.1	LOS A	1.7	11.8	0.03	0.43	0.03	47.4
12u	U	1	2.0	1	2.0	0.420	8.7	LOS A	1.7	11.8	0.03	0.43	0.03	33.7
Approach		712	1.8	712	1.8	0.420	4.0	LOS A	1.7	11.8	0.03	0.43	0.03	43.9
All Vehicles		2109	3.6	2109	3.6	0.611	8.6	LOS A	2.3	16.8	0.55	0.76	0.65	39.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 Site: 101 [2033 BG PM - Northfields Ave / Irvine St / Ring Rd / Princes Motorway (Site Folder: Irvine St Network BG)]  Network: N101 [2033 PM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	134	9.0	134	9.0	0.197	5.6	LOS A	0.4	3.1	0.54	0.64	0.54	36.8
2	T1	156	1.0	156	1.0	0.363	4.3	LOS A	1.0	6.8	0.55	0.65	0.55	37.6
3	R2	219	1.0	219	1.0	0.363	8.1	LOS A	1.0	6.8	0.55	0.65	0.55	55.2
3u	U	5	1.0	5	1.0	0.363	9.7	LOS A	1.0	6.8	0.55	0.65	0.55	23.7
Approach		514	3.1	514	3.1	0.363	6.3	LOS A	1.0	6.8	0.55	0.65	0.55	43.3
East: Princes Motorway On/Off Ramp (East)														
4	L2	20	1.0	20	1.0	0.231	11.8	LOS B	0.6	4.6	0.89	0.89	0.89	38.0
5	T1	91	9.0	91	9.0	0.231	11.9	LOS B	0.6	4.6	0.89	0.89	0.89	39.8
6	R2	141	1.0	141	1.0	0.220	13.5	LOS B	0.7	4.7	0.91	0.85	0.91	39.4
6u	U	1	1.0	1	1.0	0.220	15.2	LOS B	0.7	4.7	0.91	0.85	0.91	48.8
Approach		253	3.9	253	3.9	0.231	12.8	LOS B	0.7	4.7	0.90	0.87	0.90	39.5
North: Ring Rd (North)														
7	L2	75	1.0	75	1.0	1.165	193.5	LOS F	28.4	200.2	1.00	4.33	7.28	13.7
8	T1	463	1.0	463	1.0	1.165	193.6	LOS F	28.4	200.2	1.00	4.33	7.28	7.8
9	R2	13	1.0	13	1.0	1.165	197.2	LOS F	28.4	200.2	1.00	4.33	7.28	12.9
9u	U	1	1.0	1	1.0	1.165	198.5	LOS F	28.4	200.2	1.00	4.33	7.28	13.0
Approach		552	1.0	552	1.0	1.165	193.6	LOS F	28.4	200.2	1.00	4.33	7.28	8.8
West: Northfields Ave (West)														
10	L2	16	1.0	16	1.0	0.785	15.5	LOS B	4.8	35.1	1.00	1.29	1.57	33.5
11	T1	96	1.0	96	1.0	0.785	15.2	LOS B	4.8	35.1	1.00	1.29	1.57	40.8
12	R2	495	5.0	495	5.0	0.785	19.4	LOS B	4.8	35.1	1.00	1.29	1.57	28.9
12u	U	6	1.0	6	1.0	0.785	20.6	LOS C	4.8	35.1	1.00	1.29	1.57	34.5
Approach		613	4.2	613	4.2	0.785	18.6	LOS B	4.8	35.1	1.00	1.29	1.57	31.5
All Vehicles		1931	3.0	1930 ^N ₁	3.0	1.165	64.6	LOS E	28.4	200.2	0.87	1.93	2.84	20.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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

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

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

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

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MOVEMENT SUMMARY

▼ Site: 101 [2033 BG PM - Irvine St / Madoline St (Site Folder: Irvine St Network BG)]

■ Network: N101 [2033 PM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h]	[HV %]	[Total veh/h]	[HV %]				[Veh. veh]	[Dist m]				
South: Irvine St (South)														
1	L2	19	1.0	19	1.0	0.138	4.6	LOS A	0.0	0.0	0.00	0.04	0.00	48.2
2	T1	501	3.0	501	3.0	0.138	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	48.6
Approach		520	2.9	520	2.9	0.138	0.2	NA	0.0	0.0	0.00	0.02	0.00	48.5
North: Irvine St (North)														
8	T1	966	3.0	902	3.1	0.464	0.1	LOS A	0.1	0.9	0.03	0.01	0.04	47.4
9	R2	12	1.0	11	1.0	0.464	9.0	LOS A	0.1	0.9	0.03	0.01	0.04	47.4
Approach		978	3.0	913 ^{N1}	3.1	0.464	0.2	NA	0.1	0.9	0.03	0.01	0.04	47.4
West: Madoline St (West)														
10	L2	14	1.0	14	1.0	0.179	5.3	LOS A	0.2	1.6	0.73	0.77	0.73	25.5
12	R2	20	1.0	20	1.0	0.179	35.4	LOS E	0.2	1.6	0.73	0.77	0.73	25.5
Approach		34	1.0	34	1.0	0.179	23.2	LOS C	0.2	1.6	0.73	0.77	0.73	25.5
All Vehicles		1532	2.9	1466 ^{N1}	3.0	0.464	0.7	NA	0.2	1.6	0.03	0.03	0.04	44.3

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

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

MOVEMENT SUMMARY

Site: 101 [2033 BG PM - Irvine St / Princes Motorway On-Ramp (Site Folder: Irvine St Network BG)]

Network: N101 [2033 PM BG (Network Folder: BG Networks)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	520	1.0	520	1.0	0.138	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		520	1.0	520	1.0	0.138	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	94	1.0	94	1.0	0.305	11.8	LOS B	0.3	2.0	0.73	0.91	0.84	16.9
Approach		94	1.0	94	1.0	0.305	11.8	LOS B	0.3	2.0	0.73	0.91	0.84	16.9
North: Irvine St (North)														
8	T1	986	1.0	922	1.0	0.757	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	48.4
Approach		986	1.0	922 ^{N1}	1.0	0.757	0.2	NA	0.0	0.0	0.00	0.00	0.00	48.4
All Vehicles		1600	1.0	1536 ^{N1}	1.0	0.757	0.8	NA	0.3	2.0	0.04	0.06	0.05	44.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

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

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

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

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MOVEMENT SUMMARY

 **Site: 101 [2033 BG PM - Irvine St / University Ave (Site Folder: Irvine St Network BG)]**

 **Network: N101 [2033 PM BG (Network Folder: BG Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	136	2.0	136	2.0	0.421	5.4	LOS A	1.1	7.9	0.64	0.72	0.64	32.4
3	R2	272	1.0	272	1.0	0.421	9.5	LOS A	1.1	7.9	0.64	0.72	0.64	32.4
3u	U	2	1.0	2	1.0	0.421	11.2	LOS B	1.1	7.9	0.64	0.72	0.64	41.1
Approach		409	1.3	409	1.3	0.421	8.1	LOS A	1.1	7.9	0.64	0.72	0.64	32.4
East: University Ave (East)														
4	L2	211	1.0	211	1.0	0.500	4.3	LOS A	1.9	13.6	0.58	0.60	0.58	36.2
6	R2	382	4.0	382	4.0	0.500	8.5	LOS A	1.9	13.6	0.58	0.60	0.58	26.3
6u	U	1	1.0	1	1.0	0.500	10.1	LOS B	1.9	13.6	0.58	0.60	0.58	26.3
Approach		594	2.9	594	2.9	0.500	7.0	LOS A	1.9	13.6	0.58	0.60	0.58	31.2
North: Irvine St (North)														
7	L2	915	2.0	861	2.1	0.929	17.6	LOS B	10.7	76.2	1.00	1.16	1.61	14.8
8	T1	162	1.0	153	1.1	0.929	17.5	LOS B	10.7	76.2	1.00	1.16	1.61	27.6
9u	U	2	1.0	2	1.1	0.929	23.3	LOS C	10.7	76.2	1.00	1.16	1.61	14.8
Approach		1079	1.8	1016 ^N ₁	1.9	0.929	17.6	LOS B	10.7	76.2	1.00	1.16	1.61	17.5
All Vehicles		2082	2.1	2019 ^N ₁	2.1	0.929	12.6	LOS B	10.7	76.2	0.80	0.91	1.11	23.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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

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

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

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

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MOVEMENT SUMMARY

 **Site: 101 [2033 BG PM - University Ave / Princes Motorway**
(Site Folder: Irvine St Network BG)]

 **Network: N101 [2033 PM BG**
(Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	133	1.0	133	1.0	0.597	10.7	LOS B	2.2	15.7	0.86	1.00	1.09	38.2
5	T1	320	4.0	320	4.0	0.597	10.8	LOS B	2.2	15.7	0.86	1.00	1.09	26.7
6u	U	2	1.0	2	1.0	0.597	16.1	LOS B	2.2	15.7	0.86	1.00	1.09	36.1
Approach		455	3.1	455	3.1	0.597	10.8	LOS B	2.2	15.7	0.86	1.00	1.09	31.2
North: Princes Motorway Off-ramp (North)														
7	L2	261	1.0	261	1.0	0.281	7.6	LOS A	0.7	5.1	0.73	0.76	0.73	42.7
8	T1	1	1.0	1	1.0	0.425	15.5	LOS B	1.4	10.1	0.95	1.01	1.08	38.7
9	R2	273	1.0	273	1.0	0.425	19.4	LOS B	1.4	10.1	0.95	1.01	1.08	33.3
Approach		535	1.0	535	1.0	0.425	13.6	LOS B	1.4	10.1	0.84	0.89	0.91	37.8
West: University Ave (West)														
11	T1	789	1.0	754	1.0	0.670	3.2	LOS A	4.1	29.3	0.07	0.46	0.07	41.7
12	R2	397	3.0	379	3.1	0.670	7.1	LOS A	4.1	29.3	0.07	0.46	0.07	46.5
12u	U	1	1.0	1	1.0	0.670	8.7	LOS A	4.1	29.3	0.07	0.46	0.07	32.1
Approach		1187	1.7	1134 ^N ₁	1.7	0.670	4.5	LOS A	4.1	29.3	0.07	0.46	0.07	43.4
All Vehicles		2177	1.8	2123 ^N ₁	1.9	0.670	8.2	LOS A	4.1	29.3	0.43	0.68	0.50	38.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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

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

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

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

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MOVEMENT SUMMARY

 **Site: 101 [2038 BG AM - Northfields Ave / Irvine St / Ring Rd / Princes Motorway (Site Folder: Irvine St Network BG)]**  **Network: N101 [2038 AM BG (Network Folder: BG Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	417	4.0	417	4.0	0.573	9.3	LOS A	1.8	12.7	0.83	1.00	1.03	34.5
2	T1	249	1.0	249	1.0	0.484	8.6	LOS A	1.3	9.0	0.79	0.94	0.93	36.0
3	R2	59	2.0	59	2.0	0.484	12.4	LOS B	1.3	9.0	0.79	0.94	0.93	51.7
3u	U	4	1.0	4	1.0	0.484	14.0	LOS B	1.3	9.0	0.79	0.94	0.93	19.5
Approach		729	2.8	729	2.8	0.573	9.4	LOS A	1.8	12.7	0.81	0.97	0.99	36.0
East: Princes Motorway On/Off Ramp (East)														
4	L2	18	1.0	18	1.0	0.268	6.7	LOS A	0.7	4.8	0.62	0.65	0.62	42.4
5	T1	212	3.0	212	3.0	0.268	6.4	LOS A	0.7	4.8	0.62	0.65	0.62	42.1
6	R2	502	1.0	502	1.0	0.441	9.4	LOS A	1.4	9.6	0.68	0.73	0.68	41.0
6u	U	1	1.0	1	1.0	0.441	11.1	LOS B	1.4	9.6	0.68	0.73	0.68	51.3
Approach		733	1.6	733	1.6	0.441	8.5	LOS A	1.4	9.6	0.66	0.71	0.66	41.3
North: Ring Rd (North)														
7	L2	4	1.0	4	1.0	0.194	4.0	LOS A	0.5	3.9	0.59	0.52	0.59	47.1
8	T1	165	1.0	165	1.0	0.194	4.1	LOS A	0.5	3.9	0.59	0.52	0.59	36.0
9	R2	14	1.0	14	1.0	0.194	7.7	LOS A	0.5	3.9	0.59	0.52	0.59	38.7
9u	U	1	1.0	1	1.0	0.194	9.1	LOS A	0.5	3.9	0.59	0.52	0.59	39.4
Approach		184	1.0	184	1.0	0.194	4.4	LOS A	0.5	3.9	0.59	0.52	0.59	36.7
West: Northfields Ave (West)														
10	L2	27	1.0	27	1.0	0.391	9.7	LOS A	1.1	8.3	0.89	0.95	0.93	35.3
11	T1	6	1.0	6	1.0	0.391	9.4	LOS A	1.1	8.3	0.89	0.95	0.93	43.5
12	R2	180	5.0	180	5.0	0.391	13.6	LOS B	1.1	8.3	0.89	0.95	0.93	31.5
12u	U	11	11.0	11	11.0	0.391	15.4	LOS B	1.1	8.3	0.89	0.95	0.93	36.3
Approach		224	4.7	224	4.7	0.391	13.1	LOS B	1.1	8.3	0.89	0.95	0.93	32.9
All Vehicles		1871	2.4	1871	2.4	0.573	9.0	LOS A	1.8	12.7	0.74	0.82	0.81	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

▼ Site: 101 [2038 BG AM - Irvine St / Madoline St (Site Folder: Irvine St Network BG)]

■ Network: N101 [2038 AM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	27	1.0	27	1.0	0.198	4.6	LOS A	0.0	0.0	0.00	0.04	0.00	48.1
2	T1	719	3.0	719	3.0	0.198	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	48.5
Approach		746	2.9	746	2.9	0.198	0.2	NA	0.0	0.0	0.00	0.02	0.00	48.5
North: Irvine St (North)														
8	T1	358	10.0	358	10.0	0.193	0.2	LOS A	0.0	0.3	0.03	0.01	0.03	47.3
9	R2	4	1.0	4	1.0	0.193	9.6	LOS A	0.0	0.3	0.03	0.01	0.03	47.3
Approach		362	9.9	362	9.9	0.193	0.3	NA	0.0	0.3	0.03	0.01	0.03	47.3
West: Madoline St (West)														
10	L2	13	9.0	13	9.0	0.092	5.9	LOS A	0.1	0.9	0.64	0.77	0.64	32.5
12	R2	22	1.0	22	1.0	0.092	17.1	LOS C	0.1	0.9	0.64	0.77	0.64	32.5
Approach		35	3.9	35	3.9	0.092	13.1	LOS B	0.1	0.9	0.64	0.77	0.64	32.5
All Vehicles		1143	5.2	1143	5.2	0.198	0.6	NA	0.1	0.9	0.03	0.04	0.03	45.7

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

MOVEMENT SUMMARY

Site: 101 [2038 BG AM - Irvine St / Princes Motorway On-Ramp (Site Folder: Irvine St Network BG)]

Network: N101 [2038 AM BG (Network Folder: BG Networks)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	745	1.0	745	1.0	0.197	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		745	1.0	745	1.0	0.197	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	362	1.0	362	1.0	0.319	6.4	LOS A	0.6	4.3	0.49	0.69	0.51	23.9
Approach		362	1.0	362	1.0	0.319	6.4	LOS A	0.6	4.3	0.49	0.69	0.51	23.9
North: Irvine St (North)														
8	T1	381	1.0	381	1.0	0.188	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		381	1.0	381	1.0	0.188	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
All Vehicles		1488	1.0	1488	1.0	0.319	1.6	NA	0.6	4.3	0.12	0.17	0.12	40.1

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

MOVEMENT SUMMARY

 **Site: 101 [2038 BG AM - Irvine St / University Ave (Site Folder: Irvine St Network BG)]**

 **Network: N101 [2038 AM BG (Network Folder: BG Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	80	4.0	80	4.0	0.439	7.9	LOS A	1.3	9.5	0.85	0.91	0.90	29.6
3	R2	223	2.0	223	2.0	0.439	11.9	LOS B	1.3	9.5	0.85	0.91	0.90	29.6
3u	U	1	1.0	1	1.0	0.439	13.6	LOS B	1.3	9.5	0.85	0.91	0.90	38.5
Approach		304	2.5	304	2.5	0.439	10.8	LOS B	1.3	9.5	0.85	0.91	0.90	29.6
East: University Ave (East)														
4	L2	193	2.0	193	2.0	0.760	7.3	LOS A	4.5	32.1	0.88	0.76	0.98	33.4
6	R2	656	3.0	656	3.0	0.760	11.4	LOS B	4.5	32.1	0.88	0.76	0.98	23.1
6u	U	1	1.0	1	1.0	0.760	13.1	LOS B	4.5	32.1	0.88	0.76	0.98	23.1
Approach		849	2.8	849	2.8	0.760	10.5	LOS B	4.5	32.1	0.88	0.76	0.98	26.5
North: Irvine St (North)														
7	L2	521	6.0	521	6.0	0.676	5.9	LOS A	3.1	22.2	0.77	0.68	0.81	26.9
8	T1	212	2.0	212	2.0	0.676	5.8	LOS A	3.1	22.2	0.77	0.68	0.81	39.6
9u	U	9	1.0	9	1.0	0.676	11.5	LOS B	3.1	22.2	0.77	0.68	0.81	26.9
Approach		742	4.8	742	4.8	0.676	6.0	LOS A	3.1	22.2	0.77	0.68	0.81	32.2
All Vehicles		1896	3.5	1896	3.5	0.760	8.8	LOS A	4.5	32.1	0.83	0.76	0.90	29.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2038 BG AM - University Ave / Princes Motorway (Site Folder: Irvine St Network BG)]**

 **Network: N101 [2038 AM BG (Network Folder: BG Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	157	3.0	157	3.0	0.675	13.5	LOS B	2.8	20.5	0.95	1.14	1.31	35.3
5	T1	286	5.0	286	5.0	0.675	13.6	LOS B	2.8	20.5	0.95	1.14	1.31	23.8
6u	U	1	1.0	1	1.0	0.675	18.8	LOS B	2.8	20.5	0.95	1.14	1.31	33.2
Approach		444	4.3	444	4.3	0.675	13.6	LOS B	2.8	20.5	0.95	1.14	1.31	29.0
North: Princes Motorway Off-ramp (North)														
7	L2	455	9.0	455	9.0	0.460	7.4	LOS A	1.3	9.9	0.73	0.79	0.76	42.8
8	T1	1	1.0	1	1.0	0.610	11.6	LOS B	2.5	17.7	0.86	1.04	1.16	41.0
9	R2	564	1.0	564	1.0	0.610	15.5	LOS B	2.5	17.7	0.86	1.04	1.16	35.7
Approach		1020	4.6	1020	4.6	0.610	11.9	LOS B	2.5	17.7	0.80	0.93	0.99	38.9
West: University Ave (West)														
11	T1	603	1.0	603	1.0	0.440	3.2	LOS A	1.8	12.9	0.03	0.43	0.03	42.9
12	R2	142	5.0	142	5.0	0.440	7.1	LOS A	1.8	12.9	0.03	0.43	0.03	47.4
12u	U	1	2.0	1	2.0	0.440	8.7	LOS A	1.8	12.9	0.03	0.43	0.03	33.7
Approach		746	1.8	746	1.8	0.440	4.0	LOS A	1.8	12.9	0.03	0.43	0.03	43.9
All Vehicles		2211	3.6	2211	3.6	0.675	9.5	LOS A	2.8	20.5	0.57	0.80	0.73	38.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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Project: \\Au2005-ppfss01\shared_projects\304000956\technical\modelling\23 07 14 - 304000956 - Gwynneville (Network Only).sip9

MOVEMENT SUMMARY

 **Site: 101 [2038 BG PM - Northfields Ave / Irvine St / Ring Rd / Princes Motorway (Site Folder: Irvine St Network BG)]**  **Network: N101 [2038 PM BG (Network Folder: BG Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	140	9.0	140	9.0	0.209	5.8	LOS A	0.4	3.4	0.55	0.66	0.55	36.7
2	T1	163	1.0	163	1.0	0.386	4.4	LOS A	1.0	7.3	0.57	0.66	0.57	37.5
3	R2	229	1.0	229	1.0	0.386	8.2	LOS A	1.0	7.3	0.57	0.66	0.57	55.1
3u	U	6	1.0	6	1.0	0.386	9.8	LOS A	1.0	7.3	0.57	0.66	0.57	23.6
Approach		539	3.1	539	3.1	0.386	6.4	LOS A	1.0	7.3	0.57	0.66	0.57	43.2
East: Princes Motorway On/Off Ramp (East)														
4	L2	21	1.0	21	1.0	0.249	11.9	LOS B	0.7	5.0	0.90	0.90	0.90	38.0
5	T1	96	9.0	96	9.0	0.249	12.0	LOS B	0.7	5.0	0.90	0.90	0.90	39.7
6	R2	147	1.0	147	1.0	0.234	13.6	LOS B	0.7	5.1	0.92	0.86	0.92	39.3
6u	U	1	1.0	1	1.0	0.234	15.2	LOS B	0.7	5.1	0.92	0.86	0.92	48.8
Approach		265	3.9	265	3.9	0.249	12.9	LOS B	0.7	5.1	0.91	0.88	0.91	39.5
North: Ring Rd (North)														
7	L2	78	1.0	78	1.0	1.289	297.2	LOS F	40.4	285.1	1.00	5.48	9.52	9.9
8	T1	484	1.0	484	1.0	1.289	297.2	LOS F	40.4	285.1	1.00	5.48	9.52	5.4
9	R2	13	1.0	13	1.0	1.289	300.8	LOS F	40.4	285.1	1.00	5.48	9.52	9.5
9u	U	1	1.0	1	1.0	1.289	302.2	LOS F	40.4	285.1	1.00	5.48	9.52	9.5
Approach		576	1.0	576	1.0	1.289	297.3	LOS F	40.4	285.1	1.00	5.48	9.52	6.2
West: Northfields Ave (West)														
10	L2	17	1.0	17	1.0	0.845	20.4	LOS C	6.3	45.5	1.00	1.47	1.85	32.1
11	T1	100	1.0	100	1.0	0.845	20.1	LOS C	6.3	45.5	1.00	1.47	1.85	38.7
12	R2	518	5.0	518	5.0	0.845	24.4	LOS C	6.3	45.5	1.00	1.47	1.85	26.9
12u	U	7	1.0	7	1.0	0.845	25.5	LOS C	6.3	45.5	1.00	1.47	1.85	33.0
Approach		642	4.2	642	4.2	0.845	23.6	LOS C	6.3	45.5	1.00	1.47	1.85	29.5
All Vehicles		2022	3.0	2022	3.0	1.289	95.6	LOS F	40.4	285.1	0.87	2.32	3.57	15.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

▼ Site: 101 [2038 BG PM - Irvine St / Madoline St (Site Folder: Irvine St Network BG)]

■ Network: N101 [2038 PM BG (Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	20	1.0	20	1.0	0.144	4.6	LOS A	0.0	0.0	0.00	0.04	0.00	48.1
2	T1	524	3.0	524	3.0	0.144	0.0	LOS A	0.0	0.0	0.00	0.02	0.00	48.6
Approach		544	2.9	544	2.9	0.144	0.2	NA	0.0	0.0	0.00	0.02	0.00	48.5
North: Irvine St (North)														
8	T1	1012	3.0	884	3.3	0.455	0.1	LOS A	0.1	0.8	0.03	0.01	0.04	47.4
9	R2	12	1.0	10	1.1	0.455	9.3	LOS A	0.1	0.8	0.03	0.01	0.04	47.4
Approach		1023	3.0	894 ^{N1}	3.3	0.455	0.2	NA	0.1	0.8	0.03	0.01	0.04	47.4
West: Madoline St (West)														
10	L2	14	1.0	14	1.0	0.187	5.5	LOS A	0.2	1.6	0.74	0.78	0.75	25.3
12	R2	21	1.0	21	1.0	0.187	35.3	LOS E	0.2	1.6	0.74	0.78	0.75	25.3
Approach		35	1.0	35	1.0	0.187	23.6	LOS C	0.2	1.6	0.74	0.78	0.75	25.3
All Vehicles		1602	2.9	1472 ^{N1}	3.2	0.455	0.8	NA	0.2	1.6	0.03	0.03	0.04	44.1

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

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

MOVEMENT SUMMARY

Site: 101 [2038 BG PM - Irvine St / Princes Motorway On-Ramp (Site Folder: Irvine St Network BG)]

Network: N101 [2038 PM BG (Network Folder: BG Networks)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	544	1.0	544	1.0	0.144	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		544	1.0	544	1.0	0.144	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	98	1.0	98	1.0	0.284	11.2	LOS B	0.3	2.0	0.72	0.90	0.81	17.4
Approach		98	1.0	98	1.0	0.284	11.2	LOS B	0.3	2.0	0.72	0.90	0.81	17.4
North: Irvine St (North)														
8	T1	1033	1.0	900	1.1	0.687	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	49.0
Approach		1033	1.0	900 ^{N1}	1.1	0.687	0.1	NA	0.0	0.0	0.00	0.00	0.00	49.0
All Vehicles		1675	1.0	1542 ^{N1}	1.1	0.687	0.8	NA	0.3	2.0	0.05	0.06	0.05	44.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

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

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

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

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Project: \\Au2005-pfss01\shared_projects\304000956\technical\modelling\23 07 14 - 304000956 - Gwynneville (Network Only).sip9

MOVEMENT SUMMARY

 **Site: 101 [2038 BG PM - Irvine St / University Ave (Site Folder: Irvine St Network BG)]**

 **Network: N101 [2038 PM BG (Network Folder: BG Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	143	2.0	143	2.0	0.447	5.5	LOS A	1.2	8.6	0.66	0.74	0.66	32.2
3	R2	283	1.0	283	1.0	0.447	9.6	LOS A	1.2	8.6	0.66	0.74	0.66	32.2
3u	U	2	1.0	2	1.0	0.447	11.3	LOS B	1.2	8.6	0.66	0.74	0.66	40.9
Approach		428	1.3	428	1.3	0.447	8.3	LOS A	1.2	8.6	0.66	0.74	0.66	32.2
East: University Ave (East)														
4	L2	221	1.0	221	1.0	0.519	4.3	LOS A	2.0	14.5	0.59	0.60	0.59	36.2
6	R2	399	4.0	399	4.0	0.519	8.5	LOS A	2.0	14.5	0.59	0.60	0.59	26.3
6u	U	1	1.0	1	1.0	0.519	10.1	LOS B	2.0	14.5	0.59	0.60	0.59	26.3
Approach		621	2.9	621	2.9	0.519	7.0	LOS A	2.0	14.5	0.59	0.60	0.59	31.2
North: Irvine St (North)														
7	L2	958	2.0	841	2.2	0.922	17.2	LOS B	10.2	72.4	1.00	1.16	1.61	15.0
8	T1	169	1.0	149	1.1	0.922	17.2	LOS B	10.2	72.4	1.00	1.16	1.61	27.9
9u	U	2	1.0	2	1.1	0.922	22.9	LOS C	10.2	72.4	1.00	1.16	1.61	15.0
Approach		1129	1.8	992 ^{N1}	2.1	0.922	17.2	LOS B	10.2	72.4	1.00	1.16	1.61	17.7
All Vehicles		2179	2.1	2041 ^{N1}	2.2	0.922	12.2	LOS B	10.2	72.4	0.80	0.90	1.10	24.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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

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

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

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

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MOVEMENT SUMMARY

 **Site: 101 [2038 BG PM - University Ave / Princes Motorway**
(Site Folder: Irvine St Network BG)]

 **Network: N101 [2038 PM BG**
(Network Folder: BG Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	139	1.0	139	1.0	0.632	11.6	LOS B	2.5	17.7	0.88	1.05	1.17	37.3
5	T1	335	4.0	335	4.0	0.632	11.7	LOS B	2.5	17.7	0.88	1.05	1.17	25.7
6u	U	2	1.0	2	1.0	0.632	17.0	LOS B	2.5	17.7	0.88	1.05	1.17	35.1
Approach		476	3.1	476	3.1	0.632	11.7	LOS B	2.5	17.7	0.88	1.05	1.17	30.3
North: Princes Motorway Off-ramp (North)														
7	L2	274	1.0	274	1.0	0.292	7.5	LOS A	0.8	5.4	0.73	0.76	0.73	42.8
8	T1	1	1.0	1	1.0	0.438	15.5	LOS B	1.5	10.6	0.95	1.02	1.11	38.7
9	R2	286	1.0	286	1.0	0.438	19.3	LOS B	1.5	10.6	0.95	1.02	1.11	33.4
Approach		561	1.0	561	1.0	0.438	13.5	LOS B	1.5	10.6	0.84	0.89	0.92	37.9
West: University Ave (West)														
11	T1	825	1.0	743	1.1	0.661	3.2	LOS A	4.0	28.4	0.07	0.46	0.07	41.7
12	R2	415	3.0	374	3.3	0.661	7.1	LOS A	4.0	28.4	0.07	0.46	0.07	46.5
12u	U	1	1.0	1	1.1	0.661	8.7	LOS A	4.0	28.4	0.07	0.46	0.07	32.1
Approach		1241	1.7	1117 ^N ₁	1.8	0.661	4.5	LOS A	4.0	28.4	0.07	0.46	0.07	43.4
All Vehicles		2278	1.8	2154 ^N ₁	1.9	0.661	8.5	LOS A	4.0	28.4	0.45	0.70	0.53	38.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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

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

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

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

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Project: \\Au2005-pfss01\shared_projects\304000956\technical\modelling\23 07 14 - 304000956 - Gwynneville (Network Only).sip9

MOVEMENT SUMMARY

 **Site: 101 [2033 BG+DEV AM - Northfields Ave / Irvine St / Ring Rd / Princes Motorway (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]**  **Network: N101 [2033 AM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	401	4.0	401	4.0	0.538	8.6	LOS A	1.6	11.4	0.80	0.97	0.97	34.9
2	T1	241	1.0	241	1.0	0.470	8.1	LOS A	1.2	8.6	0.78	0.93	0.89	36.2
3	R2	72	2.0	72	2.0	0.470	11.9	LOS B	1.2	8.6	0.78	0.93	0.89	52.1
3u	U	4	1.0	4	1.0	0.470	13.5	LOS B	1.2	8.6	0.78	0.93	0.89	20.0
Approach		718	2.8	718	2.8	0.538	8.8	LOS A	1.6	11.4	0.79	0.95	0.93	36.6
East: Princes Motorway On/Off Ramp (East)														
4	L2	36	1.0	36	1.0	0.268	6.5	LOS A	0.7	4.8	0.61	0.64	0.61	42.4
5	T1	202	3.0	202	3.0	0.268	6.2	LOS A	0.7	4.8	0.61	0.64	0.61	42.1
6	R2	480	1.0	480	1.0	0.416	9.2	LOS A	1.3	8.9	0.65	0.72	0.65	41.0
6u	U	1	1.0	1	1.0	0.416	10.9	LOS B	1.3	8.9	0.65	0.72	0.65	51.4
Approach		719	1.6	719	1.6	0.416	8.3	LOS A	1.3	8.9	0.64	0.69	0.64	41.4
North: Ring Rd (North)														
7	L2	4	1.0	4	1.0	0.187	4.1	LOS A	0.5	3.7	0.58	0.53	0.58	47.1
8	T1	159	1.0	159	1.0	0.187	4.1	LOS A	0.5	3.7	0.58	0.53	0.58	36.0
9	R2	14	1.0	14	1.0	0.187	7.7	LOS A	0.5	3.7	0.58	0.53	0.58	38.7
9u	U	1	1.0	1	1.0	0.187	9.1	LOS A	0.5	3.7	0.58	0.53	0.58	39.4
Approach		178	1.0	178	1.0	0.187	4.4	LOS A	0.5	3.7	0.58	0.53	0.58	36.7
West: Northfields Ave (West)														
10	L2	25	1.0	25	1.0	0.363	9.0	LOS A	1.0	7.4	0.87	0.91	0.87	35.5
11	T1	6	1.0	6	1.0	0.363	8.7	LOS A	1.0	7.4	0.87	0.91	0.87	43.9
12	R2	173	5.0	173	5.0	0.363	12.9	LOS B	1.0	7.4	0.87	0.91	0.87	31.9
12u	U	11	3.0	11	3.0	0.363	14.2	LOS B	1.0	7.4	0.87	0.91	0.87	36.6
Approach		215	4.3	215	4.3	0.363	12.4	LOS B	1.0	7.4	0.87	0.91	0.87	33.3
All Vehicles		1829	2.3	1829	2.3	0.538	8.6	LOS A	1.6	11.4	0.72	0.80	0.78	38.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

Site: 101 [2033 BG+DEV AM - Irvine St / Madoline St (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]

Network: N101 [2033 AM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	41	1.0	41	1.0	0.195	4.6	LOS A	0.0	0.0	0.00	0.06	0.00	47.8
2	T1	695	3.0	695	3.0	0.195	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	47.9
Approach		736	2.9	736	2.9	0.195	0.3	NA	0.0	0.0	0.00	0.03	0.00	47.9
North: Irvine St (North)														
8	T1	344	10.0	344	10.0	0.210	0.7	LOS A	0.2	1.2	0.12	0.03	0.12	40.1
9	R2	19	1.0	19	1.0	0.210	9.5	LOS A	0.2	1.2	0.12	0.03	0.12	46.0
Approach		363	9.5	363	9.5	0.210	1.1	NA	0.2	1.2	0.12	0.03	0.12	41.4
West: Madoline St (West)														
10	L2	24	9.0	24	9.0	0.465	9.6	LOS A	0.9	6.2	0.79	1.00	1.15	27.3
12	R2	124	1.0	124	1.0	0.465	22.2	LOS C	0.9	6.2	0.79	1.00	1.15	27.3
Approach		148	2.3	148	2.3	0.465	20.1	LOS C	0.9	6.2	0.79	1.00	1.15	27.3
All Vehicles		1247	4.8	1247	4.8	0.465	2.9	NA	0.9	6.2	0.13	0.15	0.17	37.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

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

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

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MOVEMENT SUMMARY

▼ Site: 101 [2033 BG+DEV AM - Irvine St / Princes Motorway On-Ramp (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]
■ Network: N101 [2033 AM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	736	1.0	736	1.0	0.195	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		736	1.0	736	1.0	0.195	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	371	1.0	371	1.0	0.406	7.5	LOS A	0.8	5.8	0.55	0.81	0.69	22.3
Approach		371	1.0	371	1.0	0.406	7.5	LOS A	0.8	5.8	0.55	0.81	0.69	22.3
North: Irvine St (North)														
8	T1	468	1.0	468	1.0	0.259	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		468	1.0	468	1.0	0.259	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
All Vehicles		1575	1.0	1575	1.0	0.406	1.8	NA	0.8	5.8	0.13	0.19	0.16	39.2

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

MOVEMENT SUMMARY

 **Site: 101 [2033 BG+DEV AM - Irvine St / University Ave (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]**  **Network: N101 [2033 AM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	85	4.0	85	4.0	0.547	9.2	LOS A	1.9	13.8	0.90	0.99	1.05	28.0
3	R2	294	2.0	294	2.0	0.547	13.2	LOS B	1.9	13.8	0.90	0.99	1.05	28.0
3u	U	1	1.0	1	1.0	0.547	14.9	LOS B	1.9	13.8	0.90	0.99	1.05	37.0
Approach		380	2.4	380	2.4	0.547	12.3	LOS B	1.9	13.8	0.90	0.99	1.05	28.1
East: University Ave (East)														
4	L2	197	2.0	197	2.0	0.781	8.3	LOS A	5.0	35.9	0.95	0.81	1.09	32.5
6	R2	642	3.0	642	3.0	0.781	12.4	LOS B	5.0	35.9	0.95	0.81	1.09	22.1
6u	U	1	1.0	1	1.0	0.781	14.0	LOS B	5.0	35.9	0.95	0.81	1.09	22.1
Approach		840	2.8	840	2.8	0.781	11.4	LOS B	5.0	35.9	0.95	0.81	1.09	25.6
North: Irvine St (North)														
7	L2	600	6.0	600	6.0	0.830	11.2	LOS B	5.9	43.3	1.00	0.98	1.29	20.2
8	T1	231	2.0	231	2.0	0.830	11.0	LOS B	5.9	43.3	1.00	0.98	1.29	33.6
9u	U	8	1.0	8	1.0	0.830	16.7	LOS B	5.9	43.3	1.00	0.98	1.29	20.2
Approach		839	4.9	839	4.9	0.830	11.2	LOS B	5.9	43.3	1.00	0.98	1.29	25.3
All Vehicles		2059	3.6	2059	3.6	0.830	11.5	LOS B	5.9	43.3	0.96	0.92	1.16	26.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 BG+DEV AM - University Ave / Princes Motorway (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]**

 **Network: N101 [2033 AM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]**

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	149	3.0	149	3.0	0.713	15.6	LOS B	3.1	22.5	0.98	1.19	1.43	33.5
5	T1	286	5.0	286	5.0	0.713	15.7	LOS B	3.1	22.5	0.98	1.19	1.43	22.0
6u	U	1	1.0	1	1.0	0.713	20.9	LOS C	3.1	22.5	0.98	1.19	1.43	31.3
Approach		437	4.3	437	4.3	0.713	15.7	LOS B	3.1	22.5	0.98	1.19	1.43	27.0
North: Princes Motorway Off-ramp (North)														
7	L2	434	9.0	434	9.0	0.472	8.7	LOS A	1.4	10.9	0.78	0.86	0.87	41.8
8	T1	1	1.0	1	1.0	0.700	18.1	LOS B	3.6	25.1	0.95	1.27	1.60	37.3
9	R2	555	1.0	555	1.0	0.700	21.9	LOS C	3.6	25.1	0.95	1.27	1.60	31.9
Approach		989	4.5	989	4.5	0.700	16.1	LOS B	3.6	25.1	0.88	1.09	1.28	36.1
West: University Ave (West)														
11	T1	706	1.0	706	1.0	0.529	3.2	LOS A	2.5	18.0	0.04	0.43	0.04	42.8
12	R2	188	5.0	188	5.0	0.529	7.1	LOS A	2.5	18.0	0.04	0.43	0.04	47.2
12u	U	1	2.0	1	2.0	0.529	8.7	LOS A	2.5	18.0	0.04	0.43	0.04	33.5
Approach		896	1.8	896	1.8	0.529	4.1	LOS A	2.5	18.0	0.04	0.43	0.04	43.8
All Vehicles		2322	3.4	2322	3.4	0.713	11.4	LOS B	3.6	25.1	0.57	0.86	0.83	36.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 BG+DEV PM - Northfields Ave / Irvine St / Ring Rd / Princes Motorway (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]**  **Network: N101 [2033 PM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	135	9.0	135	9.0	0.200	5.7	LOS A	0.4	3.2	0.54	0.64	0.54	36.8
2	T1	157	1.0	157	1.0	0.373	4.3	LOS A	1.0	7.0	0.56	0.65	0.56	37.6
3	R2	228	1.0	228	1.0	0.373	8.1	LOS A	1.0	7.0	0.56	0.65	0.56	55.1
3u	U	5	1.0	5	1.0	0.373	9.7	LOS A	1.0	7.0	0.56	0.65	0.56	23.6
Approach		525	3.1	525	3.1	0.373	6.3	LOS A	1.0	7.0	0.55	0.65	0.55	43.4
East: Princes Motorway On/Off Ramp (East)														
4	L2	62	1.0	62	1.0	0.244	10.4	LOS B	0.7	5.4	0.91	0.85	0.91	39.2
5	T1	91	9.0	91	9.0	0.244	10.3	LOS B	0.7	5.4	0.91	0.85	0.91	40.4
6	R2	141	1.0	141	1.0	0.278	15.0	LOS B	0.8	5.5	0.91	0.92	0.91	38.8
6u	U	1	1.0	1	1.0	0.278	16.6	LOS B	0.8	5.5	0.91	0.92	0.91	47.9
Approach		295	3.5	295	3.5	0.278	12.6	LOS B	0.8	5.5	0.91	0.88	0.91	39.4
North: Ring Rd (North)														
7	L2	75	1.0	75	1.0	1.186	210.7	LOS F	30.3	214.0	1.00	4.54	7.68	12.9
8	T1	465	1.0	465	1.0	1.186	210.7	LOS F	30.3	214.0	1.00	4.54	7.68	7.3
9	R2	13	1.0	13	1.0	1.186	214.3	LOS F	30.3	214.0	1.00	4.54	7.68	12.2
9u	U	1	1.0	1	1.0	1.186	215.7	LOS F	30.3	214.0	1.00	4.54	7.68	12.2
Approach		554	1.0	554	1.0	1.186	210.8	LOS F	30.3	214.0	1.00	4.54	7.68	8.2
West: Northfields Ave (West)														
10	L2	16	1.0	16	1.0	0.797	16.4	LOS B	5.1	36.8	1.00	1.32	1.63	33.2
11	T1	96	1.0	96	1.0	0.797	16.1	LOS B	5.1	36.8	1.00	1.32	1.63	40.4
12	R2	497	5.0	497	5.0	0.797	20.4	LOS C	5.1	36.8	1.00	1.32	1.63	28.5
12u	U	6	1.0	6	1.0	0.797	21.5	LOS C	5.1	36.8	1.00	1.32	1.63	34.2
Approach		615	4.2	615	4.2	0.797	19.6	LOS B	5.1	36.8	1.00	1.32	1.63	31.1
All Vehicles		1988	2.9	1988	2.9	1.186	68.3	LOS E	30.3	214.0	0.87	1.98	2.92	19.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

Site: 101 [2033 BG+DEV PM - Irvine St / Madoline St (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]

Network: N101 [2033 PM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	79	1.0	79	1.0	0.156	4.6	LOS A	0.0	0.0	0.00	0.15	0.00	46.7
2	T1	506	3.0	506	3.0	0.156	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	45.8
Approach		585	2.7	585	2.7	0.156	0.6	NA	0.0	0.0	0.00	0.07	0.00	46.2
North: Irvine St (North)														
8	T1	973	3.0	813	3.3	0.463	0.7	LOS A	0.5	3.6	0.12	0.03	0.17	39.9
9	R2	51	1.0	42	1.1	0.463	9.8	LOS A	0.5	3.6	0.12	0.03	0.17	45.9
Approach		1023	2.9	855 ^{N1}	3.2	0.463	1.2	NA	0.5	3.6	0.12	0.03	0.17	41.2
West: Madoline St (West)														
10	L2	20	1.0	20	1.0	0.499	15.3	LOS C	0.7	4.9	0.80	0.95	1.13	19.8
12	R2	55	1.0	55	1.0	0.499	44.6	LOS E	0.7	4.9	0.80	0.95	1.13	19.8
Approach		75	1.0	75	1.0	0.499	36.8	LOS E	0.7	4.9	0.80	0.95	1.13	19.8
All Vehicles		1683	2.8	1515 ^{N1}	3.1	0.499	2.7	NA	0.7	4.9	0.11	0.09	0.15	36.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

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

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

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

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MOVEMENT SUMMARY

▼ Site: 101 [2033 BG+DEV PM - Irvine St / Princes Motorway On-Ramp (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]
■ Network: N101 [2033 PM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	584	1.0	584	1.0	0.155	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		584	1.0	584	1.0	0.155	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	116	1.0	116	1.0	0.415	12.1	LOS B	0.3	2.5	0.71	0.93	0.91	16.7
Approach		116	1.0	116	1.0	0.415	12.1	LOS B	0.3	2.5	0.71	0.93	0.91	16.7
North: Irvine St (North)														
8	T1	1028	1.0	876	1.1	0.432	0.0	LOS A	1.0	7.4	0.00	0.00	0.00	49.8
Approach		1028	1.0	876 ^{N1}	1.1	0.432	0.0	NA	1.0	7.4	0.00	0.00	0.00	49.8
All Vehicles		1728	1.0	1576 ^{N1}	1.1	0.432	0.9	NA	1.0	7.4	0.05	0.07	0.07	43.7

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

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

MOVEMENT SUMMARY

 **Site: 101 [2033 BG+DEV PM - Irvine St / University Ave (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]**  **Network: N101 [2033 PM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	141	2.0	141	2.0	0.484	6.1	LOS A	1.4	10.0	0.72	0.80	0.75	31.5
3	R2	298	1.0	298	1.0	0.484	10.2	LOS B	1.4	10.0	0.72	0.80	0.75	31.5
3u	U	2	1.0	2	1.0	0.484	11.9	LOS B	1.4	10.0	0.72	0.80	0.75	40.3
Approach		441	1.3	441	1.3	0.484	8.9	LOS A	1.4	10.0	0.72	0.80	0.75	31.5
East: University Ave (East)														
4	L2	256	1.0	256	1.0	0.597	4.7	LOS A	2.5	18.0	0.68	0.63	0.68	35.8
6	R2	441	4.0	441	4.0	0.597	8.8	LOS A	2.5	18.0	0.68	0.63	0.68	25.8
6u	U	1	1.0	1	1.0	0.597	10.4	LOS B	2.5	18.0	0.68	0.63	0.68	25.8
Approach		698	2.9	698	2.9	0.597	7.3	LOS A	2.5	18.0	0.68	0.63	0.68	30.9
North: Irvine St (North)														
7	L2	951	2.0	833	2.2	0.954	23.4	LOS C	12.5	89.0	1.00	1.36	1.92	12.1
8	T1	192	1.0	168	1.1	0.954	23.3	LOS C	12.5	89.0	1.00	1.36	1.92	23.9
9u	U	2	1.0	2	1.1	0.954	29.0	LOS C	12.5	89.0	1.00	1.36	1.92	12.1
Approach		1144	1.8	1002 ^N ₁	2.0	0.954	23.4	LOS C	12.5	89.0	1.00	1.36	1.92	14.6
All Vehicles		2283	2.1	2141 ^N ₁	2.2	0.954	15.1	LOS B	12.5	89.0	0.84	1.01	1.27	22.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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

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

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

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

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MOVEMENT SUMMARY

 **Site: 101 [2033 BG+DEV PM - University Ave / Princes Motorway (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]**

 **Network: N101 [2033 PM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	133	1.0	133	1.0	0.714	14.3	LOS B	3.3	23.7	0.94	1.17	1.39	34.7
5	T1	386	4.0	386	4.0	0.714	14.5	LOS B	3.3	23.7	0.94	1.17	1.39	23.1
6u	U	2	1.0	2	1.0	0.714	19.7	LOS B	3.3	23.7	0.94	1.17	1.39	32.4
Approach		521	3.2	521	3.2	0.714	14.5	LOS B	3.3	23.7	0.94	1.17	1.39	27.0
North: Princes Motorway Off-ramp (North)														
7	L2	261	1.0	261	1.0	0.281	7.6	LOS A	0.7	5.1	0.73	0.76	0.73	42.7
8	T1	1	1.0	1	1.0	0.480	17.5	LOS B	1.8	12.7	0.97	1.09	1.24	37.6
9	R2	307	1.0	307	1.0	0.480	21.3	LOS C	1.8	12.7	0.97	1.09	1.24	32.3
Approach		569	1.0	569	1.0	0.480	15.0	LOS B	1.8	12.7	0.86	0.94	1.00	36.9
West: University Ave (West)														
11	T1	826	1.0	752	1.1	0.670	3.2	LOS A	4.2	30.1	0.07	0.46	0.07	41.6
12	R2	418	3.0	381	3.2	0.670	7.1	LOS A	4.2	30.1	0.07	0.46	0.07	46.4
12u	U	1	1.0	1	1.1	0.670	8.7	LOS A	4.2	30.1	0.07	0.46	0.07	32.1
Approach		1245	1.7	1133 ^N ₁	1.8	0.670	4.5	LOS A	4.2	30.1	0.07	0.46	0.07	43.3
All Vehicles		2336	1.9	2224 ^N ₁	1.9	0.714	9.5	LOS A	4.2	30.1	0.48	0.75	0.62	37.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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

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

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

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

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MOVEMENT SUMMARY

 Site: 101 [2038 BG+DEV AM - Northfields Ave / Irvine St / Ring Rd / Princes Motorway (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]

 Network: N101 [2038 AM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	420	4.0	420	4.0	0.578	9.4	LOS A	1.8	12.9	0.83	1.00	1.04	34.5
2	T1	253	1.0	253	1.0	0.505	8.8	LOS A	1.4	9.7	0.80	0.96	0.95	35.8
3	R2	74	2.0	74	2.0	0.505	12.6	LOS B	1.4	9.7	0.80	0.96	0.95	51.3
3u	U	4	1.0	4	1.0	0.505	14.2	LOS B	1.4	9.7	0.80	0.96	0.95	19.2
Approach		751	2.8	751	2.8	0.578	9.5	LOS A	1.8	12.9	0.82	0.98	1.00	36.1
East: Princes Motorway On/Off Ramp (East)														
4	L2	37	1.0	37	1.0	0.285	6.7	LOS A	0.7	5.2	0.63	0.66	0.63	42.3
5	T1	212	3.0	212	3.0	0.285	6.3	LOS A	0.7	5.2	0.63	0.66	0.63	42.0
6	R2	502	1.0	502	1.0	0.441	9.4	LOS A	1.4	9.6	0.68	0.73	0.68	41.0
6u	U	1	1.0	1	1.0	0.441	11.1	LOS B	1.4	9.6	0.68	0.73	0.68	51.3
Approach		752	1.6	752	1.6	0.441	8.4	LOS A	1.4	9.6	0.66	0.71	0.66	41.3
North: Ring Rd (North)														
7	L2	4	1.0	4	1.0	0.198	4.2	LOS A	0.6	3.9	0.60	0.54	0.60	47.1
8	T1	166	1.0	166	1.0	0.198	4.2	LOS A	0.6	3.9	0.60	0.54	0.60	35.9
9	R2	14	1.0	14	1.0	0.198	7.8	LOS A	0.6	3.9	0.60	0.54	0.60	38.7
9u	U	1	1.0	1	1.0	0.198	9.2	LOS A	0.6	3.9	0.60	0.54	0.60	39.3
Approach		185	1.0	185	1.0	0.198	4.5	LOS A	0.6	3.9	0.60	0.54	0.60	36.7
West: Northfields Ave (West)														
10	L2	27	1.0	27	1.0	0.398	10.2	LOS B	1.2	8.6	0.90	0.96	0.95	35.1
11	T1	6	1.0	6	1.0	0.398	9.9	LOS A	1.2	8.6	0.90	0.96	0.95	43.2
12	R2	181	5.0	181	5.0	0.398	14.1	LOS B	1.2	8.6	0.90	0.96	0.95	31.2
12u	U	11	3.0	11	3.0	0.398	15.4	LOS B	1.2	8.6	0.90	0.96	0.95	36.2
Approach		225	4.3	225	4.3	0.398	13.6	LOS B	1.2	8.6	0.90	0.96	0.95	32.7
All Vehicles		1913	2.3	1913	2.3	0.578	9.1	LOS A	1.8	12.9	0.75	0.83	0.82	38.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

Site: 101 [2038 BG+DEV AM - Irvine St / Madoline St (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]

Network: N101 [2038 AM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	42	1.0	42	1.0	0.204	4.6	LOS A	0.0	0.0	0.00	0.06	0.00	47.9
2	T1	727	3.0	727	3.0	0.204	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	47.9
Approach		769	2.9	769	2.9	0.204	0.3	NA	0.0	0.0	0.00	0.03	0.00	47.9
North: Irvine St (North)														
8	T1	361	10.0	361	10.0	0.222	0.8	LOS A	0.2	1.4	0.12	0.03	0.13	39.3
9	R2	20	1.0	20	1.0	0.222	10.0	LOS B	0.2	1.4	0.12	0.03	0.13	45.8
Approach		381	9.5	381	9.5	0.222	1.2	NA	0.2	1.4	0.12	0.03	0.13	40.7
West: Madoline St (West)														
10	L2	24	9.0	24	9.0	0.508	10.8	LOS B	1.0	6.9	0.82	1.04	1.24	25.8
12	R2	125	1.0	125	1.0	0.508	24.8	LOS C	1.0	6.9	0.82	1.04	1.24	25.8
Approach		149	2.3	149	2.3	0.508	22.6	LOS C	1.0	6.9	0.82	1.04	1.24	25.8
All Vehicles		1300	4.8	1300	4.8	0.508	3.1	NA	1.0	6.9	0.13	0.15	0.18	36.6

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

MOVEMENT SUMMARY

▼ Site: 101 [2038 BG+DEV AM - Irvine St / Princes Motorway On-Ramp (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]
■ Network: N101 [2038 AM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	769	1.0	769	1.0	0.204	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		769	1.0	769	1.0	0.204	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	387	1.0	387	1.0	0.480	8.1	LOS A	1.0	6.8	0.57	0.87	0.79	21.4
Approach		387	1.0	387	1.0	0.480	8.1	LOS A	1.0	6.8	0.57	0.87	0.79	21.4
North: Irvine St (North)														
8	T1	486	1.0	486	1.0	0.298	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.8
Approach		486	1.0	486	1.0	0.298	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.8
All Vehicles		1643	1.0	1643	1.0	0.480	1.9	NA	1.0	6.8	0.13	0.21	0.19	38.6

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

MOVEMENT SUMMARY

 **Site: 101 [2038 BG+DEV AM - Irvine St / University Ave (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]**  **Network: N101 [2038 AM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	89	4.0	89	4.0	0.602	10.6	LOS B	2.3	16.5	0.95	1.06	1.16	26.7
3	R2	304	2.0	304	2.0	0.602	14.7	LOS B	2.3	16.5	0.95	1.06	1.16	26.7
3u	U	1	1.0	1	1.0	0.602	16.3	LOS B	2.3	16.5	0.95	1.06	1.16	35.7
Approach		395	2.5	395	2.5	0.602	13.7	LOS B	2.3	16.5	0.95	1.06	1.16	26.7
East: University Ave (East)														
4	L2	204	2.0	204	2.0	0.825	10.0	LOS A	6.1	43.8	1.00	0.88	1.22	30.9
6	R2	672	3.0	672	3.0	0.825	14.1	LOS B	6.1	43.8	1.00	0.88	1.22	20.3
6u	U	1	1.0	1	1.0	0.825	15.7	LOS B	6.1	43.8	1.00	0.88	1.22	20.3
Approach		877	2.8	877	2.8	0.825	13.1	LOS B	6.1	43.8	1.00	0.88	1.22	23.8
North: Irvine St (North)														
7	L2	624	6.0	624	6.0	0.877	14.1	LOS B	7.5	54.9	1.00	1.08	1.45	17.5
8	T1	240	2.0	240	2.0	0.877	13.9	LOS B	7.5	54.9	1.00	1.08	1.45	30.6
9u	U	9	1.0	9	1.0	0.877	19.6	LOS B	7.5	54.9	1.00	1.08	1.45	17.5
Approach		874	4.8	874	4.8	0.877	14.1	LOS B	7.5	54.9	1.00	1.08	1.45	22.3
All Vehicles		2145	3.6	2145	3.6	0.877	13.7	LOS B	7.5	54.9	0.99	0.99	1.30	23.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2038 BG+DEV AM - University Ave / Princes Motorway (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]**

 **Network: N101 [2038 AM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]**

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	157	3.0	157	3.0	0.819	22.6	LOS C	4.3	30.9	1.00	1.36	1.80	28.6
5	T1	299	5.0	299	5.0	0.819	22.7	LOS C	4.3	30.9	1.00	1.36	1.80	17.6
6u	U	1	1.0	1	1.0	0.819	27.9	LOS C	4.3	30.9	1.00	1.36	1.80	26.3
Approach		457	4.3	457	4.3	0.819	22.7	LOS C	4.3	30.9	1.00	1.36	1.80	22.2
North: Princes Motorway Off-ramp (North)														
7	L2	455	9.0	455	9.0	0.505	9.6	LOS A	1.7	12.6	0.81	0.91	0.95	41.1
8	T1	1	1.0	1	1.0	0.807	26.5	LOS C	5.1	36.1	0.99	1.53	2.15	33.4
9	R2	581	1.0	581	1.0	0.807	30.3	LOS C	5.1	36.1	0.99	1.53	2.15	28.1
Approach		1037	4.5	1037	4.5	0.807	21.2	LOS C	5.1	36.1	0.91	1.26	1.63	33.2
West: University Ave (West)														
11	T1	734	1.0	734	1.0	0.548	3.2	LOS A	2.7	19.4	0.04	0.43	0.04	42.8
12	R2	194	5.0	194	5.0	0.548	7.1	LOS A	2.7	19.4	0.04	0.43	0.04	47.2
12u	U	1	2.0	1	2.0	0.548	8.7	LOS A	2.7	19.4	0.04	0.43	0.04	33.5
Approach		928	1.8	928	1.8	0.548	4.0	LOS A	2.7	19.4	0.04	0.43	0.04	43.8
All Vehicles		2422	3.4	2422	3.4	0.819	14.9	LOS B	5.1	36.1	0.59	0.96	1.05	33.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2038 BG+DEV PM - Northfields Ave / Irvine St / Ring Rd / Princes Motorway (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]**  **Network: N101 [2038 PM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	141	9.0	141	9.0	0.213	5.8	LOS A	0.5	3.4	0.55	0.66	0.55	36.7
2	T1	164	1.0	164	1.0	0.395	4.4	LOS A	1.1	7.6	0.58	0.67	0.58	37.5
3	R2	239	1.0	239	1.0	0.395	8.2	LOS A	1.1	7.6	0.58	0.67	0.58	55.0
3u	U	6	1.0	6	1.0	0.395	9.8	LOS A	1.1	7.6	0.58	0.67	0.58	23.5
Approach		551	3.0	550 ^{N1}	3.1	0.395	6.5	LOS A	1.1	7.6	0.57	0.66	0.57	43.3
East: Princes Motorway On/Off Ramp (East)														
4	L2	63	1.0	63	1.0	0.258	10.5	LOS B	0.8	5.8	0.92	0.86	0.92	39.1
5	T1	96	9.0	96	9.0	0.258	10.4	LOS B	0.8	5.8	0.92	0.86	0.92	40.4
6	R2	147	1.0	147	1.0	0.295	15.1	LOS B	0.8	5.9	0.92	0.93	0.92	38.7
6u	U	1	1.0	1	1.0	0.295	16.7	LOS B	0.8	5.9	0.92	0.93	0.92	47.8
Approach		307	3.5	307	3.5	0.295	12.7	LOS B	0.8	5.9	0.92	0.89	0.92	39.4
North: Ring Rd (North)														
7	L2	78	1.0	78	1.0	1.315	319.4	LOS F	42.7	301.3	1.00	5.68	9.92	9.3
8	T1	487	1.0	487	1.0	1.315	319.4	LOS F	42.7	301.3	1.00	5.68	9.92	5.1
9	R2	13	1.0	13	1.0	1.315	323.0	LOS F	42.7	301.3	1.00	5.68	9.92	8.9
9u	U	1	1.0	1	1.0	1.315	324.4	LOS F	42.7	301.3	1.00	5.68	9.92	9.0
Approach		579	1.0	579	1.0	1.315	319.5	LOS F	42.7	301.3	1.00	5.68	9.92	5.8
West: Northfields Ave (West)														
10	L2	17	1.0	17	1.0	0.858	22.1	LOS C	6.7	48.3	1.00	1.52	1.94	31.6
11	T1	100	1.0	100	1.0	0.858	21.8	LOS C	6.7	48.3	1.00	1.52	1.94	38.1
12	R2	520	5.0	520	5.0	0.858	26.0	LOS C	6.7	48.3	1.00	1.52	1.94	26.3
12u	U	7	1.0	7	1.0	0.858	27.1	LOS C	6.7	48.3	1.00	1.52	1.94	32.5
Approach		644	4.2	644	4.2	0.858	25.3	LOS C	6.7	48.3	1.00	1.52	1.94	28.9
All Vehicles		2081	2.9	2081	2.9	1.315	100.3	LOS F	42.7	301.3	0.88	2.36	3.65	15.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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

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

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

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

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MOVEMENT SUMMARY

Site: 101 [2038 BG+DEV PM - Irvine St / Madoline St (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]

Network: N101 [2038 PM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV veh/h	%				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	80	1.0	80	1.0	0.162	4.6	LOS A	0.0	0.0	0.00	0.14	0.00	46.8
2	T1	529	3.0	529	3.0	0.162	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	45.9
Approach		609	2.7	609	2.7	0.162	0.6	NA	0.0	0.0	0.00	0.07	0.00	46.3
North: Irvine St (North)														
8	T1	1019	3.0	757	3.2	0.431	0.7	LOS A	0.4	3.2	0.12	0.03	0.16	40.1
9	R2	52	1.0	38	1.1	0.431	9.8	LOS A	0.4	3.2	0.12	0.03	0.16	46.0
Approach		1071	2.9	795 ^{N1}	3.1	0.431	1.1	NA	0.4	3.2	0.12	0.03	0.16	41.4
West: Madoline St (West)														
10	L2	21	1.0	21	1.0	0.458	12.7	LOS B	0.6	4.5	0.79	0.93	1.07	21.6
12	R2	56	1.0	56	1.0	0.458	38.8	LOS E	0.6	4.5	0.79	0.93	1.07	21.6
Approach		77	1.0	77	1.0	0.458	31.7	LOS D	0.6	4.5	0.79	0.93	1.07	21.6
All Vehicles		1757	2.8	1481 ^{N1}	3.3	0.458	2.5	NA	0.6	4.5	0.10	0.09	0.14	37.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

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

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

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

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MOVEMENT SUMMARY

▼ Site: 101 [2038 BG+DEV PM - Irvine St / Princes Motorway On-Ramp (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]
■ Network: N101 [2038 PM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	609	1.0	609	1.0	0.161	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		609	1.0	609	1.0	0.161	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	121	1.0	121	1.0	0.397	11.1	LOS B	0.3	2.4	0.68	0.91	0.86	17.6
Approach		121	1.0	121	1.0	0.397	11.1	LOS B	0.3	2.4	0.68	0.91	0.86	17.6
North: Irvine St (North)														
8	T1	1075	1.0	831	1.1	0.814	0.3	LOS A	0.0	0.0	0.00	0.00	0.00	47.5
Approach		1075	1.0	831 ^{N1}	1.1	0.814	0.3	NA	0.0	0.0	0.00	0.00	0.00	47.5
All Vehicles		1805	1.0	1561 ^{N1}	1.2	0.814	1.0	NA	0.3	2.4	0.05	0.07	0.07	43.0

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

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

MOVEMENT SUMMARY

 **Site: 101 [2038 BG+DEV PM - Irvine St / University Ave (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]**  **Network: N101 [2038 PM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	148	2.0	148	2.0	0.514	6.6	LOS A	1.6	11.3	0.75	0.83	0.80	31.0
3	R2	309	1.0	309	1.0	0.514	10.7	LOS B	1.6	11.3	0.75	0.83	0.80	31.0
3u	U	2	1.0	2	1.0	0.514	12.4	LOS B	1.6	11.3	0.75	0.83	0.80	39.9
Approach		460	1.3	460	1.3	0.514	9.4	LOS A	1.6	11.3	0.75	0.83	0.80	31.1
East: University Ave (East)														
4	L2	266	1.0	266	1.0	0.615	4.7	LOS A	2.7	19.2	0.68	0.62	0.68	35.8
6	R2	459	4.0	459	4.0	0.615	8.8	LOS A	2.7	19.2	0.68	0.62	0.68	25.7
6u	U	1	1.0	1	1.0	0.615	10.4	LOS B	2.7	19.2	0.68	0.62	0.68	25.7
Approach		726	2.9	726	2.9	0.615	7.3	LOS A	2.7	19.2	0.68	0.62	0.68	30.9
North: Irvine St (North)														
7	L2	994	2.0	808	2.3	0.943	21.5	LOS C	11.5	82.0	1.00	1.32	1.85	12.8
8	T1	200	1.0	162	1.1	0.943	21.5	LOS C	11.5	82.0	1.00	1.32	1.85	25.0
9u	U	2	1.0	2	1.1	0.943	27.2	LOS C	11.5	82.0	1.00	1.32	1.85	12.8
Approach		1196	1.8	972 ^{N1}	2.1	0.943	21.5	LOS C	11.5	82.0	1.00	1.32	1.85	15.5
All Vehicles		2382	2.1	2158 ^{N1}	2.3	0.943	14.1	LOS B	11.5	82.0	0.84	0.98	1.23	22.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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

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

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

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

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MOVEMENT SUMMARY

 **Site: 101 [2038 BG+DEV PM - University Ave / Princes Motorway (Site Folder: Irvine St Network BG + DEV (1,250 Lots))]**

 **Network: N101 [2038 PM BG + DEV (1250 Lots) (Network Folder: DEV Networks)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	139	1.0	139	1.0	0.756	16.3	LOS B	3.8	27.6	0.98	1.24	1.53	33.1
5	T1	401	4.0	401	4.0	0.756	16.4	LOS B	3.8	27.6	0.98	1.24	1.53	21.5
6u	U	2	1.0	2	1.0	0.756	21.7	LOS C	3.8	27.6	0.98	1.24	1.53	30.8
Approach		542	3.2	542	3.2	0.756	16.4	LOS B	3.8	27.6	0.98	1.24	1.53	25.4
North: Princes Motorway Off-ramp (North)														
7	L2	274	1.0	274	1.0	0.295	7.6	LOS A	0.8	5.4	0.73	0.76	0.73	42.7
8	T1	1	1.0	1	1.0	0.502	18.4	LOS B	2.0	13.9	0.98	1.12	1.30	37.2
9	R2	321	1.0	321	1.0	0.502	22.2	LOS C	2.0	13.9	0.98	1.12	1.30	31.8
Approach		596	1.0	596	1.0	0.502	15.5	LOS B	2.0	13.9	0.87	0.96	1.04	36.6
West: University Ave (West)														
11	T1	863	1.0	752	1.1	0.671	3.2	LOS A	4.3	30.5	0.07	0.46	0.07	41.6
12	R2	437	3.0	381	3.3	0.671	7.1	LOS A	4.3	30.5	0.07	0.46	0.07	46.4
12u	U	1	1.0	1	1.1	0.671	8.7	LOS A	4.3	30.5	0.07	0.46	0.07	32.1
Approach		1301	1.7	1135 ^N ₁	1.8	0.671	4.5	LOS A	4.3	30.5	0.07	0.46	0.07	43.3
All Vehicles		2439	1.9	2272 ^N ₁	2.0	0.756	10.2	LOS B	4.3	30.5	0.50	0.78	0.67	36.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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

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

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

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

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MOVEMENT SUMMARY

 **Site: 101 [2033 BG+DEV AM - Northfields Ave - 2 lanes - Import (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**

 **Network: N101 [2033 AM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	401	4.0	401	4.0	0.528	8.4	LOS A	1.5	10.9	0.79	0.96	0.94	35.1
2	T1	241	1.0	241	1.0	0.460	7.8	LOS A	1.2	8.2	0.76	0.91	0.87	36.4
3	R2	72	2.0	72	2.0	0.460	11.7	LOS B	1.2	8.2	0.76	0.91	0.87	52.5
3u	U	4	1.0	4	1.0	0.460	13.3	LOS B	1.2	8.2	0.76	0.91	0.87	20.4
Approach		718	2.8	718	2.8	0.528	8.5	LOS A	1.5	10.9	0.78	0.94	0.91	36.8
East: Princes Motorway On/Off Ramp (East)														
4	L2	36	1.0	36	1.0	0.302	6.4	LOS A	0.6	4.5	0.57	0.67	0.57	42.6
5	T1	202	3.0	202	3.0	0.302	6.2	LOS A	0.6	4.5	0.57	0.67	0.57	42.2
6	R2	480	1.0	480	1.0	0.476	9.3	LOS A	1.2	8.5	0.62	0.77	0.62	41.1
6u	U	1	1.0	1	1.0	0.476	11.0	LOS B	1.2	8.5	0.62	0.77	0.62	51.5
Approach		719	1.6	719	1.6	0.476	8.3	LOS A	1.2	8.5	0.60	0.73	0.60	41.4
North: Ring Rd (North)														
7	L2	4	1.0	4	1.0	0.086	3.3	LOS A	0.2	1.2	0.43	0.42	0.43	47.7
8	T1	159	1.0	159	1.0	0.086	3.1	LOS A	0.2	1.2	0.43	0.44	0.43	36.6
9	R2	14	1.0	14	1.0	0.086	6.7	LOS A	0.2	1.2	0.43	0.46	0.43	39.0
9u	U	1	1.0	1	1.0	0.086	8.1	LOS A	0.2	1.2	0.43	0.46	0.43	39.6
Approach		178	1.0	178	1.0	0.086	3.4	LOS A	0.2	1.2	0.43	0.44	0.43	37.3
West: Northfields Ave (West)														
10	L2	25	1.0	25	1.0	0.172	7.4	LOS A	0.4	3.1	0.77	0.80	0.77	36.3
11	T1	6	1.0	6	1.0	0.172	6.8	LOS A	0.4	3.1	0.77	0.80	0.77	45.2
12	R2	173	5.0	173	5.0	0.172	11.2	LOS B	0.4	3.1	0.77	0.82	0.77	32.7
12u	U	11	3.0	11	3.0	0.172	12.8	LOS B	0.4	3.0	0.77	0.83	0.77	36.9
Approach		215	4.3	215	4.3	0.172	10.7	LOS B	0.4	3.1	0.77	0.82	0.77	34.1
All Vehicles		1829	2.3	1829	2.3	0.528	8.2	LOS A	1.5	10.9	0.67	0.79	0.72	38.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

▼ **Site: 101 [2033 BG+DEV AM - Irvine St / Madoline St - Import (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**

■ ■ Network: N101 [2033 AM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	41	1.0	41	1.0	0.196	4.6	LOS A	0.0	0.0	0.00	0.06	0.00	47.9
2	T1	695	3.0	695	3.0	0.196	0.0	LOS A	0.0	0.1	0.00	0.03	0.00	47.7
3u	U	1	1.0	1	1.0	0.196	9.7	LOS A	0.0	0.1	0.01	0.00	0.01	49.6
Approach		737	2.9	737	2.9	0.196	0.3	NA	0.0	0.1	0.00	0.03	0.00	47.8
North: Irvine St (North)														
8	T1	344	10.0	344	10.0	0.106	0.6	LOS A	0.2	1.2	0.10	0.03	0.10	41.2
9	R2	19	1.0	19	1.0	0.106	8.7	LOS A	0.2	1.2	0.23	0.08	0.23	44.1
9u	U	1	1.0	1	1.0	0.106	14.2	LOS B	0.2	1.2	0.23	0.08	0.23	32.9
Approach		364	9.5	364	9.5	0.106	1.0	NA	0.2	1.2	0.10	0.04	0.10	41.9
West: Madoline St (West)														
10	L2	24	9.0	24	9.0	0.615	15.2	LOS C	1.3	9.0	0.83	1.11	1.44	22.4
12	R2	124	1.0	124	1.0	0.615	32.8	LOS D	1.3	9.0	0.83	1.11	1.44	22.4
12u	U	1	1.0	1	1.0	0.615	14.8	LOS B	1.3	9.0	0.83	1.11	1.44	30.2
Approach		149	2.3	149	2.3	0.615	29.8	LOS D	1.3	9.0	0.83	1.11	1.44	22.5
All Vehicles		1251	4.7	1251	4.7	0.615	4.0	NA	1.3	9.0	0.13	0.16	0.20	34.1

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

MOVEMENT SUMMARY

▼ Site: 101 [2033 BG+DEV AM - Irvine St / Princes Motorway On-Ramp - Import (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]

■ Network: N101 [2033 AM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	736	1.0	736	1.0	0.195	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		736	1.0	736	1.0	0.195	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	371	1.0	371	1.0	0.351	5.9	LOS A	0.6	4.6	0.40	0.62	0.40	24.6
Approach		371	1.0	371	1.0	0.351	5.9	LOS A	0.6	4.6	0.40	0.62	0.40	24.6
North: Irvine St (North)														
8	T1	468	1.0	468	1.0	0.115	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		468	1.0	468	1.0	0.115	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		1575	1.0	1575	1.0	0.351	1.4	NA	0.6	4.6	0.10	0.14	0.10	40.7

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

MOVEMENT SUMMARY

 **Site: 101 [2033 BG+DEV AM - Irvine St / University Ave - Import (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**

 **Network: N101 [2033 AM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	85	4.0	85	4.0	0.537	9.1	LOS A	1.9	13.2	0.88	0.98	1.02	28.2
3	R2	294	2.0	294	2.0	0.537	13.1	LOS B	1.9	13.2	0.88	0.98	1.02	28.2
3u	U	1	1.0	1	1.0	0.537	14.8	LOS B	1.9	13.2	0.88	0.98	1.02	37.2
Approach		380	2.4	380	2.4	0.537	12.2	LOS B	1.9	13.2	0.88	0.98	1.02	28.2
East: University Ave (East)														
4	L2	197	2.0	197	2.0	0.758	7.8	LOS A	4.4	31.3	0.87	0.79	0.99	33.0
6	R2	642	3.0	642	3.0	0.758	11.9	LOS B	4.4	31.3	0.87	0.79	0.99	22.6
6u	U	1	1.0	1	1.0	0.758	13.5	LOS B	4.4	31.3	0.87	0.79	0.99	22.6
Approach		840	2.8	840	2.8	0.758	11.0	LOS B	4.4	31.3	0.87	0.79	0.99	26.1
North: Irvine St (North)														
7	L2	600	6.0	600	6.0	0.510	4.9	LOS A	1.8	12.9	0.68	0.64	0.68	28.0
8	T1	231	2.0	231	2.0	0.202	4.4	LOS A	0.5	3.8	0.53	0.52	0.53	40.4
9u	U	8	1.0	8	1.0	0.202	10.1	LOS B	0.5	3.8	0.53	0.52	0.53	28.8
Approach		839	4.9	839	4.9	0.510	4.8	LOS A	1.8	12.9	0.64	0.61	0.64	33.4
All Vehicles		2059	3.6	2059	3.6	0.758	8.7	LOS A	4.4	31.3	0.78	0.75	0.85	28.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 BG+DEV AM - University Ave / Princes Motorway - Import (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**

 **Network: N101 [2033 AM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]**

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	149	3.0	149	3.0	0.695	15.0	LOS B	3.0	22.0	0.98	1.18	1.39	34.0
5	T1	286	5.0	286	5.0	0.695	15.0	LOS B	3.0	22.0	0.98	1.18	1.39	22.5
6u	U	1	1.0	1	1.0	0.695	20.3	LOS C	3.0	22.0	0.98	1.18	1.39	31.9
Approach		437	4.3	437	4.3	0.695	15.0	LOS B	3.0	22.0	0.98	1.18	1.39	27.5
North: Princes Motorway Off-ramp (North)														
7	L2	434	9.0	434	9.0	0.472	8.7	LOS A	1.4	10.9	0.78	0.86	0.87	41.8
8	T1	1	1.0	1	1.0	0.672	17.0	LOS B	3.4	23.8	0.95	1.23	1.52	37.9
9	R2	555	1.0	555	1.0	0.672	20.8	LOS C	3.4	23.8	0.95	1.23	1.52	32.5
Approach		989	4.5	989	4.5	0.672	15.5	LOS B	3.4	23.8	0.88	1.06	1.23	36.5
West: University Ave (West)														
11	T1	706	1.0	706	1.0	0.529	3.2	LOS A	2.5	18.0	0.04	0.43	0.04	42.8
12	R2	188	5.0	188	5.0	0.529	7.1	LOS A	2.5	18.0	0.04	0.43	0.04	47.2
12u	U	1	2.0	1	2.0	0.529	8.7	LOS A	2.5	18.0	0.04	0.43	0.04	33.5
Approach		896	1.8	896	1.8	0.529	4.1	LOS A	2.5	18.0	0.04	0.43	0.04	43.8
All Vehicles		2322	3.4	2322	3.4	0.695	11.0	LOS B	3.4	23.8	0.57	0.84	0.80	36.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2033 BG+DEV PM - Northfields Ave - 2 lanes - Import (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**

 **Network: N101 [2033 PM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	135	9.0	135	9.0	0.196	5.6	LOS A	0.4	3.0	0.51	0.64	0.51	36.8
2	T1	157	1.0	157	1.0	0.366	4.2	LOS A	0.9	6.5	0.53	0.65	0.53	37.6
3	R2	228	1.0	228	1.0	0.366	8.0	LOS A	0.9	6.5	0.53	0.65	0.53	55.3
3u	U	5	1.0	5	1.0	0.366	9.7	LOS A	0.9	6.5	0.53	0.65	0.53	23.9
Approach		525	3.1	525	3.1	0.366	6.3	LOS A	0.9	6.5	0.52	0.65	0.52	43.5
East: Princes Motorway On/Off Ramp (East)														
4	L2	62	1.0	62	1.0	0.222	7.7	LOS A	0.4	3.1	0.69	0.83	0.69	41.5
5	T1	91	9.0	91	9.0	0.222	7.7	LOS A	0.4	3.1	0.69	0.83	0.69	41.6
6	R2	141	1.0	141	1.0	0.227	11.5	LOS B	0.4	3.0	0.70	0.89	0.70	40.2
6u	U	1	1.0	1	1.0	0.227	13.2	LOS B	0.4	3.0	0.70	0.89	0.70	50.1
Approach		295	3.5	295	3.5	0.227	9.6	LOS A	0.4	3.1	0.70	0.86	0.70	40.9
North: Ring Rd (North)														
7	L2	75	1.0	75	1.0	0.407	6.6	LOS A	1.0	6.8	0.76	0.86	0.82	46.4
8	T1	465	1.0	465	1.0	0.407	6.7	LOS A	1.0	6.8	0.76	0.86	0.83	35.0
9	R2	13	1.0	13	1.0	0.407	10.5	LOS B	0.9	6.6	0.76	0.87	0.84	38.0
9u	U	1	1.0	1	1.0	0.407	11.9	LOS B	0.9	6.6	0.76	0.87	0.84	38.6
Approach		554	1.0	554	1.0	0.407	6.8	LOS A	1.0	6.8	0.76	0.86	0.83	37.2
West: Northfields Ave (West)														
10	L2	16	1.0	16	1.0	0.378	5.6	LOS A	1.0	7.1	0.71	0.77	0.71	37.1
11	T1	96	1.0	96	1.0	0.378	5.1	LOS A	1.0	7.1	0.71	0.77	0.71	46.3
12	R2	497	5.0	497	5.0	0.378	9.3	LOS A	1.0	7.1	0.72	0.79	0.72	33.9
12u	U	6	1.0	6	1.0	0.378	10.7	LOS B	1.0	7.0	0.72	0.81	0.72	37.7
Approach		615	4.2	615	4.2	0.378	8.6	LOS A	1.0	7.1	0.72	0.79	0.72	36.6
All Vehicles		1988	2.9	1988	2.9	0.407	7.6	LOS A	1.0	7.1	0.67	0.78	0.69	39.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

▼ **Site: 101 [2033 BG+DEV PM - Irvine St / Madoline St - Import (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**
■ **Network: N101 [2033 PM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]**

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Irvine St (South)														
1	L2	79	1.0	79	1.0	0.158	4.6	LOS A	0.0	0.0	0.00	0.15	0.00	46.8
2	T1	506	3.0	506	3.0	0.158	0.2	LOS A	0.0	0.3	0.01	0.06	0.01	43.9
3u	U	1	1.0	1	1.0	0.158	26.1	LOS D	0.0	0.3	0.02	0.00	0.02	46.2
Approach		586	2.7	586	2.7	0.158	0.9	NA	0.0	0.3	0.01	0.07	0.01	45.1
North: Irvine St (North)														
8	T1	973	3.0	973	3.0	0.277	0.4	LOS A	0.4	2.8	0.09	0.03	0.10	42.7
9	R2	51	1.0	51	1.0	0.277	8.2	LOS A	0.4	2.8	0.20	0.07	0.22	45.0
9u	U	1	1.0	1	1.0	0.277	12.0	LOS B	0.4	2.8	0.20	0.07	0.22	35.9
Approach		1024	2.9	1024	2.9	0.277	0.8	NA	0.4	2.8	0.09	0.03	0.10	43.2
West: Madoline St (West)														
10	L2	20	1.0	20	1.0	0.718	43.0	LOS E	1.3	9.1	0.88	1.11	1.58	11.7
12	R2	55	1.0	55	1.0	0.718	92.5	LOS F	1.3	9.1	0.88	1.11	1.58	11.7
12u	U	1	1.0	1	1.0	0.718	43.9	LOS E	1.3	9.1	0.88	1.11	1.58	18.6
Approach		76	1.0	76	1.0	0.718	78.8	LOS F	1.3	9.1	0.88	1.11	1.58	11.9
All Vehicles		1686	2.8	1686	2.8	0.718	4.3	NA	1.3	9.1	0.10	0.10	0.14	31.8

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

MOVEMENT SUMMARY

Site: 101 [2033 BG+DEV PM - Irvine St / Princes Motorway On-Ramp - Import (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]

Network: N101 [2033 PM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Irvine St (South)														
2	T1	584	1.0	584	1.0	0.155	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		584	1.0	584	1.0	0.155	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	116	1.0	116	1.0	0.160	7.4	LOS A	0.2	1.5	0.51	0.73	0.51	22.4
Approach		116	1.0	116	1.0	0.160	7.4	LOS A	0.2	1.5	0.51	0.73	0.51	22.4
North: Irvine St (North)														
8	T1	1028	1.0	1028	1.0	0.260	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		1028	1.0	1028	1.0	0.260	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
All Vehicles		1728	1.0	1728	1.0	0.260	0.5	NA	0.2	1.5	0.03	0.05	0.03	46.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

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

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

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MOVEMENT SUMMARY

 **Site: 101 [2033 BG+DEV PM - Irvine St / University Ave - Import (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**

 **Network: N101 [2033 PM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	141	2.0	141	2.0	0.516	6.4	LOS A	1.5	10.3	0.72	0.81	0.77	31.3
3	R2	298	1.0	298	1.0	0.516	10.5	LOS B	1.5	10.3	0.72	0.81	0.77	31.3
3u	U	2	1.0	2	1.0	0.516	12.2	LOS B	1.5	10.3	0.72	0.81	0.77	40.1
Approach		441	1.3	441	1.3	0.516	9.2	LOS A	1.5	10.3	0.72	0.81	0.77	31.3
East: University Ave (East)														
4	L2	256	1.0	256	1.0	0.602	4.9	LOS A	2.3	16.5	0.66	0.65	0.66	35.9
6	R2	441	4.0	441	4.0	0.602	9.1	LOS A	2.3	16.5	0.66	0.65	0.66	25.9
6u	U	1	1.0	1	1.0	0.602	10.7	LOS B	2.3	16.5	0.66	0.65	0.66	25.9
Approach		698	2.9	698	2.9	0.602	7.5	LOS A	2.3	16.5	0.66	0.65	0.66	31.0
North: Irvine St (North)														
7	L2	951	2.0	951	2.0	0.846	9.6	LOS A	5.4	38.7	0.88	0.89	1.15	21.4
8	T1	192	1.0	192	1.0	0.161	4.4	LOS A	0.4	2.9	0.50	0.51	0.50	40.8
9u	U	2	1.0	2	1.0	0.161	10.1	LOS B	0.4	2.9	0.50	0.51	0.50	29.3
Approach		1144	1.8	1144	1.8	0.846	8.8	LOS A	5.4	38.7	0.82	0.82	1.04	26.0
All Vehicles		2283	2.1	2283	2.1	0.846	8.5	LOS A	5.4	38.7	0.75	0.77	0.87	28.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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Project: \\Au2005-pfss01\shared_projects\304000956\technical\modelling\23 07 14 - 304000956 - Gwynneville (Network Only).sip9

MOVEMENT SUMMARY

 **Site: 101 [2033 BG+DEV PM - University Ave / Princes Motorway - Import (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**

 **Network: N101 [2033 PM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]**

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	133	1.0	133	1.0	0.739	16.1	LOS B	3.6	25.9	0.97	1.22	1.50	33.2
5	T1	386	4.0	386	4.0	0.739	16.3	LOS B	3.6	25.9	0.97	1.22	1.50	21.7
6u	U	2	1.0	2	1.0	0.739	21.5	LOS C	3.6	25.9	0.97	1.22	1.50	30.9
Approach		521	3.2	521	3.2	0.739	16.3	LOS B	3.6	25.9	0.97	1.22	1.50	25.5
North: Princes Motorway Off-ramp (North)														
7	L2	261	1.0	261	1.0	0.299	8.4	LOS A	0.8	5.7	0.77	0.79	0.77	42.1
8	T1	1	1.0	1	1.0	0.564	27.0	LOS C	2.6	18.1	1.00	1.25	1.57	33.2
9	R2	307	1.0	307	1.0	0.564	30.8	LOS C	2.6	18.1	1.00	1.25	1.57	27.9
Approach		569	1.0	569	1.0	0.564	20.5	LOS C	2.6	18.1	0.90	1.04	1.20	33.7
West: University Ave (West)														
11	T1	826	1.0	826	1.0	0.736	3.2	LOS A	5.8	41.5	0.08	0.46	0.08	41.5
12	R2	418	3.0	418	3.0	0.736	7.1	LOS A	5.8	41.5	0.08	0.46	0.08	46.4
12u	U	1	1.0	1	1.0	0.736	8.7	LOS A	5.8	41.5	0.08	0.46	0.08	31.9
Approach		1245	1.7	1245	1.7	0.736	4.5	LOS A	5.8	41.5	0.08	0.46	0.08	43.2
All Vehicles		2336	1.9	2336	1.9	0.739	11.0	LOS B	5.8	41.5	0.48	0.77	0.67	35.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2038 BG+DEV AM - Northfields Ave - 2 lanes (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**

 **Network: N101 [2038 AM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]**

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	420	4.0	420	4.0	0.566	9.0	LOS A	1.7	12.3	0.81	0.99	1.01	34.7
2	T1	253	1.0	253	1.0	0.494	8.4	LOS A	1.3	9.2	0.78	0.94	0.93	36.0
3	R2	74	2.0	74	2.0	0.494	12.3	LOS B	1.3	9.2	0.78	0.94	0.93	51.7
3u	U	4	1.0	4	1.0	0.494	13.9	LOS B	1.3	9.2	0.78	0.94	0.93	19.6
Approach		751	2.8	751	2.8	0.566	9.2	LOS A	1.7	12.3	0.80	0.97	0.97	36.3
East: Princes Motorway On/Off Ramp (East)														
4	L2	37	1.0	37	1.0	0.320	6.5	LOS A	0.7	4.8	0.58	0.69	0.58	42.5
5	T1	212	3.0	212	3.0	0.320	6.3	LOS A	0.7	4.8	0.58	0.69	0.58	42.2
6	R2	502	1.0	502	1.0	0.503	9.6	LOS A	1.4	9.5	0.64	0.79	0.67	41.0
6u	U	1	1.0	1	1.0	0.503	11.3	LOS B	1.4	9.5	0.64	0.79	0.67	51.4
Approach		752	1.6	752	1.6	0.503	8.5	LOS A	1.4	9.5	0.62	0.76	0.64	41.4
North: Ring Rd (North)														
7	L2	4	1.0	4	1.0	0.090	3.4	LOS A	0.2	1.2	0.44	0.43	0.44	47.6
8	T1	166	1.0	166	1.0	0.090	3.1	LOS A	0.2	1.2	0.44	0.45	0.44	36.6
9	R2	14	1.0	14	1.0	0.090	6.7	LOS A	0.2	1.2	0.44	0.47	0.44	39.0
9u	U	1	1.0	1	1.0	0.090	8.1	LOS A	0.2	1.2	0.44	0.47	0.44	39.6
Approach		185	1.0	185	1.0	0.090	3.4	LOS A	0.2	1.2	0.44	0.45	0.44	37.2
West: Northfields Ave (West)														
10	L2	27	1.0	27	1.0	0.188	7.8	LOS A	0.5	3.4	0.79	0.82	0.79	36.1
11	T1	6	1.0	6	1.0	0.188	7.3	LOS A	0.5	3.4	0.79	0.82	0.79	44.9
12	R2	181	5.0	181	5.0	0.188	11.8	LOS B	0.5	3.4	0.79	0.84	0.79	32.4
12u	U	11	3.0	11	3.0	0.188	13.3	LOS B	0.5	3.3	0.79	0.85	0.79	36.7
Approach		225	4.3	225	4.3	0.188	11.2	LOS B	0.5	3.4	0.79	0.84	0.79	33.8
All Vehicles		1913	2.3	1913	2.3	0.566	8.6	LOS A	1.7	12.3	0.69	0.82	0.77	38.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

Site: 101 [2038 BG+DEV AM - Irvine St / Madoline St (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]

Network: N101 [2038 AM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total HV] veh/h	%				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	42	1.0	42	1.0	0.204	4.6	LOS A	0.0	0.0	0.00	0.06	0.00	47.9
2	T1	727	3.0	727	3.0	0.204	0.0	LOS A	0.0	0.0	0.00	0.03	0.00	47.9
Approach		769	2.9	769	2.9	0.204	0.3	NA	0.0	0.0	0.00	0.03	0.00	47.9
North: Irvine St (North)														
8	T1	361	10.0	361	10.0	0.110	0.6	LOS A	0.2	1.2	0.10	0.03	0.10	41.2
9	R2	20	1.0	20	1.0	0.110	9.1	LOS A	0.2	1.2	0.23	0.08	0.23	44.2
Approach		381	9.5	381	9.5	0.110	1.0	NA	0.2	1.2	0.10	0.04	0.10	42.0
West: Madoline St (West)														
10	L2	24	9.0	24	9.0	0.680	19.2	LOS C	1.5	10.4	0.86	1.17	1.63	20.2
12	R2	125	1.0	125	1.0	0.680	38.9	LOS E	1.5	10.4	0.86	1.17	1.63	20.2
12u	U	1	1.0	1	1.0	0.680	18.7	LOS C	1.5	10.4	0.86	1.17	1.63	28.1
Approach		151	2.3	151	2.3	0.680	35.6	LOS E	1.5	10.4	0.86	1.17	1.63	20.3
All Vehicles		1301	4.8	1301	4.8	0.680	4.6	NA	1.5	10.4	0.13	0.16	0.22	32.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

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

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

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MOVEMENT SUMMARY

▼ Site: 101 [2038 BG+DEV AM - Irvine St / Princes Motorway On-Ramp (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]

■ Network: N101 [2038 AM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	769	1.0	769	1.0	0.204	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		769	1.0	769	1.0	0.204	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	387	1.0	387	1.0	0.370	6.1	LOS A	0.7	5.1	0.42	0.63	0.43	24.5
Approach		387	1.0	387	1.0	0.370	6.1	LOS A	0.7	5.1	0.42	0.63	0.43	24.5
North: Irvine St (North)														
8	T1	486	1.0	486	1.0	0.120	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	50.0
Approach		486	1.0	486	1.0	0.120	0.0	NA	0.0	0.0	0.00	0.00	0.00	50.0
All Vehicles		1643	1.0	1643	1.0	0.370	1.4	NA	0.7	5.1	0.10	0.15	0.10	40.6

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

MOVEMENT SUMMARY

 **Site: 101 [2038 BG+DEV AM - Irvine St / University Ave (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**

 **Network: N101 [2038 AM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]**

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	89	4.0	89	4.0	0.589	10.4	LOS B	2.2	15.8	0.93	1.05	1.14	26.9
3	R2	304	2.0	304	2.0	0.589	14.4	LOS B	2.2	15.8	0.93	1.05	1.14	26.9
3u	U	1	1.0	1	1.0	0.589	16.1	LOS B	2.2	15.8	0.93	1.05	1.14	36.0
Approach		395	2.5	395	2.5	0.589	13.5	LOS B	2.2	15.8	0.93	1.05	1.14	26.9
East: University Ave (East)														
4	L2	204	2.0	204	2.0	0.800	9.2	LOS A	5.3	38.1	0.93	0.85	1.12	31.6
6	R2	672	3.0	672	3.0	0.800	13.3	LOS B	5.3	38.1	0.93	0.85	1.12	21.1
6u	U	1	1.0	1	1.0	0.800	14.9	LOS B	5.3	38.1	0.93	0.85	1.12	21.1
Approach		877	2.8	877	2.8	0.800	12.4	LOS B	5.3	38.1	0.93	0.85	1.12	24.6
North: Irvine St (North)														
7	L2	624	6.0	624	6.0	0.537	5.0	LOS A	1.9	14.1	0.72	0.66	0.72	27.7
8	T1	240	2.0	240	2.0	0.214	4.5	LOS A	0.6	4.1	0.55	0.53	0.55	40.2
9u	U	9	1.0	9	1.0	0.214	10.2	LOS B	0.6	4.1	0.55	0.53	0.55	28.6
Approach		874	4.8	874	4.8	0.537	4.9	LOS A	1.9	14.1	0.67	0.62	0.67	33.2
All Vehicles		2145	3.6	2145	3.6	0.800	9.6	LOS A	5.3	38.1	0.83	0.79	0.94	27.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2038 BG+DEV AM - University Ave / Princes Motorway (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**

 **Network: N101 [2038 AM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]**

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	157	3.0	157	3.0	0.793	20.6	LOS C	4.0	29.1	1.00	1.31	1.69	29.8
5	T1	299	5.0	299	5.0	0.793	20.7	LOS C	4.0	29.1	1.00	1.31	1.69	18.7
6u	U	1	1.0	1	1.0	0.793	25.9	LOS C	4.0	29.1	1.00	1.31	1.69	27.6
Approach		457	4.3	457	4.3	0.793	20.7	LOS C	4.0	29.1	1.00	1.31	1.69	23.4
North: Princes Motorway Off-ramp (North)														
7	L2	455	9.0	455	9.0	0.505	9.6	LOS A	1.7	12.6	0.81	0.91	0.95	41.1
8	T1	1	1.0	1	1.0	0.769	23.3	LOS C	4.6	32.6	0.99	1.44	1.94	34.8
9	R2	581	1.0	581	1.0	0.769	27.1	LOS C	4.6	32.6	0.99	1.44	1.94	29.4
Approach		1037	4.5	1037	4.5	0.769	19.4	LOS B	4.6	32.6	0.91	1.21	1.51	34.2
West: University Ave (West)														
11	T1	734	1.0	734	1.0	0.548	3.2	LOS A	2.7	19.4	0.04	0.43	0.04	42.8
12	R2	194	5.0	194	5.0	0.548	7.1	LOS A	2.7	19.4	0.04	0.43	0.04	47.2
12u	U	1	2.0	1	2.0	0.548	8.7	LOS A	2.7	19.4	0.04	0.43	0.04	33.5
Approach		928	1.8	928	1.8	0.548	4.0	LOS A	2.7	19.4	0.04	0.43	0.04	43.8
All Vehicles		2422	3.4	2422	3.4	0.793	13.8	LOS B	4.6	32.6	0.59	0.93	0.98	34.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

Site: 101 [2038 BG+DEV PM - Northfields Ave - 2 lanes (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]

Network: N101 [2038 PM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %	v/c	sec		[Veh. veh	Dist] m				km/h
South: Irvine St (South)														
1	L2	141	9.0	141	9.0	0.208	5.7	LOS A	0.4	3.2	0.53	0.65	0.53	36.7
2	T1	164	1.0	164	1.0	0.388	4.3	LOS A	1.0	7.0	0.55	0.66	0.55	37.6
3	R2	239	1.0	239	1.0	0.388	8.1	LOS A	1.0	7.0	0.55	0.66	0.55	55.2
3u	U	6	1.0	6	1.0	0.388	9.8	LOS A	1.0	7.0	0.55	0.66	0.55	23.7
Approach		551	3.0	551	3.0	0.388	6.4	LOS A	1.0	7.0	0.54	0.66	0.54	43.4
East: Princes Motorway On/Off Ramp (East)														
4	L2	63	1.0	63	1.0	0.238	7.9	LOS A	0.5	3.4	0.71	0.84	0.71	41.3
5	T1	96	9.0	96	9.0	0.238	7.9	LOS A	0.5	3.4	0.71	0.84	0.71	41.5
6	R2	147	1.0	147	1.0	0.245	11.8	LOS B	0.5	3.3	0.72	0.90	0.72	40.1
6u	U	1	1.0	1	1.0	0.245	13.5	LOS B	0.5	3.3	0.72	0.90	0.72	49.9
Approach		307	3.5	307	3.5	0.245	9.8	LOS A	0.5	3.4	0.71	0.87	0.71	40.7
North: Ring Rd (North)														
7	L2	78	1.0	78	1.0	0.440	7.1	LOS A	1.1	7.7	0.78	0.90	0.88	46.1
8	T1	487	1.0	487	1.0	0.440	7.2	LOS A	1.1	7.7	0.78	0.90	0.89	34.6
9	R2	13	1.0	13	1.0	0.440	11.2	LOS B	1.1	7.5	0.79	0.90	0.90	37.7
9u	U	1	1.0	1	1.0	0.440	12.6	LOS B	1.1	7.5	0.79	0.90	0.90	38.3
Approach		579	1.0	579	1.0	0.440	7.3	LOS A	1.1	7.7	0.78	0.90	0.89	36.8
West: Northfields Ave (West)														
10	L2	17	1.0	17	1.0	0.406	5.9	LOS A	1.1	7.8	0.74	0.79	0.74	37.0
11	T1	100	1.0	100	1.0	0.406	5.3	LOS A	1.1	7.8	0.74	0.79	0.74	46.2
12	R2	520	5.0	520	5.0	0.406	9.7	LOS A	1.1	7.8	0.74	0.81	0.74	33.7
12u	U	7	1.0	7	1.0	0.406	11.0	LOS B	1.1	7.7	0.74	0.83	0.75	37.6
Approach		644	4.2	644	4.2	0.406	8.9	LOS A	1.1	7.8	0.74	0.81	0.74	36.4
All Vehicles		2081	2.9	2081	2.9	0.440	7.9	LOS A	1.1	7.8	0.70	0.80	0.73	38.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

MOVEMENT SUMMARY

Site: 101 [2038 BG+DEV PM - Irvine St / Madoline St (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]

Network: N101 [2038 PM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	80	1.0	80	1.0	0.165	4.6	LOS A	0.0	0.0	0.00	0.14	0.00	46.8
2	T1	529	3.0	529	3.0	0.165	0.3	LOS A	0.1	0.4	0.01	0.06	0.01	43.7
3u	U	1	1.0	1	1.0	0.165	28.8	LOS D	0.1	0.4	0.02	0.00	0.02	45.6
Approach		611	2.7	611	2.7	0.165	0.9	NA	0.1	0.4	0.01	0.07	0.01	45.0
North: Irvine St (North)														
8	T1	1019	3.0	1019	3.0	0.290	0.5	LOS A	0.4	3.1	0.09	0.03	0.10	42.4
9	R2	52	1.0	52	1.0	0.290	8.6	LOS A	0.4	3.1	0.21	0.07	0.23	44.8
9u	U	1	1.0	1	1.0	0.290	12.6	LOS B	0.4	3.1	0.21	0.07	0.23	35.3
Approach		1072	2.9	1072	2.9	0.290	0.9	NA	0.4	3.1	0.09	0.03	0.11	42.9
West: Madoline St (West)														
10	L2	21	1.0	21	1.0	0.862	82.3	LOS F	1.9	13.2	0.90	1.29	2.13	8.1
12	R2	56	1.0	56	1.0	0.862	141.0	LOS F	1.9	13.2	0.90	1.29	2.13	8.1
12u	U	1	1.0	1	1.0	0.862	83.1	LOS F	1.9	13.2	0.90	1.29	2.13	13.7
Approach		78	1.0	78	1.0	0.862	124.3	LOS F	1.9	13.2	0.90	1.29	2.13	8.2
All Vehicles		1760	2.8	1760	2.8	0.862	6.3	NA	1.9	13.2	0.10	0.10	0.16	27.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

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

Minor Road Approach LOS values are based on average delay for all vehicle movements.

NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.

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

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

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

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MOVEMENT SUMMARY

▼ Site: 101 [2038 BG+DEV PM - Irvine St / Princes Motorway On-Ramp (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]

■ Network: N101 [2038 PM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	609	1.0	609	1.0	0.161	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		609	1.0	609	1.0	0.161	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
East: Princes Motorway On-Ramp														
4	L2	121	1.0	121	1.0	0.190	7.3	LOS A	0.2	1.6	0.50	0.73	0.50	22.7
Approach		121	1.0	121	1.0	0.190	7.3	LOS A	0.2	1.6	0.50	0.73	0.50	22.7
North: Irvine St (North)														
8	T1	1075	1.0	1075	1.0	0.292	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	49.9
Approach		1075	1.0	1075	1.0	0.292	0.0	NA	0.0	0.0	0.00	0.00	0.00	49.9
All Vehicles		1805	1.0	1805	1.0	0.292	0.5	NA	0.2	1.6	0.03	0.05	0.03	46.3

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

MOVEMENT SUMMARY

 **Site: 101 [2038 BG+DEV PM - Irvine St / University Ave (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**

 **Network: N101 [2038 PM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]**

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
2	T1	148	2.0	148	2.0	0.577	7.2	LOS A	1.7	12.2	0.75	0.87	0.86	30.5
3	R2	309	1.0	309	1.0	0.577	11.3	LOS B	1.7	12.2	0.75	0.87	0.86	30.5
3u	U	2	1.0	2	1.0	0.577	13.0	LOS B	1.7	12.2	0.75	0.87	0.86	39.4
Approach		460	1.3	460	1.3	0.577	10.0	LOS A	1.7	12.2	0.75	0.87	0.86	30.6
East: University Ave (East)														
4	L2	266	1.0	266	1.0	0.632	5.1	LOS A	2.5	17.9	0.69	0.66	0.69	35.8
6	R2	459	4.0	459	4.0	0.632	9.2	LOS A	2.5	17.9	0.69	0.66	0.69	25.7
6u	U	1	1.0	1	1.0	0.632	10.9	LOS B	2.5	17.9	0.69	0.66	0.69	25.7
Approach		726	2.9	726	2.9	0.632	7.7	LOS A	2.5	17.9	0.69	0.66	0.69	30.8
North: Irvine St (North)														
7	L2	994	2.0	994	2.0	0.961	22.1	LOS C	10.5	75.0	0.95	1.33	1.89	12.3
8	T1	200	1.0	200	1.0	0.170	4.4	LOS A	0.4	3.1	0.52	0.51	0.52	40.7
9u	U	2	1.0	2	1.0	0.170	10.2	LOS B	0.4	3.1	0.52	0.51	0.52	29.1
Approach		1196	1.8	1196	1.8	0.961	19.1	LOS B	10.5	75.0	0.88	1.19	1.66	16.6
All Vehicles		2382	2.1	2382	2.1	0.961	13.9	LOS B	10.5	75.0	0.80	0.97	1.21	22.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

 **Site: 101 [2038 BG+DEV PM - University Ave / Princes Motorway (Site Folder: Increased Capacity Network BG + DEV (2 lane Roundabout))]**

 **Network: N101 [2038 PM BG + DEV (1250 lots) (Network Folder: Increased Capacity Network - 2 lane roundabout)]**

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design Roundabout

Vehicle Movement Performance														
Mov ID	Turn	DEMAND FLOWS		ARRIVAL FLOWS		Deg. Satn	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: University Ave (East)														
4	L2	139	1.0	139	1.0	0.794	19.9	LOS B	4.5	32.0	1.00	1.33	1.74	30.4
5	T1	401	4.0	401	4.0	0.794	20.0	LOS C	4.5	32.0	1.00	1.33	1.74	19.1
6u	U	2	1.0	2	1.0	0.794	25.3	LOS C	4.5	32.0	1.00	1.33	1.74	28.1
Approach		542	3.2	542	3.2	0.794	20.0	LOS C	4.5	32.0	1.00	1.33	1.74	22.8
North: Princes Motorway Off-ramp (North)														
7	L2	274	1.0	274	1.0	0.324	8.9	LOS A	0.9	6.3	0.80	0.82	0.80	41.8
8	T1	1	1.0	1	1.0	0.649	38.5	LOS D	3.5	25.0	1.00	1.41	1.92	29.1
9	R2	321	1.0	321	1.0	0.649	42.3	LOS D	3.5	25.0	1.00	1.41	1.92	23.9
Approach		596	1.0	596	1.0	0.649	26.9	LOS C	3.5	25.0	0.91	1.14	1.41	30.6
West: University Ave (West)														
11	T1	863	1.0	863	1.0	0.769	3.3	LOS A	7.0	49.9	0.09	0.45	0.09	41.5
12	R2	437	3.0	437	3.0	0.769	7.1	LOS A	7.0	49.9	0.09	0.45	0.09	46.3
12u	U	1	1.0	1	1.0	0.769	8.7	LOS A	7.0	49.9	0.09	0.45	0.09	31.8
Approach		1301	1.7	1301	1.7	0.769	4.5	LOS A	7.0	49.9	0.09	0.45	0.09	43.2
All Vehicles		2439	1.9	2439	1.9	0.794	13.5	LOS B	7.0	49.9	0.49	0.81	0.78	33.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).

Roundabout LOS Method: SIDRA Roundabout LOS.

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

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

Roundabout Capacity Model: SIDRA Standard.

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.

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MOVEMENT SUMMARY

Site: 101 [2023 BG AM (Site Folder: 5. Irvine St / Spearing Pde BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Irvine St (South)														
1	L2	7	1.0	7	1.0	0.155	5.1	LOSA	0.0	0.2	0.01	0.02	0.01	48.5
2	T1	279	3.0	294	3.0	0.155	0.0	LOSA	0.0	0.2	0.01	0.02	0.01	49.4
3u	U	1	1.0	1	1.0	0.155	8.5	LOSA	0.0	0.2	0.01	0.02	0.01	46.0
Approach		287	2.9	302	2.9	0.155	0.2	NA	0.0	0.2	0.01	0.02	0.01	49.3
North: Irvine St (North)														
8	T1	311	2.0	327	2.0	0.170	0.1	LOSA	0.1	0.9	0.04	0.02	0.04	48.8
9	R2	11	9.0	12	9.0	0.170	5.8	LOSA	0.1	0.9	0.04	0.02	0.04	46.9
9u	U	1	1.0	1	1.0	0.170	8.1	LOSA	0.1	0.9	0.04	0.02	0.04	23.2
Approach		323	2.2	340	2.2	0.170	0.3	NA	0.1	0.9	0.04	0.02	0.04	48.5
West: Spearing Pde (West)														
10	L2	11	1.0	12	1.0	0.013	5.5	LOSA	0.0	0.3	0.18	0.54	0.18	35.8
12	R2	2	1.0	2	1.0	0.013	7.5	LOSA	0.0	0.3	0.18	0.54	0.18	40.7
12u	U	1	1.0	1	1.0	0.013	5.9	LOSA	0.0	0.3	0.18	0.54	0.18	43.1
Approach		14	1.0	15	1.0	0.013	5.8	LOSA	0.0	0.3	0.18	0.54	0.18	37.2
All Vehicles		624	2.5	657	2.5	0.170	0.4	NA	0.1	0.9	0.03	0.03	0.03	48.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2023 BG PM (Site Folder: 5. Irvine St / Spearing Pde BG)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	4	1.0	4	1.0	0.158	5.3	LOS A	0.0	0.2	0.01	0.01	0.01	48.6
2	T1	292	1.0	307	1.0	0.158	0.0	LOS A	0.0	0.2	0.01	0.01	0.01	49.6
3u	U	1	1.0	1	1.0	0.158	8.3	LOS A	0.0	0.2	0.01	0.01	0.01	46.2
Approach		297	1.0	313	1.0	0.158	0.1	NA	0.0	0.2	0.01	0.01	0.01	49.5
North: Irvine St (North)														
8	T1	294	1.0	309	1.0	0.159	0.1	LOS A	0.1	0.9	0.04	0.02	0.04	48.7
9	R2	11	1.0	12	1.0	0.159	5.7	LOS A	0.1	0.9	0.04	0.02	0.04	47.3
9u	U	1	1.0	1	1.0	0.159	8.2	LOS A	0.1	0.9	0.04	0.02	0.04	23.1
Approach		306	1.0	322	1.0	0.159	0.3	NA	0.1	0.9	0.04	0.02	0.04	48.5
West: Spearing Pde (West)														
10	L2	28	1.0	29	1.0	0.029	5.6	LOS A	0.1	0.8	0.24	0.55	0.24	35.8
12	R2	3	1.0	3	1.0	0.029	7.5	LOS A	0.1	0.8	0.24	0.55	0.24	40.7
12u	U	1	1.0	1	1.0	0.029	5.9	LOS A	0.1	0.8	0.24	0.55	0.24	43.1
Approach		32	1.0	34	1.0	0.029	5.8	LOS A	0.1	0.8	0.24	0.55	0.24	36.6
All Vehicles		635	1.0	668	1.0	0.159	0.5	NA	0.1	0.9	0.04	0.04	0.04	47.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2028 BG AM (Site Folder: 5. Irvine St / Spearing Pde BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Irvine St (South)														
1	L2	7	1.0	7	1.0	0.140	5.2	LOSA	0.0	0.2	0.01	0.02	0.01	48.5
2	T1	251	3.0	264	3.0	0.140	0.0	LOSA	0.0	0.2	0.01	0.02	0.01	49.3
3u	U	1	1.0	1	1.0	0.140	8.8	LOSA	0.0	0.2	0.01	0.02	0.01	46.0
Approach		259	2.9	273	2.9	0.140	0.2	NA	0.0	0.2	0.01	0.02	0.01	49.2
North: Irvine St (North)														
8	T1	339	2.0	357	2.0	0.184	0.1	LOSA	0.1	0.9	0.04	0.02	0.04	48.9
9	R2	11	9.0	12	9.0	0.184	5.6	LOSA	0.1	0.9	0.04	0.02	0.04	47.0
9u	U	1	1.0	1	1.0	0.184	7.9	LOSA	0.1	0.9	0.04	0.02	0.04	23.2
Approach		351	2.2	369	2.2	0.184	0.3	NA	0.1	0.9	0.04	0.02	0.04	48.7
West: Spearing Pde (West)														
10	L2	11	1.0	12	1.0	0.013	5.4	LOSA	0.0	0.3	0.18	0.54	0.18	35.9
12	R2	2	1.0	2	1.0	0.013	7.5	LOSA	0.0	0.3	0.18	0.54	0.18	40.8
12u	U	1	1.0	1	1.0	0.013	5.9	LOSA	0.0	0.3	0.18	0.54	0.18	43.1
Approach		14	1.0	15	1.0	0.013	5.7	LOSA	0.0	0.3	0.18	0.54	0.18	37.2
All Vehicles		624	2.5	657	2.5	0.184	0.4	NA	0.1	0.9	0.03	0.03	0.03	48.2

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

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

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.

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Organisation: STANTEC NEW ZEALAND | Licence: NETWORK / Enterprise | Processed: Thursday, 29 June 2023 10:35:57 AM

Project: \\Au2005-pfss01\shared_projects\304000956\technical\modelling\ss\23 07 24 - 304000956 - Gwynneville (Individual Intersections Only) - RM.sip9

MOVEMENT SUMMARY

Site: 101 [2028 BG PM (Site Folder: 5. Irvine St / Spearing Pde BG)]

Created by: RM

Reviewd by:

Project number:

Site Category: Existing Design

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Irvine St (South)														
1	L2	4	1.0	4	1.0	0.185	5.5	LOSA	0.0	0.2	0.01	0.01	0.01	48.7
2	T1	342	1.0	360	1.0	0.185	0.0	LOSA	0.0	0.2	0.01	0.01	0.01	49.6
3u	U	1	1.0	1	1.0	0.185	8.8	LOSA	0.0	0.2	0.01	0.01	0.01	46.2
Approach		347	1.0	365	1.0	0.185	0.1	NA	0.0	0.2	0.01	0.01	0.01	49.6
North: Irvine St (North)														
8	T1	327	1.0	344	1.0	0.177	0.1	LOSA	0.1	1.0	0.05	0.02	0.05	48.7
9	R2	11	1.0	12	1.0	0.177	6.0	LOSA	0.1	1.0	0.05	0.02	0.05	47.3
9u	U	1	1.0	1	1.0	0.177	8.9	LOSA	0.1	1.0	0.05	0.02	0.05	23.1
Approach		339	1.0	357	1.0	0.177	0.3	NA	0.1	1.0	0.05	0.02	0.05	48.5
West: Spearing Pde (West)														
10	L2	28	1.0	29	1.0	0.031	5.8	LOSA	0.1	0.8	0.25	0.57	0.25	35.6
12	R2	3	1.0	3	1.0	0.031	8.2	LOSA	0.1	0.8	0.25	0.57	0.25	40.5
12u	U	1	1.0	1	1.0	0.031	5.9	LOSA	0.1	0.8	0.25	0.57	0.25	42.9
Approach		32	1.0	34	1.0	0.031	6.0	LOSA	0.1	0.8	0.25	0.57	0.25	36.3
All Vehicles		718	1.0	756	1.0	0.185	0.5	NA	0.1	1.0	0.04	0.04	0.04	47.6

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

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

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.

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Organisation: STANTEC NEW ZEALAND | Licence: NETWORK / Enterprise | Processed: Thursday, 29 June 2023 10:35:59 AM

Project: \\Au2005-pfss01\shared_projects\304000956\technical\modelling\ss\23 07 24 - 304000956 - Gwynneville (Individual Intersections Only) - RM.sip9

MOVEMENT SUMMARY

▼ Site: 101 [2033 BG AM (Site Folder: 5. Irvine St / Spearing Pde BG)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	7	1.0	7	1.0	0.147	5.2	LOS A	0.0	0.2	0.01	0.02	0.01	48.5
2	T1	263	3.0	277	3.0	0.147	0.0	LOS A	0.0	0.2	0.01	0.02	0.01	49.3
3u	U	1	1.0	1	1.0	0.147	9.1	LOS A	0.0	0.2	0.01	0.02	0.01	46.0
Approach		271	2.9	285	2.9	0.147	0.2	NA	0.0	0.2	0.01	0.02	0.01	49.2
North: Irvine St (North)														
8	T1	356	2.0	375	2.0	0.193	0.1	LOS A	0.1	1.0	0.04	0.02	0.04	48.9
9	R2	12	9.0	13	9.0	0.193	5.7	LOS A	0.1	1.0	0.04	0.02	0.04	47.0
9u	U	1	1.0	1	1.0	0.193	8.0	LOS A	0.1	1.0	0.04	0.02	0.04	23.2
Approach		369	2.2	388	2.2	0.193	0.3	NA	0.1	1.0	0.04	0.02	0.04	48.6
West: Spearing Pde (West)														
10	L2	12	1.0	13	1.0	0.014	5.4	LOS A	0.1	0.4	0.19	0.54	0.19	35.8
12	R2	2	1.0	2	1.0	0.014	7.8	LOS A	0.1	0.4	0.19	0.54	0.19	40.7
12u	U	1	1.0	1	1.0	0.014	5.9	LOS A	0.1	0.4	0.19	0.54	0.19	43.1
Approach		15	1.0	16	1.0	0.014	5.8	LOS A	0.1	0.4	0.19	0.54	0.19	37.1
All Vehicles		655	2.5	689	2.5	0.193	0.4	NA	0.1	1.0	0.03	0.03	0.03	48.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2033 BG PM (Site Folder: 5. Irvine St / Spearing Pde BG)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	4	1.0	4	1.0	0.194	5.6	LOS A	0.0	0.2	0.01	0.01	0.01	48.7
2	T1	359	1.0	378	1.0	0.194	0.0	LOS A	0.0	0.2	0.01	0.01	0.01	49.6
3u	U	1	1.0	1	1.0	0.194	9.1	LOS A	0.0	0.2	0.01	0.01	0.01	46.2
Approach		364	1.0	383	1.0	0.194	0.1	NA	0.0	0.2	0.01	0.01	0.01	49.6
North: Irvine St (North)														
8	T1	343	1.0	361	1.0	0.186	0.1	LOS A	0.2	1.1	0.05	0.02	0.05	48.7
9	R2	12	1.0	13	1.0	0.186	6.1	LOS A	0.2	1.1	0.05	0.02	0.05	47.3
9u	U	1	1.0	1	1.0	0.186	9.1	LOS A	0.2	1.1	0.05	0.02	0.05	23.1
Approach		356	1.0	375	1.0	0.186	0.3	NA	0.2	1.1	0.05	0.02	0.05	48.5
West: Spearing Pde (West)														
10	L2	30	1.0	32	1.0	0.034	5.9	LOS A	0.1	0.9	0.27	0.57	0.27	35.5
12	R2	3	1.0	3	1.0	0.034	8.5	LOS A	0.1	0.9	0.27	0.57	0.27	40.4
12u	U	1	1.0	1	1.0	0.034	5.9	LOS A	0.1	0.9	0.27	0.57	0.27	42.8
Approach		34	1.0	36	1.0	0.034	6.1	LOS A	0.1	0.9	0.27	0.57	0.27	36.2
All Vehicles		754	1.0	794	1.0	0.194	0.5	NA	0.2	1.1	0.04	0.04	0.04	47.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2038 BG AM (Site Folder: 5. Irvine St / Spearing Pde BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Irvine St (South)														
1	L2	8	1.0	8	1.0	0.154	5.2	LOS A	0.0	0.2	0.01	0.02	0.01	48.5
2	T1	276	3.0	291	3.0	0.154	0.0	LOS A	0.0	0.2	0.01	0.02	0.01	49.2
3u	U	1	1.0	1	1.0	0.154	9.3	LOS A	0.0	0.2	0.01	0.02	0.01	45.9
Approach		285	2.9	300	2.9	0.154	0.2	NA	0.0	0.2	0.01	0.02	0.01	49.2
North: Irvine St (North)														
8	T1	373	2.0	393	2.0	0.202	0.1	LOS A	0.1	1.0	0.04	0.02	0.04	48.9
9	R2	12	9.0	13	9.0	0.202	5.8	LOS A	0.1	1.0	0.04	0.02	0.04	47.0
9u	U	1	1.0	1	1.0	0.202	8.2	LOS A	0.1	1.0	0.04	0.02	0.04	23.2
Approach		386	2.2	406	2.2	0.202	0.3	NA	0.1	1.0	0.04	0.02	0.04	48.7
West: Spearing Pde (West)														
10	L2	12	1.0	13	1.0	0.014	5.5	LOS A	0.1	0.4	0.20	0.54	0.20	35.7
12	R2	2	1.0	2	1.0	0.014	8.0	LOS A	0.1	0.4	0.20	0.54	0.20	40.6
12u	U	1	1.0	1	1.0	0.014	5.9	LOS A	0.1	0.4	0.20	0.54	0.20	43.0
Approach		15	1.0	16	1.0	0.014	5.9	LOS A	0.1	0.4	0.20	0.54	0.20	37.0
All Vehicles		686	2.5	722	2.5	0.202	0.4	NA	0.1	1.0	0.03	0.03	0.03	48.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2038 BG PM (Site Folder: 5. Irvine St / Spearing Pde BG)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Irvine St (South)														
1	L2	4	1.0	4	1.0	0.203	5.7	LOS A	0.0	0.2	0.01	0.01	0.01	48.7
2	T1	376	1.0	396	1.0	0.203	0.0	LOS A	0.0	0.2	0.01	0.01	0.01	49.6
3u	U	1	1.0	1	1.0	0.203	9.3	LOS A	0.0	0.2	0.01	0.01	0.01	46.2
Approach		381	1.0	401	1.0	0.203	0.1	NA	0.0	0.2	0.01	0.01	0.01	49.6
North: Irvine St (North)														
8	T1	359	1.0	378	1.0	0.194	0.1	LOS A	0.2	1.1	0.05	0.02	0.05	48.7
9	R2	12	1.0	13	1.0	0.194	6.2	LOS A	0.2	1.1	0.05	0.02	0.05	47.3
9u	U	1	1.0	1	1.0	0.194	9.4	LOS A	0.2	1.1	0.05	0.02	0.05	23.1
Approach		372	1.0	392	1.0	0.194	0.3	NA	0.2	1.1	0.05	0.02	0.05	48.5
West: Spearing Pde (West)														
10	L2	31	1.0	33	1.0	0.036	6.0	LOS A	0.1	0.9	0.28	0.58	0.28	35.4
12	R2	3	1.0	3	1.0	0.036	8.8	LOS A	0.1	0.9	0.28	0.58	0.28	40.3
12u	U	1	1.0	1	1.0	0.036	5.9	LOS A	0.1	0.9	0.28	0.58	0.28	42.8
Approach		35	1.0	37	1.0	0.036	6.2	LOS A	0.1	0.9	0.28	0.58	0.28	36.1
All Vehicles		788	1.0	829	1.0	0.203	0.5	NA	0.2	1.1	0.04	0.04	0.04	47.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2023 BG AM (Site Folder: 6. Murphys Ave / Paulsgrove St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: Murphys Ave (East)														
5	T1	210	2.0	221	2.0	0.137	0.1	LOS A	0.2	1.6	0.08	0.06	0.08	49.3
6	R2	17	1.0	18	1.0	0.137	5.3	LOS A	0.2	1.6	0.08	0.06	0.08	47.5
6u	U	7	1.0	7	1.0	0.137	7.1	LOS A	0.2	1.6	0.08	0.06	0.08	47.6
Approach		234	1.9	246	1.9	0.137	0.7	NA	0.2	1.6	0.08	0.06	0.08	49.1
North: Paulsgrove St (North)														
7	L2	23	1.0	24	1.0	0.040	5.1	LOS A	0.1	1.0	0.26	0.56	0.26	43.9
9	R2	17	6.0	18	6.0	0.040	6.5	LOS A	0.1	1.0	0.26	0.56	0.26	44.7
9u	U	1	1.0	1	1.0	0.040	5.9	LOS A	0.1	1.0	0.26	0.56	0.26	43.9
Approach		41	3.1	43	3.1	0.040	5.7	LOS A	0.1	1.0	0.26	0.56	0.26	44.3
West: Murphys Ave (West)														
10	L2	12	8.0	13	8.0	0.103	4.8	LOS A	0.0	0.1	0.01	0.04	0.01	49.0
11	T1	169	4.0	178	4.0	0.103	0.0	LOS A	0.0	0.1	0.01	0.04	0.01	49.7
12u	U	1	1.0	1	1.0	0.103	7.3	LOS A	0.0	0.1	0.01	0.04	0.01	48.9
Approach		182	4.2	192	4.2	0.103	0.4	NA	0.0	0.1	0.01	0.04	0.01	49.6
All Vehicles		457	2.9	481	2.9	0.137	1.0	NA	0.2	1.6	0.07	0.10	0.07	48.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2023 BG PM (Site Folder: 6. Murphys Ave / Paulsgrove St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
East: Murphys Ave (East)														
5	T1	217	1.0	228	1.0	0.136	0.1	LOS A	0.2	1.4	0.08	0.05	0.08	49.4
6	R2	19	1.0	20	1.0	0.136	5.3	LOS A	0.2	1.4	0.08	0.05	0.08	47.6
6u	U	3	1.0	3	1.0	0.136	7.2	LOS A	0.2	1.4	0.08	0.05	0.08	47.7
Approach		239	1.0	252	1.0	0.136	0.6	NA	0.2	1.4	0.08	0.05	0.08	49.2
North: Paulsgrove St (North)														
7	L2	11	1.0	12	1.0	0.021	5.2	LOS A	0.1	0.5	0.24	0.55	0.24	43.9
9	R2	9	1.0	9	1.0	0.021	6.4	LOS A	0.1	0.5	0.24	0.55	0.24	44.7
9u	U	1	1.0	1	1.0	0.021	5.9	LOS A	0.1	0.5	0.24	0.55	0.24	43.8
Approach		21	1.0	22	1.0	0.021	5.7	LOS A	0.1	0.5	0.24	0.55	0.24	44.3
West: Murphys Ave (West)														
10	L2	14	1.0	15	1.0	0.113	4.7	LOS A	0.0	0.1	0.01	0.04	0.01	49.1
11	T1	188	2.0	198	2.0	0.113	0.0	LOS A	0.0	0.1	0.01	0.04	0.01	49.7
12u	U	1	1.0	1	1.0	0.113	7.4	LOS A	0.0	0.1	0.01	0.04	0.01	48.9
Approach		203	1.9	214	1.9	0.113	0.4	NA	0.0	0.1	0.01	0.04	0.01	49.6
All Vehicles		463	1.4	487	1.4	0.136	0.7	NA	0.2	1.4	0.05	0.07	0.05	49.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2028 BG AM (Site Folder: 6. Murphys Ave / Paulsgrove St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: Murphys Ave (East)														
5	T1	212	2.0	223	2.0	0.137	0.1	LOSA	0.2	1.5	0.08	0.06	0.08	49.3
6	R2	17	1.0	18	1.0	0.137	5.2	LOSA	0.2	1.5	0.08	0.06	0.08	47.6
6u	U	7	1.0	7	1.0	0.137	6.9	LOSA	0.2	1.5	0.08	0.06	0.08	47.6
Approach		236	1.9	248	1.9	0.137	0.7	NA	0.2	1.5	0.08	0.06	0.08	49.1
North: Paulsgrove St (North)														
7	L2	23	1.0	24	1.0	0.039	5.1	LOSA	0.1	1.0	0.25	0.55	0.25	44.0
9	R2	17	6.0	18	6.0	0.039	6.4	LOSA	0.1	1.0	0.25	0.55	0.25	44.7
9u	U	1	1.0	1	1.0	0.039	5.9	LOSA	0.1	1.0	0.25	0.55	0.25	43.9
Approach		41	3.1	43	3.1	0.039	5.6	LOSA	0.1	1.0	0.25	0.55	0.25	44.3
West: Murphys Ave (West)														
10	L2	12	8.0	13	8.0	0.093	4.8	LOSA	0.0	0.1	0.01	0.04	0.01	49.0
11	T1	152	4.0	160	4.0	0.093	0.0	LOSA	0.0	0.1	0.01	0.04	0.01	49.7
12u	U	1	1.0	1	1.0	0.093	7.3	LOSA	0.0	0.1	0.01	0.04	0.01	48.9
Approach		165	4.3	174	4.3	0.093	0.4	NA	0.0	0.1	0.01	0.04	0.01	49.6
All Vehicles		442	2.9	465	2.9	0.137	1.0	NA	0.2	1.5	0.07	0.10	0.07	48.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2028 BG PM (Site Folder: 6. Murphys Ave / Paulsgrove St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: Murphys Ave (East)														
5	T1	263	1.0	277	1.0	0.162	0.1	LOS A	0.2	1.4	0.07	0.05	0.07	49.4
6	R2	19	1.0	20	1.0	0.162	5.4	LOS A	0.2	1.4	0.07	0.05	0.07	47.7
6u	U	3	1.0	3	1.0	0.162	7.3	LOS A	0.2	1.4	0.07	0.05	0.07	47.8
Approach		285	1.0	300	1.0	0.162	0.5	NA	0.2	1.4	0.07	0.05	0.07	49.3
North: Paulsgrove St (North)														
7	L2	11	1.0	12	1.0	0.021	5.2	LOS A	0.1	0.5	0.24	0.56	0.24	43.7
9	R2	9	1.0	9	1.0	0.021	6.7	LOS A	0.1	0.5	0.24	0.56	0.24	44.6
9u	U	1	1.0	1	1.0	0.021	5.9	LOS A	0.1	0.5	0.24	0.56	0.24	43.7
Approach		21	1.0	22	1.0	0.021	5.9	LOS A	0.1	0.5	0.24	0.56	0.24	44.2
West: Murphys Ave (West)														
10	L2	14	1.0	15	1.0	0.116	4.8	LOS A	0.0	0.2	0.01	0.04	0.01	49.1
11	T1	194	2.0	204	2.0	0.116	0.0	LOS A	0.0	0.2	0.01	0.04	0.01	49.7
12u	U	1	1.0	1	1.0	0.116	7.9	LOS A	0.0	0.2	0.01	0.04	0.01	48.9
Approach		209	1.9	220	1.9	0.116	0.4	NA	0.0	0.2	0.01	0.04	0.01	49.6
All Vehicles		515	1.4	542	1.4	0.162	0.7	NA	0.2	1.4	0.05	0.06	0.05	49.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2033 BG AM (Site Folder: 6. Murphys Ave / Paulsgrove St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: Murphys Ave (East)														
5	T1	223	2.0	235	2.0	0.144	0.1	LOSA	0.2	1.6	0.08	0.06	0.08	49.3
6	R2	18	1.0	19	1.0	0.144	5.2	LOSA	0.2	1.6	0.08	0.06	0.08	47.6
6u	U	7	1.0	7	1.0	0.144	7.0	LOSA	0.2	1.6	0.08	0.06	0.08	47.6
Approach		248	1.9	261	1.9	0.144	0.7	NA	0.2	1.6	0.08	0.06	0.08	49.1
North: Paulsgrove St (North)														
7	L2	24	1.0	25	1.0	0.042	5.1	LOSA	0.1	1.1	0.26	0.56	0.26	43.9
9	R2	18	6.0	19	6.0	0.042	6.5	LOSA	0.1	1.1	0.26	0.56	0.26	44.7
9u	U	1	1.0	1	1.0	0.042	5.9	LOSA	0.1	1.1	0.26	0.56	0.26	43.9
Approach		43	3.1	45	3.1	0.042	5.7	LOSA	0.1	1.1	0.26	0.56	0.26	44.3
West: Murphys Ave (West)														
10	L2	13	8.0	14	8.0	0.098	4.8	LOSA	0.0	0.1	0.01	0.04	0.01	48.9
11	T1	159	4.0	167	4.0	0.098	0.0	LOSA	0.0	0.1	0.01	0.04	0.01	49.7
12u	U	1	1.0	1	1.0	0.098	7.5	LOSA	0.0	0.1	0.01	0.04	0.01	48.9
Approach		173	4.3	182	4.3	0.098	0.4	NA	0.0	0.1	0.01	0.04	0.01	49.6
All Vehicles		464	2.9	488	2.9	0.144	1.1	NA	0.2	1.6	0.07	0.10	0.07	48.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2033 BG PM (Site Folder: 6. Murphys Ave / Paulsgrove St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: Murphys Ave (East)														
5	T1	276	1.0	291	1.0	0.170	0.1	LOSA	0.2	1.5	0.07	0.05	0.07	49.4
6	R2	20	1.0	21	1.0	0.170	5.5	LOSA	0.2	1.5	0.07	0.05	0.07	47.7
6u	U	3	1.0	3	1.0	0.170	7.4	LOSA	0.2	1.5	0.07	0.05	0.07	47.8
Approach		299	1.0	315	1.0	0.170	0.5	NA	0.2	1.5	0.07	0.05	0.07	49.3
North: Paulsgrove St (North)														
7	L2	12	1.0	13	1.0	0.024	5.2	LOSA	0.1	0.6	0.26	0.56	0.26	43.7
9	R2	10	1.0	11	1.0	0.024	6.9	LOSA	0.1	0.6	0.26	0.56	0.26	44.6
9u	U	1	1.0	1	1.0	0.024	5.9	LOSA	0.1	0.6	0.26	0.56	0.26	43.7
Approach		23	1.0	24	1.0	0.024	6.0	LOSA	0.1	0.6	0.26	0.56	0.26	44.1
West: Murphys Ave (West)														
10	L2	15	1.0	16	1.0	0.122	4.8	LOSA	0.0	0.2	0.01	0.04	0.01	49.1
11	T1	203	2.0	214	2.0	0.122	0.0	LOSA	0.0	0.2	0.01	0.04	0.01	49.7
12u	U	1	1.0	1	1.0	0.122	8.0	LOSA	0.0	0.2	0.01	0.04	0.01	48.9
Approach		219	1.9	231	1.9	0.122	0.4	NA	0.0	0.2	0.01	0.04	0.01	49.6
All Vehicles		541	1.4	569	1.4	0.170	0.7	NA	0.2	1.5	0.05	0.07	0.05	49.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2038 BG AM (Site Folder: 6. Murphys Ave / Paulsgrove St BG)]

Created by: RM

Reviewd by:

Project number:

Site Category: Existing Design

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
						v/c	sec							km/h
East: Murphys Ave (East)														
5	T1	233	2.0	245	2.0	0.152	0.1	LOS A	0.3	1.8	0.09	0.06	0.09	49.3
6	R2	19	1.0	20	1.0	0.152	5.3	LOS A	0.3	1.8	0.09	0.06	0.09	47.5
6u	U	8	1.0	8	1.0	0.152	7.1	LOS A	0.3	1.8	0.09	0.06	0.09	47.6
Approach		260	1.9	274	1.9	0.152	0.7	NA	0.3	1.8	0.09	0.06	0.09	49.1
North: Paulsgrove St (North)														
7	L2	26	1.0	27	1.0	0.045	5.1	LOS A	0.2	1.1	0.27	0.56	0.27	43.9
9	R2	19	6.0	20	6.0	0.045	6.6	LOS A	0.2	1.1	0.27	0.56	0.27	44.6
9u	U	1	1.0	1	1.0	0.045	5.9	LOS A	0.2	1.1	0.27	0.56	0.27	43.8
Approach		46	3.1	48	3.1	0.045	5.8	LOS A	0.2	1.1	0.27	0.56	0.27	44.2
West: Murphys Ave (West)														
10	L2	13	8.0	14	8.0	0.102	4.8	LOS A	0.0	0.2	0.01	0.04	0.01	49.0
11	T1	167	4.0	176	4.0	0.102	0.0	LOS A	0.0	0.2	0.01	0.04	0.01	49.7
12u	U	1	1.0	1	1.0	0.102	7.6	LOS A	0.0	0.2	0.01	0.04	0.01	48.9
Approach		181	4.3	191	4.3	0.102	0.4	NA	0.0	0.2	0.01	0.04	0.01	49.6
All Vehicles		487	2.9	513	2.9	0.152	1.1	NA	0.3	1.8	0.07	0.10	0.07	48.8

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

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

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.

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Project: \\Au2005-pfss01\shared_projects\304000956\technical\modelling\ss\23 07 24 - 304000956 - Gwynneville (Individual Intersections Only) - RM.sip9

MOVEMENT SUMMARY

Site: 101 [2038 BG PM (Site Folder: 6. Murphys Ave / Paulsgrove St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
East: Murphys Ave (East)														
5	T1	289	1.0	304	1.0	0.178	0.1	LOSA	0.2	1.6	0.07	0.05	0.07	49.4
6	R2	21	1.0	22	1.0	0.178	5.5	LOSA	0.2	1.6	0.07	0.05	0.07	47.7
6u	U	3	1.0	3	1.0	0.178	7.5	LOSA	0.2	1.6	0.07	0.05	0.07	47.8
Approach		313	1.0	329	1.0	0.178	0.6	NA	0.2	1.6	0.07	0.05	0.07	49.3
North: Paulsgrove St (North)														
7	L2	12	1.0	13	1.0	0.024	5.3	LOSA	0.1	0.6	0.27	0.57	0.27	43.6
9	R2	10	1.0	11	1.0	0.024	7.0	LOSA	0.1	0.6	0.27	0.57	0.27	44.5
9u	U	1	1.0	1	1.0	0.024	5.9	LOSA	0.1	0.6	0.27	0.57	0.27	43.6
Approach		23	1.0	24	1.0	0.024	6.1	LOSA	0.1	0.6	0.27	0.57	0.27	44.1
West: Murphys Ave (West)														
10	L2	16	1.0	17	1.0	0.128	4.8	LOSA	0.0	0.2	0.01	0.04	0.01	49.1
11	T1	213	2.0	224	2.0	0.128	0.0	LOSA	0.0	0.2	0.01	0.04	0.01	49.7
12u	U	1	1.0	1	1.0	0.128	8.2	LOSA	0.0	0.2	0.01	0.04	0.01	48.9
Approach		230	1.9	242	1.9	0.128	0.4	NA	0.0	0.2	0.01	0.04	0.01	49.6
All Vehicles		566	1.4	596	1.4	0.178	0.7	NA	0.2	1.6	0.05	0.06	0.05	49.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2023 BG AM (Site Folder: 7. Paulsgrove St / Spearing Pde BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Paulsgrove St (South)														
2	T1	19	1.0	20	1.0	0.017	0.0	LOS A	0.1	0.4	0.06	0.19	0.06	47.2
3	R2	8	1.0	8	1.0	0.017	3.7	LOS A	0.1	0.4	0.06	0.19	0.06	45.4
3u	U	2	1.0	2	1.0	0.017	4.9	LOS A	0.1	0.4	0.06	0.19	0.06	33.0
Approach		29	1.0	31	1.0	0.017	1.4	NA	0.1	0.4	0.06	0.19	0.06	46.2
East: Spearing Pde (East)														
4	L2	18	1.0	19	1.0	0.017	4.6	LOS A	0.1	0.4	0.07	0.51	0.07	39.7
6	R2	5	1.0	5	1.0	0.017	4.7	LOS A	0.1	0.4	0.07	0.51	0.07	44.0
6u	U	1	1.0	1	1.0	0.017	5.8	LOS A	0.1	0.4	0.07	0.51	0.07	43.8
Approach		24	1.0	25	1.0	0.017	4.7	LOS A	0.1	0.4	0.07	0.51	0.07	41.2
North: Paulsgrove St (North)														
7	L2	1	1.0	1	1.0	0.013	4.6	LOS A	0.0	0.1	0.01	0.05	0.01	48.6
8	T1	21	1.0	22	1.0	0.013	0.0	LOS A	0.0	0.1	0.01	0.05	0.01	49.0
9u	U	1	1.0	1	1.0	0.013	5.9	LOS A	0.0	0.1	0.01	0.05	0.01	48.0
Approach		23	1.0	24	1.0	0.013	0.5	NA	0.0	0.1	0.01	0.05	0.01	48.9
All Vehicles		76	1.0	80	1.0	0.017	2.2	NA	0.1	0.4	0.05	0.25	0.05	45.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2023 BG PM (Site Folder: 7. Paulsgrove St / Spearing Pde BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Paulsgrove St (South)														
2	T1	19	1.0	20	1.0	0.020	0.0	LOS A	0.1	0.5	0.06	0.23	0.06	46.7
3	R2	14	1.0	15	1.0	0.020	3.7	LOS A	0.1	0.5	0.06	0.23	0.06	45.0
3u	U	1	1.0	1	1.0	0.020	4.9	LOS A	0.1	0.5	0.06	0.23	0.06	32.1
Approach		34	1.0	36	1.0	0.020	1.7	NA	0.1	0.5	0.06	0.23	0.06	45.8
East: Spearing Pde (East)														
4	L2	7	1.0	7	1.0	0.006	4.6	LOS A	0.0	0.2	0.05	0.53	0.05	39.8
6	R2	1	1.0	1	1.0	0.006	4.7	LOS A	0.0	0.2	0.05	0.53	0.05	44.1
6u	U	1	1.0	1	1.0	0.006	5.9	LOS A	0.0	0.2	0.05	0.53	0.05	43.9
Approach		9	1.0	9	1.0	0.006	4.8	LOS A	0.0	0.2	0.05	0.53	0.05	41.1
North: Paulsgrove St (North)														
7	L2	9	1.0	9	1.0	0.011	4.6	LOS A	0.0	0.1	0.02	0.29	0.02	46.5
8	T1	9	1.0	9	1.0	0.011	0.0	LOS A	0.0	0.1	0.02	0.29	0.02	45.5
9u	U	1	1.0	1	1.0	0.011	5.9	LOS A	0.0	0.1	0.02	0.29	0.02	46.0
Approach		19	1.0	20	1.0	0.011	2.5	NA	0.0	0.1	0.02	0.29	0.02	46.1
All Vehicles		62	1.0	65	1.0	0.020	2.4	NA	0.1	0.5	0.04	0.29	0.04	45.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2028 BG AM (Site Folder: 7. Paulsgrove St / Spearing Pde BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
2	T1	19	1.0	20	1.0	0.017	0.0	LOSA	0.1	0.4	0.06	0.19	0.06	47.2
3	R2	8	1.0	8	1.0	0.017	3.7	LOSA	0.1	0.4	0.06	0.19	0.06	45.4
3u	U	2	1.0	2	1.0	0.017	4.9	LOSA	0.1	0.4	0.06	0.19	0.06	33.0
Approach		29	1.0	31	1.0	0.017	1.4	NA	0.1	0.4	0.06	0.19	0.06	46.2
East: Spearing Pde (East)														
4	L2	18	1.0	19	1.0	0.017	4.6	LOSA	0.1	0.4	0.07	0.51	0.07	39.7
6	R2	5	1.0	5	1.0	0.017	4.7	LOSA	0.1	0.4	0.07	0.51	0.07	44.0
6u	U	1	1.0	1	1.0	0.017	5.8	LOSA	0.1	0.4	0.07	0.51	0.07	43.8
Approach		24	1.0	25	1.0	0.017	4.7	LOSA	0.1	0.4	0.07	0.51	0.07	41.2
North: Paulsgrove St (North)														
7	L2	1	1.0	1	1.0	0.013	4.6	LOSA	0.0	0.1	0.01	0.05	0.01	48.6
8	T1	21	1.0	22	1.0	0.013	0.0	LOSA	0.0	0.1	0.01	0.05	0.01	49.0
9u	U	1	1.0	1	1.0	0.013	5.9	LOSA	0.0	0.1	0.01	0.05	0.01	48.0
Approach		23	1.0	24	1.0	0.013	0.5	NA	0.0	0.1	0.01	0.05	0.01	48.9
All Vehicles		76	1.0	80	1.0	0.017	2.2	NA	0.1	0.4	0.05	0.25	0.05	45.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2028 BG PM (Site Folder: 7. Paulsgrove St / Spearing Pde BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
2	T1	19	1.0	20	1.0	0.020	0.0	LOS A	0.1	0.5	0.06	0.23	0.06	46.7
3	R2	14	1.0	15	1.0	0.020	3.7	LOS A	0.1	0.5	0.06	0.23	0.06	45.0
3u	U	1	1.0	1	1.0	0.020	4.9	LOS A	0.1	0.5	0.06	0.23	0.06	32.1
Approach		34	1.0	36	1.0	0.020	1.7	NA	0.1	0.5	0.06	0.23	0.06	45.8
East: Spearing Pde (East)														
4	L2	7	1.0	7	1.0	0.006	4.6	LOS A	0.0	0.2	0.05	0.53	0.05	39.8
6	R2	1	1.0	1	1.0	0.006	4.7	LOS A	0.0	0.2	0.05	0.53	0.05	44.1
6u	U	1	1.0	1	1.0	0.006	5.9	LOS A	0.0	0.2	0.05	0.53	0.05	43.9
Approach		9	1.0	9	1.0	0.006	4.8	LOS A	0.0	0.2	0.05	0.53	0.05	41.1
North: Paulsgrove St (North)														
7	L2	9	1.0	9	1.0	0.011	4.6	LOS A	0.0	0.1	0.02	0.29	0.02	46.5
8	T1	9	1.0	9	1.0	0.011	0.0	LOS A	0.0	0.1	0.02	0.29	0.02	45.5
9u	U	1	1.0	1	1.0	0.011	5.9	LOS A	0.0	0.1	0.02	0.29	0.02	46.0
Approach		19	1.0	20	1.0	0.011	2.5	NA	0.0	0.1	0.02	0.29	0.02	46.1
All Vehicles		62	1.0	65	1.0	0.020	2.4	NA	0.1	0.5	0.04	0.29	0.04	45.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2033 BG AM (Site Folder: 7. Paulsgrove St / Spearing Pde BG)]

Created by: RM

Reviewd by:

Project number:

Site Category: Existing Design

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
2	T1	20	1.0	21	1.0	0.018	0.0	LOS A	0.1	0.4	0.06	0.19	0.06	47.3
3	R2	8	1.0	8	1.0	0.018	3.7	LOS A	0.1	0.4	0.06	0.19	0.06	45.5
3u	U	2	1.0	2	1.0	0.018	4.9	LOS A	0.1	0.4	0.06	0.19	0.06	33.1
Approach		30	1.0	32	1.0	0.018	1.3	NA	0.1	0.4	0.06	0.19	0.06	46.4
East: Spearing Pde (East)														
4	L2	19	1.0	20	1.0	0.018	4.6	LOS A	0.1	0.5	0.08	0.51	0.08	39.7
6	R2	5	1.0	5	1.0	0.018	4.7	LOS A	0.1	0.5	0.08	0.51	0.08	44.0
6u	U	1	1.0	1	1.0	0.018	5.8	LOS A	0.1	0.5	0.08	0.51	0.08	43.8
Approach		25	1.0	26	1.0	0.018	4.7	LOS A	0.1	0.5	0.08	0.51	0.08	41.1
North: Paulsgrove St (North)														
7	L2	1	1.0	1	1.0	0.014	4.6	LOS A	0.0	0.1	0.01	0.05	0.01	48.6
8	T1	22	1.0	23	1.0	0.014	0.0	LOS A	0.0	0.1	0.01	0.05	0.01	49.1
9u	U	1	1.0	1	1.0	0.014	5.9	LOS A	0.0	0.1	0.01	0.05	0.01	48.0
Approach		24	1.0	25	1.0	0.014	0.4	NA	0.0	0.1	0.01	0.05	0.01	49.0
All Vehicles		79	1.0	83	1.0	0.018	2.1	NA	0.1	0.5	0.05	0.25	0.05	45.1

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

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

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.

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Project: \\Au2005-pfss01\shared_projects\304000956\technical\modelling\ss\23 07 24 - 304000956 - Gwynneville (Individual Intersections Only) - RM.sip9

MOVEMENT SUMMARY

Site: 101 [2033 BG PM (Site Folder: 7. Paulsgrove St / Spearing Pde BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
2	T1	20	1.0	21	1.0	0.021	0.0	LOSA	0.1	0.6	0.06	0.23	0.06	46.6
3	R2	15	1.0	16	1.0	0.021	3.7	LOSA	0.1	0.6	0.06	0.23	0.06	44.9
3u	U	1	1.0	1	1.0	0.021	4.9	LOSA	0.1	0.6	0.06	0.23	0.06	32.0
Approach		36	1.0	38	1.0	0.021	1.7	NA	0.1	0.6	0.06	0.23	0.06	45.7
East: Spearing Pde (East)														
4	L2	7	1.0	7	1.0	0.006	4.6	LOSA	0.0	0.2	0.05	0.53	0.05	39.8
6	R2	1	1.0	1	1.0	0.006	4.7	LOSA	0.0	0.2	0.05	0.53	0.05	44.0
6u	U	1	1.0	1	1.0	0.006	5.9	LOSA	0.0	0.2	0.05	0.53	0.05	43.9
Approach		9	1.0	9	1.0	0.006	4.8	LOSA	0.0	0.2	0.05	0.53	0.05	41.0
North: Paulsgrove St (North)														
7	L2	10	1.0	11	1.0	0.012	4.6	LOSA	0.0	0.1	0.02	0.29	0.02	46.6
8	T1	10	1.0	11	1.0	0.012	0.0	LOSA	0.0	0.1	0.02	0.29	0.02	45.5
9u	U	1	1.0	1	1.0	0.012	5.9	LOSA	0.0	0.1	0.02	0.29	0.02	46.0
Approach		21	1.0	22	1.0	0.012	2.5	NA	0.0	0.1	0.02	0.29	0.02	46.2
All Vehicles		66	1.0	69	1.0	0.021	2.4	NA	0.1	0.6	0.05	0.29	0.05	45.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2038 BG AM (Site Folder: 7. Paulsgrove St / Spearing Pde BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
2	T1	21	1.0	22	1.0	0.019	0.0	LOS A	0.1	0.4	0.06	0.19	0.06	47.2
3	R2	9	1.0	9	1.0	0.019	3.7	LOS A	0.1	0.4	0.06	0.19	0.06	45.4
3u	U	2	1.0	2	1.0	0.019	5.0	LOS A	0.1	0.4	0.06	0.19	0.06	33.0
Approach		32	1.0	34	1.0	0.019	1.4	NA	0.1	0.4	0.06	0.19	0.06	46.3
East: Spearing Pde (East)														
4	L2	20	1.0	21	1.0	0.019	4.6	LOS A	0.1	0.5	0.08	0.51	0.08	39.7
6	R2	6	1.0	6	1.0	0.019	4.8	LOS A	0.1	0.5	0.08	0.51	0.08	44.0
6u	U	1	1.0	1	1.0	0.019	5.8	LOS A	0.1	0.5	0.08	0.51	0.08	43.8
Approach		27	1.0	28	1.0	0.019	4.7	LOS A	0.1	0.5	0.08	0.51	0.08	41.2
North: Paulsgrove St (North)														
7	L2	1	1.0	1	1.0	0.014	4.6	LOS A	0.0	0.1	0.01	0.05	0.01	48.7
8	T1	23	1.0	24	1.0	0.014	0.0	LOS A	0.0	0.1	0.01	0.05	0.01	49.1
9u	U	1	1.0	1	1.0	0.014	5.9	LOS A	0.0	0.1	0.01	0.05	0.01	48.1
Approach		25	1.0	26	1.0	0.014	0.4	NA	0.0	0.1	0.01	0.05	0.01	49.0
All Vehicles		84	1.0	88	1.0	0.019	2.2	NA	0.1	0.5	0.05	0.25	0.05	45.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2038 BG PM (Site Folder: 7. Paulsgrove St / Spearing Pde BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
2	T1	21	1.0	22	1.0	0.022	0.0	LOS A	0.1	0.6	0.06	0.24	0.06	46.6
3	R2	16	1.0	17	1.0	0.022	3.7	LOS A	0.1	0.6	0.06	0.24	0.06	44.9
3u	U	1	1.0	1	1.0	0.022	4.9	LOS A	0.1	0.6	0.06	0.24	0.06	32.0
Approach		38	1.0	40	1.0	0.022	1.7	NA	0.1	0.6	0.06	0.24	0.06	45.7
East: Spearing Pde (East)														
4	L2	8	1.0	8	1.0	0.007	4.6	LOS A	0.0	0.2	0.05	0.52	0.05	39.8
6	R2	1	1.0	1	1.0	0.007	4.7	LOS A	0.0	0.2	0.05	0.52	0.05	44.1
6u	U	1	1.0	1	1.0	0.007	5.9	LOS A	0.0	0.2	0.05	0.52	0.05	43.9
Approach		10	1.0	11	1.0	0.007	4.7	LOS A	0.0	0.2	0.05	0.52	0.05	40.9
North: Paulsgrove St (North)														
7	L2	10	1.0	11	1.0	0.012	4.6	LOS A	0.0	0.1	0.02	0.29	0.02	46.6
8	T1	10	1.0	11	1.0	0.012	0.0	LOS A	0.0	0.1	0.02	0.29	0.02	45.5
9u	U	1	1.0	1	1.0	0.012	5.9	LOS A	0.0	0.1	0.02	0.29	0.02	46.0
Approach		21	1.0	22	1.0	0.012	2.5	NA	0.0	0.1	0.02	0.29	0.02	46.2
All Vehicles		69	1.0	73	1.0	0.022	2.4	NA	0.1	0.6	0.05	0.29	0.05	45.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2023 BG AM (Site Folder: 8. Paulsgrove St / Leahy Cres BG)]

Created by: RM

Reviewed by:

Project number:

Site Category: Existing Design

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Paulsgrove St (South)														
2	T1	20	1.0	21	1.0	0.013	0.0	LOS A	0.0	0.1	0.02	0.06	0.02	49.0
3	R2	1	1.0	1	1.0	0.013	4.7	LOS A	0.0	0.1	0.02	0.06	0.02	44.6
3u	U	1	1.0	1	1.0	0.013	5.9	LOS A	0.0	0.1	0.02	0.06	0.02	45.9
Approach		22	1.0	23	1.0	0.013	0.5	NA	0.0	0.1	0.02	0.06	0.02	48.7
East: Leahy Cres (East)														
4	L2	5	1.0	5	1.0	0.008	4.6	LOS A	0.0	0.2	0.03	0.55	0.03	38.0
6	R2	4	1.0	4	1.0	0.008	4.8	LOS A	0.0	0.2	0.03	0.55	0.03	38.8
6u	U	1	1.0	1	1.0	0.008	5.8	LOS A	0.0	0.2	0.03	0.55	0.03	35.2
Approach		10	1.0	11	1.0	0.008	4.8	LOS A	0.0	0.2	0.03	0.55	0.03	38.1
North: Paulsgrove St (North)														
7	L2	1	1.0	1	1.0	0.010	4.6	LOS A	0.0	0.1	0.02	0.07	0.02	46.9
8	T1	15	1.0	16	1.0	0.010	0.0	LOS A	0.0	0.1	0.02	0.07	0.02	48.7
9u	U	1	1.0	1	1.0	0.010	5.9	LOS A	0.0	0.1	0.02	0.07	0.02	46.9
Approach		17	1.0	18	1.0	0.010	0.6	NA	0.0	0.1	0.02	0.07	0.02	48.5
All Vehicles		49	1.0	52	1.0	0.013	1.4	NA	0.0	0.2	0.02	0.16	0.02	46.5

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

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

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.

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Organisation: STANTEC NEW ZEALAND | Licence: NETWORK / Enterprise | Processed: Tuesday, 25 July 2023 9:29:30 AM

Project: \\Au2005-pfss01\shared_projects\304000956\technical\modelling\ss\23 07 24 - 304000956 - Gwynneville (Individual Intersections Only) - RM.sip9

MOVEMENT SUMMARY

Site: 101 [2023 BG PM (Site Folder: 8. Paulsgrove St / Leahy Cres BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
2	T1	12	1.0	13	1.0	0.013	0.0	LOSA	0.0	0.4	0.04	0.26	0.04	45.8
3	R2	9	1.0	9	1.0	0.013	4.7	LOSA	0.0	0.4	0.04	0.26	0.04	40.9
3u	U	1	1.0	1	1.0	0.013	5.9	LOSA	0.0	0.4	0.04	0.26	0.04	42.5
Approach		22	1.0	23	1.0	0.013	2.2	NA	0.0	0.4	0.04	0.26	0.04	43.9
East: Leahy Cres (East)														
4	L2	7	1.0	7	1.0	0.007	4.6	LOSA	0.0	0.2	0.04	0.53	0.04	38.0
6	R2	2	1.0	2	1.0	0.007	4.8	LOSA	0.0	0.2	0.04	0.53	0.04	38.8
6u	U	1	1.0	1	1.0	0.007	5.8	LOSA	0.0	0.2	0.04	0.53	0.04	35.2
Approach		10	1.0	11	1.0	0.007	4.8	LOSA	0.0	0.2	0.04	0.53	0.04	38.0
North: Paulsgrove St (North)														
7	L2	1	1.0	1	1.0	0.006	4.6	LOSA	0.0	0.1	0.02	0.12	0.02	46.1
8	T1	8	1.0	8	1.0	0.006	0.0	LOSA	0.0	0.1	0.02	0.12	0.02	47.9
9u	U	1	1.0	1	1.0	0.006	5.9	LOSA	0.0	0.1	0.02	0.12	0.02	46.2
Approach		10	1.0	11	1.0	0.006	1.1	NA	0.0	0.1	0.02	0.12	0.02	47.5
All Vehicles		42	1.0	44	1.0	0.013	2.5	NA	0.0	0.4	0.04	0.29	0.04	43.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2028 BG AM (Site Folder: 8. Paulsgrove St / Leahy Cres BG)]

Created by: RM

Reviewed by:

Project number:

Site Category: Existing Design

Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
2	T1	20	1.0	21	1.0	0.013	0.0	LOS A	0.0	0.1	0.02	0.06	0.02	49.0
3	R2	1	1.0	1	1.0	0.013	4.7	LOS A	0.0	0.1	0.02	0.06	0.02	44.6
3u	U	1	1.0	1	1.0	0.013	5.9	LOS A	0.0	0.1	0.02	0.06	0.02	45.9
Approach		22	1.0	23	1.0	0.013	0.5	NA	0.0	0.1	0.02	0.06	0.02	48.7
East: Leahy Cres (East)														
4	L2	5	1.0	5	1.0	0.008	4.6	LOS A	0.0	0.2	0.03	0.55	0.03	38.0
6	R2	4	1.0	4	1.0	0.008	4.8	LOS A	0.0	0.2	0.03	0.55	0.03	38.8
6u	U	1	1.0	1	1.0	0.008	5.8	LOS A	0.0	0.2	0.03	0.55	0.03	35.2
Approach		10	1.0	11	1.0	0.008	4.8	LOS A	0.0	0.2	0.03	0.55	0.03	38.1
North: Paulsgrove St (North)														
7	L2	1	1.0	1	1.0	0.010	4.6	LOS A	0.0	0.1	0.02	0.07	0.02	46.9
8	T1	15	1.0	16	1.0	0.010	0.0	LOS A	0.0	0.1	0.02	0.07	0.02	48.7
9u	U	1	1.0	1	1.0	0.010	5.9	LOS A	0.0	0.1	0.02	0.07	0.02	46.9
Approach		17	1.0	18	1.0	0.010	0.6	NA	0.0	0.1	0.02	0.07	0.02	48.5
All Vehicles		49	1.0	52	1.0	0.013	1.4	NA	0.0	0.2	0.02	0.16	0.02	46.5

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

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

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.

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Organisation: STANTEC NEW ZEALAND | Licence: NETWORK / Enterprise | Processed: Monday, 24 July 2023 4:58:23 PM

Project: \\Au2005-pfss01\shared_projects\304000956\technical\modelling\ss\23 07 24 - 304000956 - Gwynneville (Individual Intersections Only) - RM.sip9

MOVEMENT SUMMARY

Site: 101 [2028 BG PM (Site Folder: 8. Paulsgrove St / Leahy Cres BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
2	T1	12	1.0	13	1.0	0.013	0.0	LOS A	0.0	0.4	0.04	0.26	0.04	45.8
3	R2	9	1.0	9	1.0	0.013	4.7	LOS A	0.0	0.4	0.04	0.26	0.04	40.9
3u	U	1	1.0	1	1.0	0.013	5.9	LOS A	0.0	0.4	0.04	0.26	0.04	42.5
Approach		22	1.0	23	1.0	0.013	2.2	NA	0.0	0.4	0.04	0.26	0.04	43.9
East: Leahy Cres (East)														
4	L2	7	1.0	7	1.0	0.007	4.6	LOS A	0.0	0.2	0.04	0.53	0.04	38.0
6	R2	2	1.0	2	1.0	0.007	4.8	LOS A	0.0	0.2	0.04	0.53	0.04	38.8
6u	U	1	1.0	1	1.0	0.007	5.8	LOS A	0.0	0.2	0.04	0.53	0.04	35.2
Approach		10	1.0	11	1.0	0.007	4.8	LOS A	0.0	0.2	0.04	0.53	0.04	38.0
North: Paulsgrove St (North)														
7	L2	1	1.0	1	1.0	0.006	4.6	LOS A	0.0	0.1	0.02	0.12	0.02	46.1
8	T1	8	1.0	8	1.0	0.006	0.0	LOS A	0.0	0.1	0.02	0.12	0.02	47.9
9u	U	1	1.0	1	1.0	0.006	5.9	LOS A	0.0	0.1	0.02	0.12	0.02	46.2
Approach		10	1.0	11	1.0	0.006	1.1	NA	0.0	0.1	0.02	0.12	0.02	47.5
All Vehicles		42	1.0	44	1.0	0.013	2.5	NA	0.0	0.4	0.04	0.29	0.04	43.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2033 BG AM (Site Folder: 8. Paulsgrove St / Leahy Cres BG)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
2	T1	21	1.0	22	1.0	0.013	0.0	LOS A	0.0	0.1	0.02	0.06	0.02	49.0
3	R2	1	1.0	1	1.0	0.013	4.7	LOS A	0.0	0.1	0.02	0.06	0.02	44.6
3u	U	1	1.0	1	1.0	0.013	5.9	LOS A	0.0	0.1	0.02	0.06	0.02	45.9
Approach		23	1.0	24	1.0	0.013	0.5	NA	0.0	0.1	0.02	0.06	0.02	48.7
East: Leahy Cres (East)														
4	L2	5	1.0	5	1.0	0.008	4.6	LOS A	0.0	0.2	0.03	0.55	0.03	38.0
6	R2	4	1.0	4	1.0	0.008	4.8	LOS A	0.0	0.2	0.03	0.55	0.03	38.8
6u	U	1	1.0	1	1.0	0.008	5.8	LOS A	0.0	0.2	0.03	0.55	0.03	35.2
Approach		10	1.0	11	1.0	0.008	4.8	LOS A	0.0	0.2	0.03	0.55	0.03	38.1
North: Paulsgrove St (North)														
7	L2	1	1.0	1	1.0	0.011	4.6	LOS A	0.0	0.1	0.02	0.07	0.02	47.0
8	T1	16	1.0	17	1.0	0.011	0.0	LOS A	0.0	0.1	0.02	0.07	0.02	48.8
9u	U	1	1.0	1	1.0	0.011	5.9	LOS A	0.0	0.1	0.02	0.07	0.02	46.9
Approach		18	1.0	19	1.0	0.011	0.6	NA	0.0	0.1	0.02	0.07	0.02	48.6
All Vehicles		51	1.0	54	1.0	0.013	1.4	NA	0.0	0.2	0.02	0.16	0.02	46.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2033 BG PM (Site Folder: 8. Paulsgrove St / Leahy Cres BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Paulsgrove St (South)														
2	T1	13	1.0	14	1.0	0.014	0.0	LOS A	0.1	0.4	0.04	0.26	0.04	45.8
3	R2	10	1.0	11	1.0	0.014	4.7	LOS A	0.1	0.4	0.04	0.26	0.04	40.9
3u	U	1	1.0	1	1.0	0.014	5.9	LOS A	0.1	0.4	0.04	0.26	0.04	42.5
Approach		24	1.0	25	1.0	0.014	2.2	NA	0.1	0.4	0.04	0.26	0.04	43.9
East: Leahy Cres (East)														
4	L2	7	1.0	7	1.0	0.007	4.6	LOS A	0.0	0.2	0.04	0.53	0.04	38.0
6	R2	2	1.0	2	1.0	0.007	4.8	LOS A	0.0	0.2	0.04	0.53	0.04	38.8
6u	U	1	1.0	1	1.0	0.007	5.8	LOS A	0.0	0.2	0.04	0.53	0.04	35.2
Approach		10	1.0	11	1.0	0.007	4.8	LOS A	0.0	0.2	0.04	0.53	0.04	38.0
North: Paulsgrove St (North)														
7	L2	1	1.0	1	1.0	0.006	4.6	LOS A	0.0	0.1	0.02	0.12	0.02	46.1
8	T1	8	1.0	8	1.0	0.006	0.0	LOS A	0.0	0.1	0.02	0.12	0.02	47.9
9u	U	1	1.0	1	1.0	0.006	5.9	LOS A	0.0	0.1	0.02	0.12	0.02	46.2
Approach		10	1.0	11	1.0	0.006	1.1	NA	0.0	0.1	0.02	0.12	0.02	47.5
All Vehicles		44	1.0	46	1.0	0.014	2.5	NA	0.1	0.4	0.04	0.29	0.04	43.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2038 BG AM (Site Folder: 8. Paulsgrove St / Leahy Cres BG)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
2	T1	22	1.0	23	1.0	0.014	0.0	LOS A	0.0	0.1	0.02	0.05	0.02	49.0
3	R2	1	1.0	1	1.0	0.014	4.7	LOS A	0.0	0.1	0.02	0.05	0.02	44.7
3u	U	1	1.0	1	1.0	0.014	5.9	LOS A	0.0	0.1	0.02	0.05	0.02	45.9
Approach		24	1.0	25	1.0	0.014	0.5	NA	0.0	0.1	0.02	0.05	0.02	48.8
East: Leahy Cres (East)														
4	L2	6	1.0	6	1.0	0.008	4.6	LOS A	0.0	0.2	0.03	0.54	0.03	38.1
6	R2	4	1.0	4	1.0	0.008	4.8	LOS A	0.0	0.2	0.03	0.54	0.03	38.8
6u	U	1	1.0	1	1.0	0.008	5.8	LOS A	0.0	0.2	0.03	0.54	0.03	35.2
Approach		11	1.0	12	1.0	0.008	4.8	LOS A	0.0	0.2	0.03	0.54	0.03	38.2
North: Paulsgrove St (North)														
7	L2	1	1.0	1	1.0	0.011	4.6	LOS A	0.0	0.1	0.02	0.07	0.02	47.1
8	T1	17	1.0	18	1.0	0.011	0.0	LOS A	0.0	0.1	0.02	0.07	0.02	48.8
9u	U	1	1.0	1	1.0	0.011	5.9	LOS A	0.0	0.1	0.02	0.07	0.02	47.0
Approach		19	1.0	20	1.0	0.011	0.6	NA	0.0	0.1	0.02	0.07	0.02	48.6
All Vehicles		54	1.0	57	1.0	0.014	1.4	NA	0.0	0.2	0.02	0.16	0.02	46.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2038 BG PM (Site Folder: 8. Paulsgrove St / Leahy Cres BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Paulsgrove St (South)														
2	T1	13	1.0	14	1.0	0.014	0.0	LOS A	0.1	0.4	0.04	0.26	0.04	45.8
3	R2	10	1.0	11	1.0	0.014	4.7	LOS A	0.1	0.4	0.04	0.26	0.04	40.9
3u	U	1	1.0	1	1.0	0.014	5.9	LOS A	0.1	0.4	0.04	0.26	0.04	42.5
Approach		24	1.0	25	1.0	0.014	2.2	NA	0.1	0.4	0.04	0.26	0.04	43.9
East: Leahy Cres (East)														
4	L2	8	1.0	8	1.0	0.008	4.6	LOS A	0.0	0.2	0.05	0.53	0.05	38.0
6	R2	2	1.0	2	1.0	0.008	4.8	LOS A	0.0	0.2	0.05	0.53	0.05	38.8
6u	U	1	1.0	1	1.0	0.008	5.8	LOS A	0.0	0.2	0.05	0.53	0.05	35.2
Approach		11	1.0	12	1.0	0.008	4.7	LOS A	0.0	0.2	0.05	0.53	0.05	38.0
North: Paulsgrove St (North)														
7	L2	1	1.0	1	1.0	0.007	4.6	LOS A	0.0	0.1	0.02	0.11	0.02	46.3
8	T1	9	1.0	9	1.0	0.007	0.0	LOS A	0.0	0.1	0.02	0.11	0.02	48.1
9u	U	1	1.0	1	1.0	0.007	5.9	LOS A	0.0	0.1	0.02	0.11	0.02	46.4
Approach		11	1.0	12	1.0	0.007	1.0	NA	0.0	0.1	0.02	0.11	0.02	47.7
All Vehicles		46	1.0	48	1.0	0.014	2.5	NA	0.1	0.4	0.04	0.29	0.04	43.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2023 BG AM (Site Folder: 9. Paulsgrove St / Madoline St BG)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
1	L2	3	1.0	3	1.0	0.014	4.6	LOS A	0.0	0.3	0.04	0.56	0.04	32.7
3	R2	14	1.0	15	1.0	0.014	4.8	LOS A	0.0	0.3	0.04	0.56	0.04	43.6
3u	U	1	1.0	1	1.0	0.014	5.8	LOS A	0.0	0.3	0.04	0.56	0.04	44.4
Approach		18	1.0	19	1.0	0.014	4.8	LOS A	0.0	0.3	0.04	0.56	0.04	42.1
East: Madoline St (East)														
4	L2	12	1.0	13	1.0	0.011	4.6	LOS A	0.0	0.2	0.01	0.45	0.01	45.3
5	T1	3	1.0	3	1.0	0.011	0.0	LOS A	0.0	0.2	0.01	0.45	0.01	43.0
6u	U	2	1.0	2	1.0	0.011	5.8	LOS A	0.0	0.2	0.01	0.45	0.01	44.3
Approach		17	1.0	18	1.0	0.011	3.9	NA	0.0	0.2	0.01	0.45	0.01	44.9
West: Madoline St (West)														
11	T1	3	1.0	3	1.0	0.003	0.0	LOS A	0.0	0.1	0.02	0.26	0.02	46.7
12	R2	1	1.0	1	1.0	0.003	4.0	LOS A	0.0	0.1	0.02	0.26	0.02	44.8
12u	U	1	1.0	1	1.0	0.003	4.9	LOS A	0.0	0.1	0.02	0.26	0.02	12.3
Approach		5	1.0	5	1.0	0.003	1.8	NA	0.0	0.1	0.02	0.26	0.02	38.6
All Vehicles		40	1.0	42	1.0	0.014	4.1	NA	0.0	0.3	0.03	0.48	0.03	43.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2023 BG PM (Site Folder: 9. Paulsgrove St / Madoline St BG)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
1	L2	1	1.0	1	1.0	0.013	4.6	LOS A	0.0	0.3	0.04	0.57	0.04	32.7
3	R2	14	1.0	15	1.0	0.013	4.8	LOS A	0.0	0.3	0.04	0.57	0.04	43.6
3u	U	1	1.0	1	1.0	0.013	5.8	LOS A	0.0	0.3	0.04	0.57	0.04	44.4
Approach		16	1.0	17	1.0	0.013	4.9	LOS A	0.0	0.3	0.04	0.57	0.04	43.1
East: Madoline St (East)														
4	L2	6	1.0	6	1.0	0.008	4.6	LOS A	0.0	0.2	0.01	0.53	0.01	44.7
5	T1	1	1.0	1	1.0	0.008	0.0	LOS A	0.0	0.2	0.01	0.53	0.01	42.0
6u	U	4	1.0	4	1.0	0.008	5.8	LOS A	0.0	0.2	0.01	0.53	0.01	43.6
Approach		11	1.0	12	1.0	0.008	4.6	NA	0.0	0.2	0.01	0.53	0.01	44.2
West: Madoline St (West)														
11	T1	1	1.0	1	1.0	0.003	0.0	LOS A	0.0	0.1	0.02	0.48	0.02	44.0
12	R2	3	1.0	3	1.0	0.003	4.0	LOS A	0.0	0.1	0.02	0.48	0.02	42.7
12u	U	1	1.0	1	1.0	0.003	4.9	LOS A	0.0	0.1	0.02	0.48	0.02	11.7
Approach		5	1.0	5	1.0	0.003	3.4	NA	0.0	0.1	0.02	0.48	0.02	36.6
All Vehicles		32	1.0	34	1.0	0.013	4.5	NA	0.0	0.3	0.03	0.54	0.03	42.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2028 BG AM (Site Folder: 9. Paulsgrove St / Madoline St BG)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
1	L2	3	1.0	3	1.0	0.014	4.6	LOS A	0.0	0.3	0.04	0.56	0.04	32.7
3	R2	14	1.0	15	1.0	0.014	4.8	LOS A	0.0	0.3	0.04	0.56	0.04	43.6
3u	U	1	1.0	1	1.0	0.014	5.8	LOS A	0.0	0.3	0.04	0.56	0.04	44.4
Approach		18	1.0	19	1.0	0.014	4.8	LOS A	0.0	0.3	0.04	0.56	0.04	42.1
East: Madoline St (East)														
4	L2	12	1.0	13	1.0	0.011	4.6	LOS A	0.0	0.2	0.01	0.45	0.01	45.3
5	T1	3	1.0	3	1.0	0.011	0.0	LOS A	0.0	0.2	0.01	0.45	0.01	43.0
6u	U	2	1.0	2	1.0	0.011	5.8	LOS A	0.0	0.2	0.01	0.45	0.01	44.3
Approach		17	1.0	18	1.0	0.011	3.9	NA	0.0	0.2	0.01	0.45	0.01	44.9
West: Madoline St (West)														
11	T1	3	1.0	3	1.0	0.003	0.0	LOS A	0.0	0.1	0.02	0.26	0.02	46.7
12	R2	1	1.0	1	1.0	0.003	4.0	LOS A	0.0	0.1	0.02	0.26	0.02	44.8
12u	U	1	1.0	1	1.0	0.003	4.9	LOS A	0.0	0.1	0.02	0.26	0.02	12.3
Approach		5	1.0	5	1.0	0.003	1.8	NA	0.0	0.1	0.02	0.26	0.02	38.6
All Vehicles		40	1.0	42	1.0	0.014	4.1	NA	0.0	0.3	0.03	0.48	0.03	43.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2028 BG PM (Site Folder: 9. Paulsgrove St / Madoline St BG)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
1	L2	1	1.0	1	1.0	0.013	4.6	LOS A	0.0	0.3	0.04	0.57	0.04	32.7
3	R2	14	1.0	15	1.0	0.013	4.8	LOS A	0.0	0.3	0.04	0.57	0.04	43.6
3u	U	1	1.0	1	1.0	0.013	5.8	LOS A	0.0	0.3	0.04	0.57	0.04	44.4
Approach		16	1.0	17	1.0	0.013	4.9	LOS A	0.0	0.3	0.04	0.57	0.04	43.1
East: Madoline St (East)														
4	L2	6	1.0	6	1.0	0.008	4.6	LOS A	0.0	0.2	0.01	0.53	0.01	44.7
5	T1	1	1.0	1	1.0	0.008	0.0	LOS A	0.0	0.2	0.01	0.53	0.01	42.0
6u	U	4	1.0	4	1.0	0.008	5.8	LOS A	0.0	0.2	0.01	0.53	0.01	43.6
Approach		11	1.0	12	1.0	0.008	4.6	NA	0.0	0.2	0.01	0.53	0.01	44.2
West: Madoline St (West)														
11	T1	1	1.0	1	1.0	0.003	0.0	LOS A	0.0	0.1	0.02	0.48	0.02	44.0
12	R2	3	1.0	3	1.0	0.003	4.0	LOS A	0.0	0.1	0.02	0.48	0.02	42.7
12u	U	1	1.0	1	1.0	0.003	4.9	LOS A	0.0	0.1	0.02	0.48	0.02	11.7
Approach		5	1.0	5	1.0	0.003	3.4	NA	0.0	0.1	0.02	0.48	0.02	36.6
All Vehicles		32	1.0	34	1.0	0.013	4.5	NA	0.0	0.3	0.03	0.54	0.03	42.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2033 BG AM (Site Folder: 9. Paulsgrove St / Madoline St BG)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
1	L2	3	1.0	3	1.0	0.015	4.6	LOS A	0.0	0.3	0.04	0.56	0.04	32.7
3	R2	15	1.0	16	1.0	0.015	4.8	LOS A	0.0	0.3	0.04	0.56	0.04	43.6
3u	U	1	1.0	1	1.0	0.015	5.8	LOS A	0.0	0.3	0.04	0.56	0.04	44.4
Approach		19	1.0	20	1.0	0.015	4.9	LOS A	0.0	0.3	0.04	0.56	0.04	42.2
East: Madoline St (East)														
4	L2	13	1.0	14	1.0	0.012	4.6	LOS A	0.0	0.2	0.01	0.46	0.01	45.3
5	T1	3	1.0	3	1.0	0.012	0.0	LOS A	0.0	0.2	0.01	0.46	0.01	43.0
6u	U	2	1.0	2	1.0	0.012	5.8	LOS A	0.0	0.2	0.01	0.46	0.01	44.2
Approach		18	1.0	19	1.0	0.012	4.0	NA	0.0	0.2	0.01	0.46	0.01	44.9
West: Madoline St (West)														
11	T1	3	1.0	3	1.0	0.003	0.0	LOS A	0.0	0.1	0.02	0.26	0.02	46.7
12	R2	1	1.0	1	1.0	0.003	4.0	LOS A	0.0	0.1	0.02	0.26	0.02	44.8
12u	U	1	1.0	1	1.0	0.003	4.9	LOS A	0.0	0.1	0.02	0.26	0.02	12.3
Approach		5	1.0	5	1.0	0.003	1.8	NA	0.0	0.1	0.02	0.26	0.02	38.6
All Vehicles		42	1.0	44	1.0	0.015	4.1	NA	0.0	0.3	0.03	0.48	0.03	43.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2033 BG PM (Site Folder: 9. Paulsgrove St / Madoline St BG)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
1	L2	1	1.0	1	1.0	0.014	4.6	LOS A	0.0	0.3	0.04	0.57	0.04	32.7
3	R2	15	1.0	16	1.0	0.014	4.8	LOS A	0.0	0.3	0.04	0.57	0.04	43.6
3u	U	1	1.0	1	1.0	0.014	5.8	LOS A	0.0	0.3	0.04	0.57	0.04	44.4
Approach		17	1.0	18	1.0	0.014	4.9	LOS A	0.0	0.3	0.04	0.57	0.04	43.1
East: Madoline St (East)														
4	L2	6	1.0	6	1.0	0.008	4.6	LOS A	0.0	0.2	0.01	0.53	0.01	44.7
5	T1	1	1.0	1	1.0	0.008	0.0	LOS A	0.0	0.2	0.01	0.53	0.01	42.0
6u	U	4	1.0	4	1.0	0.008	5.8	LOS A	0.0	0.2	0.01	0.53	0.01	43.6
Approach		11	1.0	12	1.0	0.008	4.6	NA	0.0	0.2	0.01	0.53	0.01	44.2
West: Madoline St (West)														
11	T1	1	1.0	1	1.0	0.003	0.0	LOS A	0.0	0.1	0.02	0.48	0.02	44.0
12	R2	3	1.0	3	1.0	0.003	4.0	LOS A	0.0	0.1	0.02	0.48	0.02	42.7
12u	U	1	1.0	1	1.0	0.003	4.9	LOS A	0.0	0.1	0.02	0.48	0.02	11.7
Approach		5	1.0	5	1.0	0.003	3.4	NA	0.0	0.1	0.02	0.48	0.02	36.6
All Vehicles		33	1.0	35	1.0	0.014	4.6	NA	0.0	0.3	0.03	0.54	0.03	42.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2038 BG AM (Site Folder: 9. Paulsgrove St / Madoline St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
1	L2	3	1.0	3	1.0	0.016	4.6	LOSA	0.1	0.4	0.04	0.56	0.04	32.7
3	R2	16	1.0	17	1.0	0.016	4.8	LOSA	0.1	0.4	0.04	0.56	0.04	43.6
3u	U	1	1.0	1	1.0	0.016	5.8	LOSA	0.1	0.4	0.04	0.56	0.04	44.4
Approach		20	1.0	21	1.0	0.016	4.9	LOSA	0.1	0.4	0.04	0.56	0.04	42.2
East: Madoline St (East)														
4	L2	13	1.0	14	1.0	0.012	4.6	LOSA	0.0	0.2	0.01	0.46	0.01	45.3
5	T1	3	1.0	3	1.0	0.012	0.0	LOSA	0.0	0.2	0.01	0.46	0.01	43.0
6u	U	2	1.0	2	1.0	0.012	5.8	LOSA	0.0	0.2	0.01	0.46	0.01	44.2
Approach		18	1.0	19	1.0	0.012	4.0	NA	0.0	0.2	0.01	0.46	0.01	44.9
West: Madoline St (West)														
11	T1	3	1.0	3	1.0	0.003	0.0	LOSA	0.0	0.1	0.02	0.26	0.02	46.7
12	R2	1	1.0	1	1.0	0.003	4.0	LOSA	0.0	0.1	0.02	0.26	0.02	44.8
12u	U	1	1.0	1	1.0	0.003	4.9	LOSA	0.0	0.1	0.02	0.26	0.02	12.3
Approach		5	1.0	5	1.0	0.003	1.8	NA	0.0	0.1	0.02	0.26	0.02	38.6
All Vehicles		43	1.0	45	1.0	0.016	4.1	NA	0.1	0.4	0.03	0.48	0.03	43.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2038 BG PM (Site Folder: 9. Paulsgrove St / Madoline St BG)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Paulsgrove St (South)														
1	L2	1	1.0	1	1.0	0.015	4.6	LOS A	0.0	0.3	0.04	0.57	0.04	32.7
3	R2	16	1.0	17	1.0	0.015	4.8	LOS A	0.0	0.3	0.04	0.57	0.04	43.6
3u	U	1	1.0	1	1.0	0.015	5.8	LOS A	0.0	0.3	0.04	0.57	0.04	44.4
Approach		18	1.0	19	1.0	0.015	4.9	LOS A	0.0	0.3	0.04	0.57	0.04	43.1
East: Madoline St (East)														
4	L2	7	1.0	7	1.0	0.009	4.6	LOS A	0.0	0.2	0.01	0.53	0.01	44.7
5	T1	1	1.0	1	1.0	0.009	0.0	LOS A	0.0	0.2	0.01	0.53	0.01	42.0
6u	U	4	1.0	4	1.0	0.009	5.8	LOS A	0.0	0.2	0.01	0.53	0.01	43.6
Approach		12	1.0	13	1.0	0.009	4.6	NA	0.0	0.2	0.01	0.53	0.01	44.2
West: Madoline St (West)														
11	T1	1	1.0	1	1.0	0.003	0.0	LOS A	0.0	0.1	0.02	0.48	0.02	44.0
12	R2	3	1.0	3	1.0	0.003	4.0	LOS A	0.0	0.1	0.02	0.48	0.02	42.7
12u	U	1	1.0	1	1.0	0.003	4.9	LOS A	0.0	0.1	0.02	0.48	0.02	11.7
Approach		5	1.0	5	1.0	0.003	3.4	NA	0.0	0.1	0.02	0.48	0.02	36.6
All Vehicles		35	1.0	37	1.0	0.015	4.6	NA	0.0	0.3	0.03	0.54	0.03	42.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2023 BG AM (Site Folder: 10. Madoline St / Sidney St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Sidney St (South)														
1	L2	3	1.0	3	1.0	0.005	4.6	LOSA	0.0	0.1	0.05	0.55	0.05	42.5
3	R2	2	1.0	2	1.0	0.005	4.9	LOSA	0.0	0.1	0.05	0.55	0.05	41.5
3u	U	1	1.0	1	1.0	0.005	5.8	LOSA	0.0	0.1	0.05	0.55	0.05	43.1
Approach		6	1.0	6	1.0	0.005	4.9	LOSA	0.0	0.1	0.05	0.55	0.05	42.3
East: Madoline St (East)														
4	L2	6	1.0	6	1.0	0.014	4.6	LOSA	0.0	0.1	0.01	0.16	0.01	46.9
5	T1	17	1.0	18	1.0	0.014	0.0	LOSA	0.0	0.1	0.01	0.16	0.01	47.4
6u	U	1	1.0	1	1.0	0.014	5.9	LOSA	0.0	0.1	0.01	0.16	0.01	45.3
Approach		24	1.0	25	1.0	0.014	1.4	NA	0.0	0.1	0.01	0.16	0.01	47.2
West: Madoline St (West)														
11	T1	20	1.0	21	1.0	0.016	0.0	LOSA	0.0	0.3	0.04	0.14	0.04	47.6
12	R2	4	1.0	4	1.0	0.016	4.8	LOSA	0.0	0.3	0.04	0.14	0.04	45.8
12u	U	2	1.0	2	1.0	0.016	5.9	LOSA	0.0	0.3	0.04	0.14	0.04	45.4
Approach		26	1.0	27	1.0	0.016	1.2	NA	0.0	0.3	0.04	0.14	0.04	47.1
All Vehicles		56	1.0	59	1.0	0.016	1.7	NA	0.0	0.3	0.03	0.20	0.03	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2023 BG PM (Site Folder: 10. Madoline St / Sidney St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Sidney St (South)														
1	L2	1	1.0	1	1.0	0.006	4.6	LOSA	0.0	0.1	0.05	0.57	0.05	42.5
3	R2	5	1.0	5	1.0	0.006	4.9	LOSA	0.0	0.1	0.05	0.57	0.05	41.5
3u	U	1	1.0	1	1.0	0.006	5.8	LOSA	0.0	0.1	0.05	0.57	0.05	43.0
Approach		7	1.0	7	1.0	0.006	5.0	LOSA	0.0	0.1	0.05	0.57	0.05	41.9
East: Madoline St (East)														
4	L2	5	1.0	5	1.0	0.013	4.6	LOSA	0.0	0.2	0.03	0.20	0.03	46.4
5	T1	13	1.0	14	1.0	0.013	0.0	LOSA	0.0	0.2	0.03	0.20	0.03	46.7
6u	U	2	1.0	2	1.0	0.013	5.9	LOSA	0.0	0.2	0.03	0.20	0.03	44.7
Approach		20	1.0	21	1.0	0.013	1.8	NA	0.0	0.2	0.03	0.20	0.03	46.4
West: Madoline St (West)														
11	T1	19	1.0	20	1.0	0.013	0.0	LOSA	0.0	0.1	0.02	0.09	0.02	48.5
12	R2	2	1.0	2	1.0	0.013	4.8	LOSA	0.0	0.1	0.02	0.09	0.02	46.5
12u	U	1	1.0	1	1.0	0.013	5.9	LOSA	0.0	0.1	0.02	0.09	0.02	46.3
Approach		22	1.0	23	1.0	0.013	0.7	NA	0.0	0.1	0.02	0.09	0.02	48.2
All Vehicles		49	1.0	52	1.0	0.013	1.8	NA	0.0	0.2	0.03	0.20	0.03	46.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2028 BG AM (Site Folder: 10. Madoline St / Sidney St BG)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Sidney St (South)														
1	L2	3	1.0	3	1.0	0.005	4.6	LOS A	0.0	0.1	0.05	0.55	0.05	42.5
3	R2	2	1.0	2	1.0	0.005	4.9	LOS A	0.0	0.1	0.05	0.55	0.05	41.5
3u	U	1	1.0	1	1.0	0.005	5.8	LOS A	0.0	0.1	0.05	0.55	0.05	43.1
Approach		6	1.0	6	1.0	0.005	4.9	LOS A	0.0	0.1	0.05	0.55	0.05	42.3
East: Madoline St (East)														
4	L2	6	1.0	6	1.0	0.014	4.6	LOS A	0.0	0.1	0.01	0.16	0.01	46.9
5	T1	17	1.0	18	1.0	0.014	0.0	LOS A	0.0	0.1	0.01	0.16	0.01	47.4
6u	U	1	1.0	1	1.0	0.014	5.9	LOS A	0.0	0.1	0.01	0.16	0.01	45.3
Approach		24	1.0	25	1.0	0.014	1.4	NA	0.0	0.1	0.01	0.16	0.01	47.2
West: Madoline St (West)														
11	T1	20	1.0	21	1.0	0.016	0.0	LOS A	0.0	0.3	0.04	0.14	0.04	47.6
12	R2	4	1.0	4	1.0	0.016	4.8	LOS A	0.0	0.3	0.04	0.14	0.04	45.8
12u	U	2	1.0	2	1.0	0.016	5.9	LOS A	0.0	0.3	0.04	0.14	0.04	45.4
Approach		26	1.0	27	1.0	0.016	1.2	NA	0.0	0.3	0.04	0.14	0.04	47.1
All Vehicles		56	1.0	59	1.0	0.016	1.7	NA	0.0	0.3	0.03	0.20	0.03	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2028 BG PM (Site Folder: 10. Madoline St / Sidney St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Sidney St (South)														
1	L2	1	1.0	1	1.0	0.006	4.6	LOSA	0.0	0.1	0.05	0.57	0.05	42.5
3	R2	5	1.0	5	1.0	0.006	4.9	LOSA	0.0	0.1	0.05	0.57	0.05	41.5
3u	U	1	1.0	1	1.0	0.006	5.8	LOSA	0.0	0.1	0.05	0.57	0.05	43.0
Approach		7	1.0	7	1.0	0.006	5.0	LOSA	0.0	0.1	0.05	0.57	0.05	41.9
East: Madoline St (East)														
4	L2	5	1.0	5	1.0	0.013	4.6	LOSA	0.0	0.2	0.03	0.20	0.03	46.4
5	T1	13	1.0	14	1.0	0.013	0.0	LOSA	0.0	0.2	0.03	0.20	0.03	46.7
6u	U	2	1.0	2	1.0	0.013	5.9	LOSA	0.0	0.2	0.03	0.20	0.03	44.7
Approach		20	1.0	21	1.0	0.013	1.8	NA	0.0	0.2	0.03	0.20	0.03	46.4
West: Madoline St (West)														
11	T1	19	1.0	20	1.0	0.013	0.0	LOSA	0.0	0.1	0.02	0.09	0.02	48.5
12	R2	2	1.0	2	1.0	0.013	4.8	LOSA	0.0	0.1	0.02	0.09	0.02	46.5
12u	U	1	1.0	1	1.0	0.013	5.9	LOSA	0.0	0.1	0.02	0.09	0.02	46.3
Approach		22	1.0	23	1.0	0.013	0.7	NA	0.0	0.1	0.02	0.09	0.02	48.2
All Vehicles		49	1.0	52	1.0	0.013	1.8	NA	0.0	0.2	0.03	0.20	0.03	46.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2033 BG AM (Site Folder: 10. Madoline St / Sidney St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Sidney St (South)														
1	L2	3	1.0	3	1.0	0.005	4.6	LOS A	0.0	0.1	0.06	0.55	0.06	42.5
3	R2	2	1.0	2	1.0	0.005	4.9	LOS A	0.0	0.1	0.06	0.55	0.06	41.5
3u	U	1	1.0	1	1.0	0.005	5.8	LOS A	0.0	0.1	0.06	0.55	0.06	43.1
Approach		6	1.0	6	1.0	0.005	4.9	LOS A	0.0	0.1	0.06	0.55	0.06	42.3
East: Madoline St (East)														
4	L2	6	1.0	6	1.0	0.015	4.6	LOS A	0.0	0.1	0.01	0.16	0.01	47.0
5	T1	18	1.0	19	1.0	0.015	0.0	LOS A	0.0	0.1	0.01	0.16	0.01	47.5
6u	U	1	1.0	1	1.0	0.015	5.9	LOS A	0.0	0.1	0.01	0.16	0.01	45.3
Approach		25	1.0	26	1.0	0.015	1.3	NA	0.0	0.1	0.01	0.16	0.01	47.3
West: Madoline St (West)														
11	T1	21	1.0	22	1.0	0.017	0.0	LOS A	0.0	0.3	0.04	0.14	0.04	47.6
12	R2	4	1.0	4	1.0	0.017	4.9	LOS A	0.0	0.3	0.04	0.14	0.04	45.9
12u	U	2	1.0	2	1.0	0.017	5.9	LOS A	0.0	0.3	0.04	0.14	0.04	45.5
Approach		27	1.0	28	1.0	0.017	1.2	NA	0.0	0.3	0.04	0.14	0.04	47.1
All Vehicles		58	1.0	61	1.0	0.017	1.6	NA	0.0	0.3	0.03	0.19	0.03	46.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2033 BG PM (Site Folder: 10. Madoline St / Sidney St BG)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Sidney St (South)														
1	L2	1	1.0	1	1.0	0.006	4.6	LOS A	0.0	0.1	0.05	0.57	0.05	42.5
3	R2	5	1.0	5	1.0	0.006	4.9	LOS A	0.0	0.1	0.05	0.57	0.05	41.5
3u	U	1	1.0	1	1.0	0.006	5.8	LOS A	0.0	0.1	0.05	0.57	0.05	43.0
Approach		7	1.0	7	1.0	0.006	5.0	LOS A	0.0	0.1	0.05	0.57	0.05	41.9
East: Madoline St (East)														
4	L2	5	1.0	5	1.0	0.013	4.6	LOS A	0.0	0.2	0.03	0.19	0.03	46.5
5	T1	14	1.0	15	1.0	0.013	0.0	LOS A	0.0	0.2	0.03	0.19	0.03	46.9
6u	U	2	1.0	2	1.0	0.013	5.9	LOS A	0.0	0.2	0.03	0.19	0.03	44.8
Approach		21	1.0	22	1.0	0.013	1.7	NA	0.0	0.2	0.03	0.19	0.03	46.6
West: Madoline St (West)														
11	T1	20	1.0	21	1.0	0.014	0.0	LOS A	0.0	0.1	0.02	0.08	0.02	48.6
12	R2	2	1.0	2	1.0	0.014	4.8	LOS A	0.0	0.1	0.02	0.08	0.02	46.6
12u	U	1	1.0	1	1.0	0.014	5.9	LOS A	0.0	0.1	0.02	0.08	0.02	46.4
Approach		23	1.0	24	1.0	0.014	0.7	NA	0.0	0.1	0.02	0.08	0.02	48.3
All Vehicles		51	1.0	54	1.0	0.014	1.7	NA	0.0	0.2	0.03	0.19	0.03	46.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2038 BG AM (Site Folder: 10. Madoline St / Sidney St BG)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Sidney St (South)														
1	L2	3	1.0	3	1.0	0.005	4.6	LOS A	0.0	0.1	0.06	0.55	0.06	42.5
3	R2	2	1.0	2	1.0	0.005	4.9	LOS A	0.0	0.1	0.06	0.55	0.06	41.5
3u	U	1	1.0	1	1.0	0.005	5.8	LOS A	0.0	0.1	0.06	0.55	0.06	43.1
Approach		6	1.0	6	1.0	0.005	4.9	LOS A	0.0	0.1	0.06	0.55	0.06	42.3
East: Madoline St (East)														
4	L2	7	1.0	7	1.0	0.016	4.6	LOS A	0.0	0.1	0.01	0.17	0.01	46.9
5	T1	19	1.0	20	1.0	0.016	0.0	LOS A	0.0	0.1	0.01	0.17	0.01	47.4
6u	U	1	1.0	1	1.0	0.016	5.9	LOS A	0.0	0.1	0.01	0.17	0.01	45.2
Approach		27	1.0	28	1.0	0.016	1.4	NA	0.0	0.1	0.01	0.17	0.01	47.1
West: Madoline St (West)														
11	T1	22	1.0	23	1.0	0.017	0.0	LOS A	0.0	0.3	0.04	0.13	0.04	47.7
12	R2	4	1.0	4	1.0	0.017	4.9	LOS A	0.0	0.3	0.04	0.13	0.04	45.9
12u	U	2	1.0	2	1.0	0.017	5.9	LOS A	0.0	0.3	0.04	0.13	0.04	45.5
Approach		28	1.0	29	1.0	0.017	1.1	NA	0.0	0.3	0.04	0.13	0.04	47.2
All Vehicles		61	1.0	64	1.0	0.017	1.6	NA	0.0	0.3	0.03	0.19	0.03	46.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2038 BG PM (Site Folder: 10. Madoline St / Sidney St BG)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Sidney St (South)														
1	L2	1	1.0	1	1.0	0.007	4.6	LOS A	0.0	0.1	0.05	0.57	0.05	42.5
3	R2	6	1.0	6	1.0	0.007	4.9	LOS A	0.0	0.1	0.05	0.57	0.05	41.5
3u	U	1	1.0	1	1.0	0.007	5.8	LOS A	0.0	0.1	0.05	0.57	0.05	43.0
Approach		8	1.0	8	1.0	0.007	5.0	LOS A	0.0	0.1	0.05	0.57	0.05	41.8
East: Madoline St (East)														
4	L2	6	1.0	6	1.0	0.014	4.6	LOS A	0.0	0.2	0.03	0.21	0.03	46.3
5	T1	14	1.0	15	1.0	0.014	0.0	LOS A	0.0	0.2	0.03	0.21	0.03	46.7
6u	U	2	1.0	2	1.0	0.014	5.9	LOS A	0.0	0.2	0.03	0.21	0.03	44.6
Approach		22	1.0	23	1.0	0.014	1.8	NA	0.0	0.2	0.03	0.21	0.03	46.4
West: Madoline St (West)														
11	T1	21	1.0	22	1.0	0.014	0.0	LOS A	0.0	0.1	0.02	0.08	0.02	48.6
12	R2	2	1.0	2	1.0	0.014	4.8	LOS A	0.0	0.1	0.02	0.08	0.02	46.6
12u	U	1	1.0	1	1.0	0.014	5.9	LOS A	0.0	0.1	0.02	0.08	0.02	46.4
Approach		24	1.0	25	1.0	0.014	0.7	NA	0.0	0.1	0.02	0.08	0.02	48.3
All Vehicles		54	1.0	57	1.0	0.014	1.8	NA	0.0	0.2	0.03	0.20	0.03	46.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2023 BG AM (Site Folder: 11. Madoline St / Hoskins St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
						v/c	sec							km/h
South: Hoskins St (South)														
1	L2	1	1.0	1	1.0	0.007	4.6	LOS A	0.0	0.1	0.05	0.56	0.05	43.1
3	R2	6	1.0	6	1.0	0.007	4.8	LOS A	0.0	0.1	0.05	0.56	0.05	39.4
3u	U	1	1.0	1	1.0	0.007	5.8	LOS A	0.0	0.1	0.05	0.56	0.05	42.6
Approach		8	1.0	8	1.0	0.007	4.9	LOS A	0.0	0.1	0.05	0.56	0.05	40.4
East: Madoline St (East)														
4	L2	5	1.0	5	1.0	0.017	4.6	LOS A	0.0	0.1	0.01	0.11	0.01	46.6
5	T1	24	1.0	25	1.0	0.017	0.0	LOS A	0.0	0.1	0.01	0.11	0.01	48.0
6u	U	1	1.0	1	1.0	0.017	5.9	LOS A	0.0	0.1	0.01	0.11	0.01	42.2
Approach		30	1.0	32	1.0	0.017	1.0	NA	0.0	0.1	0.01	0.11	0.01	47.6
West: Madoline St (West)														
11	T1	22	5.0	23	5.0	0.014	0.0	LOS A	0.0	0.1	0.02	0.05	0.02	48.9
12	R2	1	1.0	1	1.0	0.014	4.7	LOS A	0.0	0.1	0.02	0.05	0.02	47.2
12u	U	1	1.0	1	1.0	0.014	5.9	LOS A	0.0	0.1	0.02	0.05	0.02	47.5
Approach		24	4.7	25	4.7	0.014	0.5	NA	0.0	0.1	0.02	0.05	0.02	48.7
All Vehicles		62	2.4	65	2.4	0.017	1.3	NA	0.0	0.1	0.02	0.15	0.02	46.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2023 BG PM (Site Folder: 11. Madoline St / Hoskins St BG)]

Created by: RM
Reviewd by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Hoskins St (South)														
1	L2	1	1.0	1	1.0	0.004	4.6	LOS A	0.0	0.1	0.05	0.55	0.05	43.0
3	R2	3	1.0	3	1.0	0.004	4.7	LOS A	0.0	0.1	0.05	0.55	0.05	39.8
3u	U	1	1.0	1	1.0	0.004	5.8	LOS A	0.0	0.1	0.05	0.55	0.05	42.5
Approach		5	1.0	5	1.0	0.004	4.9	LOS A	0.0	0.1	0.05	0.55	0.05	41.2
East: Madoline St (East)														
4	L2	6	1.0	6	1.0	0.015	4.6	LOS A	0.0	0.1	0.01	0.15	0.01	46.1
5	T1	20	1.0	21	1.0	0.015	0.0	LOS A	0.0	0.1	0.01	0.15	0.01	47.4
6u	U	1	1.0	1	1.0	0.015	5.9	LOS A	0.0	0.1	0.01	0.15	0.01	41.5
Approach		27	1.0	28	1.0	0.015	1.2	NA	0.0	0.1	0.01	0.15	0.01	47.0
West: Madoline St (West)														
11	T1	23	1.0	24	1.0	0.017	0.0	LOS A	0.0	0.2	0.04	0.11	0.04	47.9
12	R2	4	1.0	4	1.0	0.017	4.9	LOS A	0.0	0.2	0.04	0.11	0.04	46.5
12u	U	1	1.0	1	1.0	0.017	5.9	LOS A	0.0	0.2	0.04	0.11	0.04	46.9
Approach		28	1.0	29	1.0	0.017	0.9	NA	0.0	0.2	0.04	0.11	0.04	47.6
All Vehicles		60	1.0	63	1.0	0.017	1.4	NA	0.0	0.2	0.03	0.16	0.03	46.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2028 BG AM (Site Folder: 11. Madoline St / Hoskins St BG)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Hoskins St (South)														
1	L2	1	1.0	1	1.0	0.007	4.6	LOS A	0.0	0.1	0.05	0.56	0.05	43.1
3	R2	6	1.0	6	1.0	0.007	4.8	LOS A	0.0	0.1	0.05	0.56	0.05	39.4
3u	U	1	1.0	1	1.0	0.007	5.8	LOS A	0.0	0.1	0.05	0.56	0.05	42.6
Approach		8	1.0	8	1.0	0.007	4.9	LOS A	0.0	0.1	0.05	0.56	0.05	40.4
East: Madoline St (East)														
4	L2	5	1.0	5	1.0	0.017	4.6	LOS A	0.0	0.1	0.01	0.11	0.01	46.6
5	T1	24	1.0	25	1.0	0.017	0.0	LOS A	0.0	0.1	0.01	0.11	0.01	48.0
6u	U	1	1.0	1	1.0	0.017	5.9	LOS A	0.0	0.1	0.01	0.11	0.01	42.2
Approach		30	1.0	32	1.0	0.017	1.0	NA	0.0	0.1	0.01	0.11	0.01	47.6
West: Madoline St (West)														
11	T1	22	5.0	23	5.0	0.014	0.0	LOS A	0.0	0.1	0.02	0.05	0.02	48.9
12	R2	1	1.0	1	1.0	0.014	4.7	LOS A	0.0	0.1	0.02	0.05	0.02	47.2
12u	U	1	1.0	1	1.0	0.014	5.9	LOS A	0.0	0.1	0.02	0.05	0.02	47.5
Approach		24	4.7	25	4.7	0.014	0.5	NA	0.0	0.1	0.02	0.05	0.02	48.7
All Vehicles		62	2.4	65	2.4	0.017	1.3	NA	0.0	0.1	0.02	0.15	0.02	46.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2028 BG PM (Site Folder: 11. Madoline St / Hoskins St BG)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Hoskins St (South)														
1	L2	1	1.0	1	1.0	0.004	4.6	LOS A	0.0	0.1	0.05	0.55	0.05	43.0
3	R2	3	1.0	3	1.0	0.004	4.7	LOS A	0.0	0.1	0.05	0.55	0.05	39.8
3u	U	1	1.0	1	1.0	0.004	5.8	LOS A	0.0	0.1	0.05	0.55	0.05	42.5
Approach		5	1.0	5	1.0	0.004	4.9	LOS A	0.0	0.1	0.05	0.55	0.05	41.2
East: Madoline St (East)														
4	L2	6	1.0	6	1.0	0.015	4.6	LOS A	0.0	0.1	0.01	0.15	0.01	46.1
5	T1	20	1.0	21	1.0	0.015	0.0	LOS A	0.0	0.1	0.01	0.15	0.01	47.4
6u	U	1	1.0	1	1.0	0.015	5.9	LOS A	0.0	0.1	0.01	0.15	0.01	41.5
Approach		27	1.0	28	1.0	0.015	1.2	NA	0.0	0.1	0.01	0.15	0.01	47.0
West: Madoline St (West)														
11	T1	23	1.0	24	1.0	0.017	0.0	LOS A	0.0	0.2	0.04	0.11	0.04	47.9
12	R2	4	1.0	4	1.0	0.017	4.9	LOS A	0.0	0.2	0.04	0.11	0.04	46.5
12u	U	1	1.0	1	1.0	0.017	5.9	LOS A	0.0	0.2	0.04	0.11	0.04	46.9
Approach		28	1.0	29	1.0	0.017	0.9	NA	0.0	0.2	0.04	0.11	0.04	47.6
All Vehicles		60	1.0	63	1.0	0.017	1.4	NA	0.0	0.2	0.03	0.16	0.03	46.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2033 BG AM (Site Folder: 11. Madoline St / Hoskins St BG)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Hoskins St (South)														
1	L2	1	1.0	1	1.0	0.007	4.6	LOS A	0.0	0.2	0.05	0.54	0.05	43.1
3	R2	6	1.0	6	1.0	0.007	4.7	LOS A	0.0	0.2	0.05	0.54	0.05	39.9
3u	U	1	1.0	1	1.0	0.007	5.8	LOS A	0.0	0.2	0.05	0.54	0.05	42.6
Approach		8	1.0	8	1.0	0.007	4.9	LOS A	0.0	0.2	0.05	0.54	0.05	40.8
East: Madoline St (East)														
4	L2	5	1.0	5	1.0	0.017	4.6	LOS A	0.0	0.1	0.01	0.11	0.01	46.7
5	T1	25	1.0	26	1.0	0.017	0.0	LOS A	0.0	0.1	0.01	0.11	0.01	48.0
6u	U	1	1.0	1	1.0	0.017	5.9	LOS A	0.0	0.1	0.01	0.11	0.01	42.3
Approach		31	1.0	33	1.0	0.017	0.9	NA	0.0	0.1	0.01	0.11	0.01	47.7
West: Madoline St (West)														
11	T1	23	5.0	24	5.0	0.015	0.0	LOS A	0.0	0.1	0.02	0.05	0.02	48.9
12	R2	1	1.0	1	1.0	0.015	4.9	LOS A	0.0	0.1	0.02	0.05	0.02	47.1
12u	U	1	1.0	1	1.0	0.015	5.9	LOS A	0.0	0.1	0.02	0.05	0.02	47.5
Approach		25	4.7	26	4.7	0.015	0.4	NA	0.0	0.1	0.02	0.05	0.02	48.7
All Vehicles		64	2.4	67	2.4	0.017	1.2	NA	0.0	0.2	0.02	0.14	0.02	47.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2033 BG PM (Site Folder: 11. Madoline St / Hoskins St BG)]

Created by: RM
 Reviewd by:
 Project number:
 Site Category: Existing Design
 Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Hoskins St (South)														
1	L2	1	1.0	1	1.0	0.004	4.6	LOS A	0.0	0.1	0.05	0.55	0.05	43.0
3	R2	3	1.0	3	1.0	0.004	4.7	LOS A	0.0	0.1	0.05	0.55	0.05	39.8
3u	U	1	1.0	1	1.0	0.004	5.8	LOS A	0.0	0.1	0.05	0.55	0.05	42.5
Approach		5	1.0	5	1.0	0.004	4.9	LOS A	0.0	0.1	0.05	0.55	0.05	41.2
East: Madoline St (East)														
4	L2	6	1.0	6	1.0	0.015	4.6	LOS A	0.0	0.1	0.01	0.14	0.01	46.2
5	T1	21	1.0	22	1.0	0.015	0.0	LOS A	0.0	0.1	0.01	0.14	0.01	47.5
6u	U	1	1.0	1	1.0	0.015	5.9	LOS A	0.0	0.1	0.01	0.14	0.01	41.6
Approach		28	1.0	29	1.0	0.015	1.2	NA	0.0	0.1	0.01	0.14	0.01	47.1
West: Madoline St (West)														
11	T1	24	1.0	25	1.0	0.017	0.0	LOS A	0.0	0.2	0.04	0.11	0.04	48.0
12	R2	4	1.0	4	1.0	0.017	4.9	LOS A	0.0	0.2	0.04	0.11	0.04	46.5
12u	U	1	1.0	1	1.0	0.017	5.9	LOS A	0.0	0.2	0.04	0.11	0.04	46.9
Approach		29	1.0	31	1.0	0.017	0.9	NA	0.0	0.2	0.04	0.11	0.04	47.6
All Vehicles		62	1.0	65	1.0	0.017	1.4	NA	0.0	0.2	0.03	0.16	0.03	46.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
 Vehicle movement LOS values are based on average delay per movement.
 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 [2038 BG AM (Site Folder: 11. Madoline St / Hoskins St BG)]

Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV %	[Total veh/h	HV %				[Veh. veh	Dist] m				
South: Hoskins St (South)														
1	L2	1	1.0	1	1.0	0.008	4.6	LOS A	0.0	0.2	0.05	0.54	0.05	43.1
3	R2	7	1.0	7	1.0	0.008	4.8	LOS A	0.0	0.2	0.05	0.54	0.05	39.9
3u	U	1	1.0	1	1.0	0.008	5.8	LOS A	0.0	0.2	0.05	0.54	0.05	42.6
Approach		9	1.0	9	1.0	0.008	4.9	LOS A	0.0	0.2	0.05	0.54	0.05	40.7
East: Madoline St (East)														
4	L2	6	1.0	6	1.0	0.018	4.6	LOS A	0.0	0.1	0.01	0.12	0.01	46.6
5	T1	27	1.0	28	1.0	0.018	0.0	LOS A	0.0	0.1	0.01	0.12	0.01	47.9
6u	U	1	1.0	1	1.0	0.018	5.9	LOS A	0.0	0.1	0.01	0.12	0.01	42.2
Approach		34	1.0	36	1.0	0.018	1.0	NA	0.0	0.1	0.01	0.12	0.01	47.6
West: Madoline St (West)														
11	T1	24	5.0	25	5.0	0.016	0.0	LOS A	0.0	0.1	0.02	0.05	0.02	49.0
12	R2	1	1.0	1	1.0	0.016	4.9	LOS A	0.0	0.1	0.02	0.05	0.02	47.1
12u	U	1	1.0	1	1.0	0.016	6.0	LOS A	0.0	0.1	0.02	0.05	0.02	47.5
Approach		26	4.7	27	4.7	0.016	0.4	NA	0.0	0.1	0.02	0.05	0.02	48.8
All Vehicles		69	2.4	73	2.4	0.018	1.3	NA	0.0	0.2	0.02	0.15	0.02	46.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
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 [2038 BG PM (Site Folder: 11. Madoline St / Hoskins St BG)]

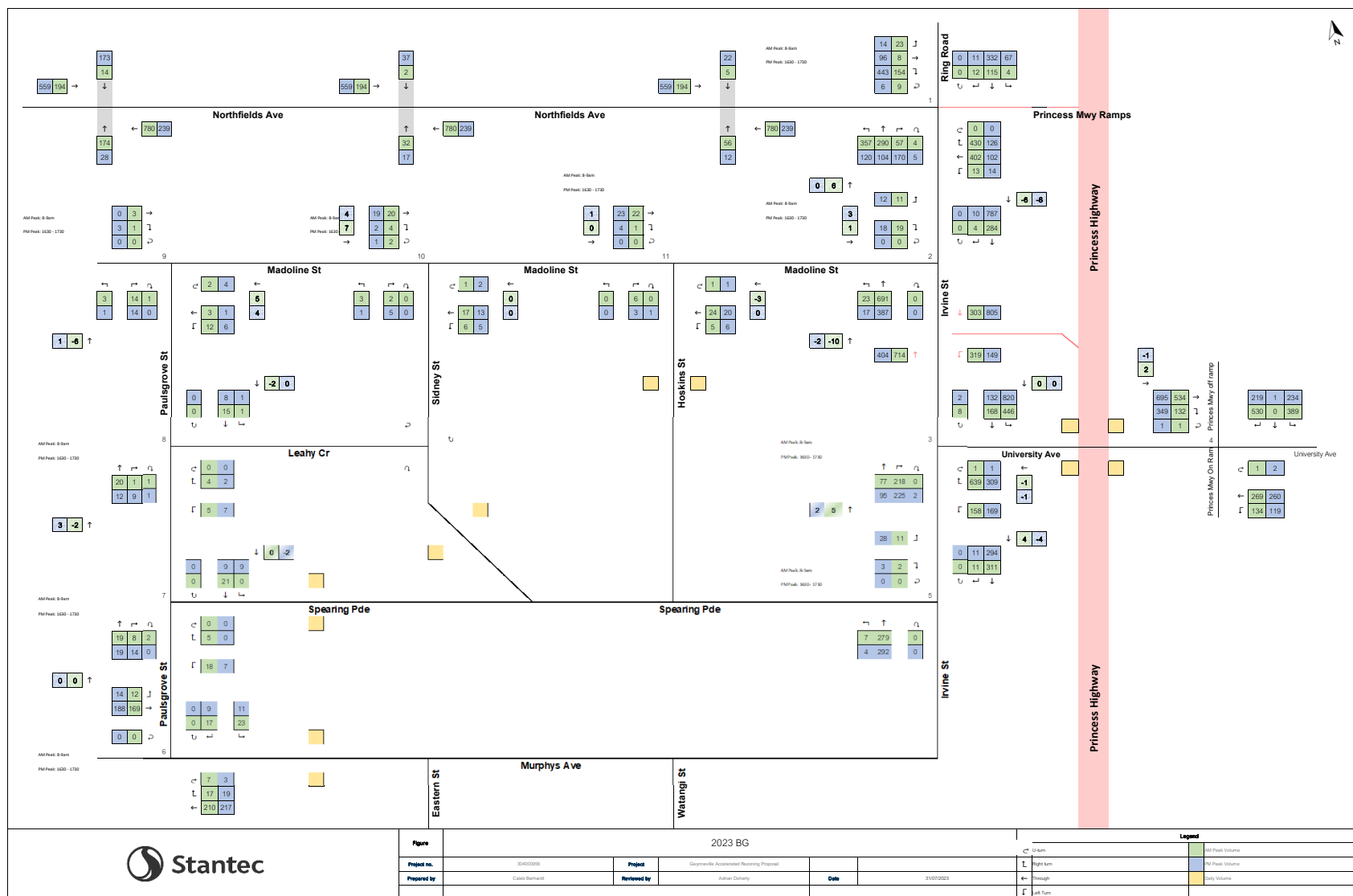
Created by: RM
Reviewed by:
Project number:
Site Category: Existing Design
Give-Way (Two-Way)

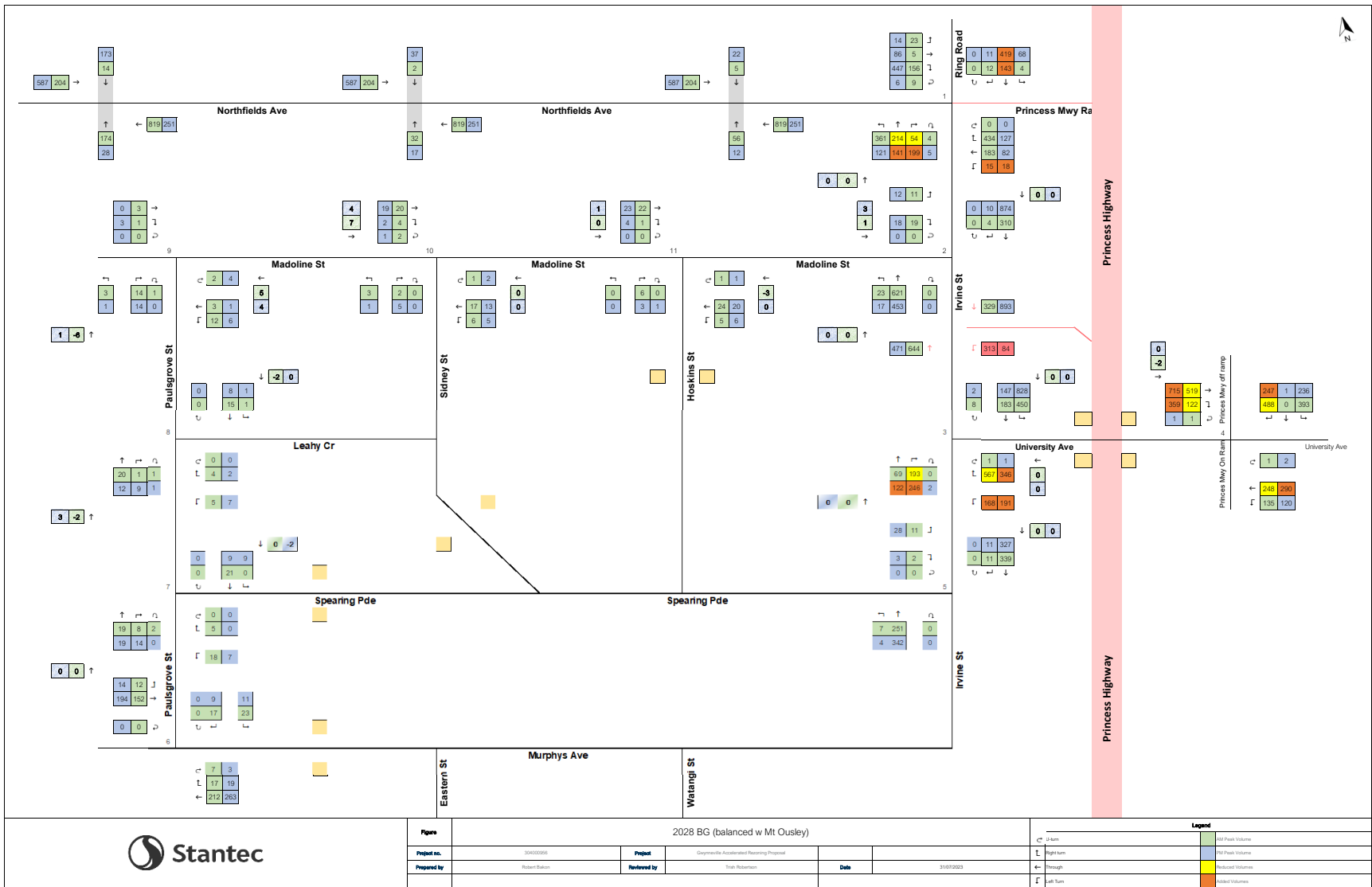
Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES		DEMAND FLOWS		Deg. Satn	Aver. Delay	Level of Service	95% BACK OF QUEUE		Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed
		[Total veh/h	HV] %	[Total veh/h	HV] %				[Veh. veh	Dist] m				
South: Hoskins St (South)														
1	L2	1	1.0	1	1.0	0.004	4.6	LOS A	0.0	0.1	0.06	0.55	0.06	43.0
3	R2	3	1.0	3	1.0	0.004	4.8	LOS A	0.0	0.1	0.06	0.55	0.06	39.7
3u	U	1	1.0	1	1.0	0.004	5.8	LOS A	0.0	0.1	0.06	0.55	0.06	42.5
Approach		5	1.0	5	1.0	0.004	4.9	LOS A	0.0	0.1	0.06	0.55	0.06	41.2
East: Madoline St (East)														
4	L2	7	1.0	7	1.0	0.016	4.6	LOS A	0.0	0.1	0.01	0.15	0.01	46.1
5	T1	22	1.0	23	1.0	0.016	0.0	LOS A	0.0	0.1	0.01	0.15	0.01	47.4
6u	U	1	1.0	1	1.0	0.016	5.9	LOS A	0.0	0.1	0.01	0.15	0.01	41.4
Approach		30	1.0	32	1.0	0.016	1.3	NA	0.0	0.1	0.01	0.15	0.01	47.0
West: Madoline St (West)														
11	T1	26	1.0	27	1.0	0.018	0.0	LOS A	0.0	0.2	0.04	0.10	0.04	48.1
12	R2	4	1.0	4	1.0	0.018	4.9	LOS A	0.0	0.2	0.04	0.10	0.04	46.6
12u	U	1	1.0	1	1.0	0.018	5.9	LOS A	0.0	0.2	0.04	0.10	0.04	47.0
Approach		31	1.0	33	1.0	0.018	0.8	NA	0.0	0.2	0.04	0.10	0.04	47.8
All Vehicles		66	1.0	69	1.0	0.018	1.3	NA	0.0	0.2	0.03	0.16	0.03	46.8

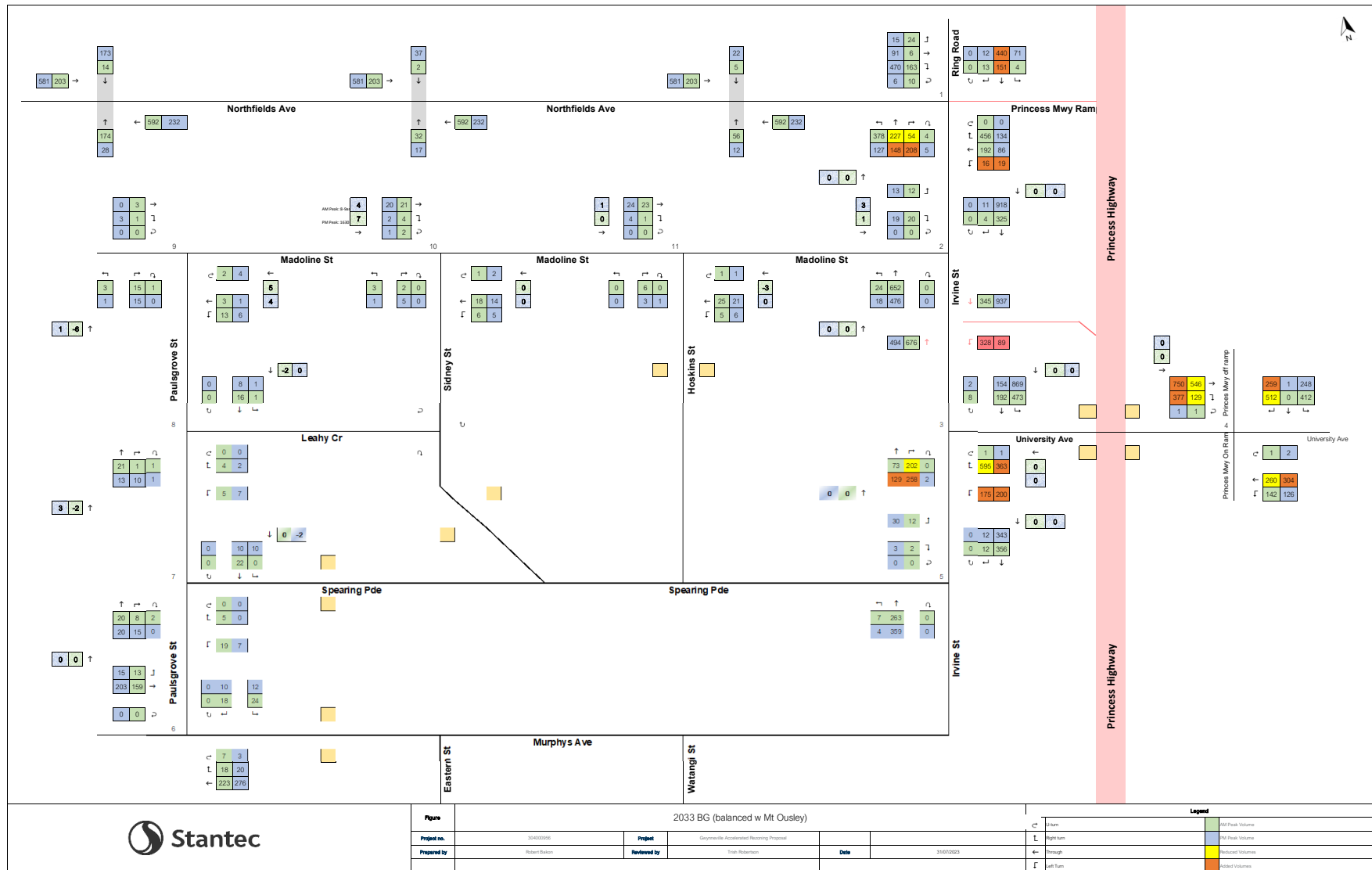
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and 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.

Appendix D. Turn Movement Diagrams









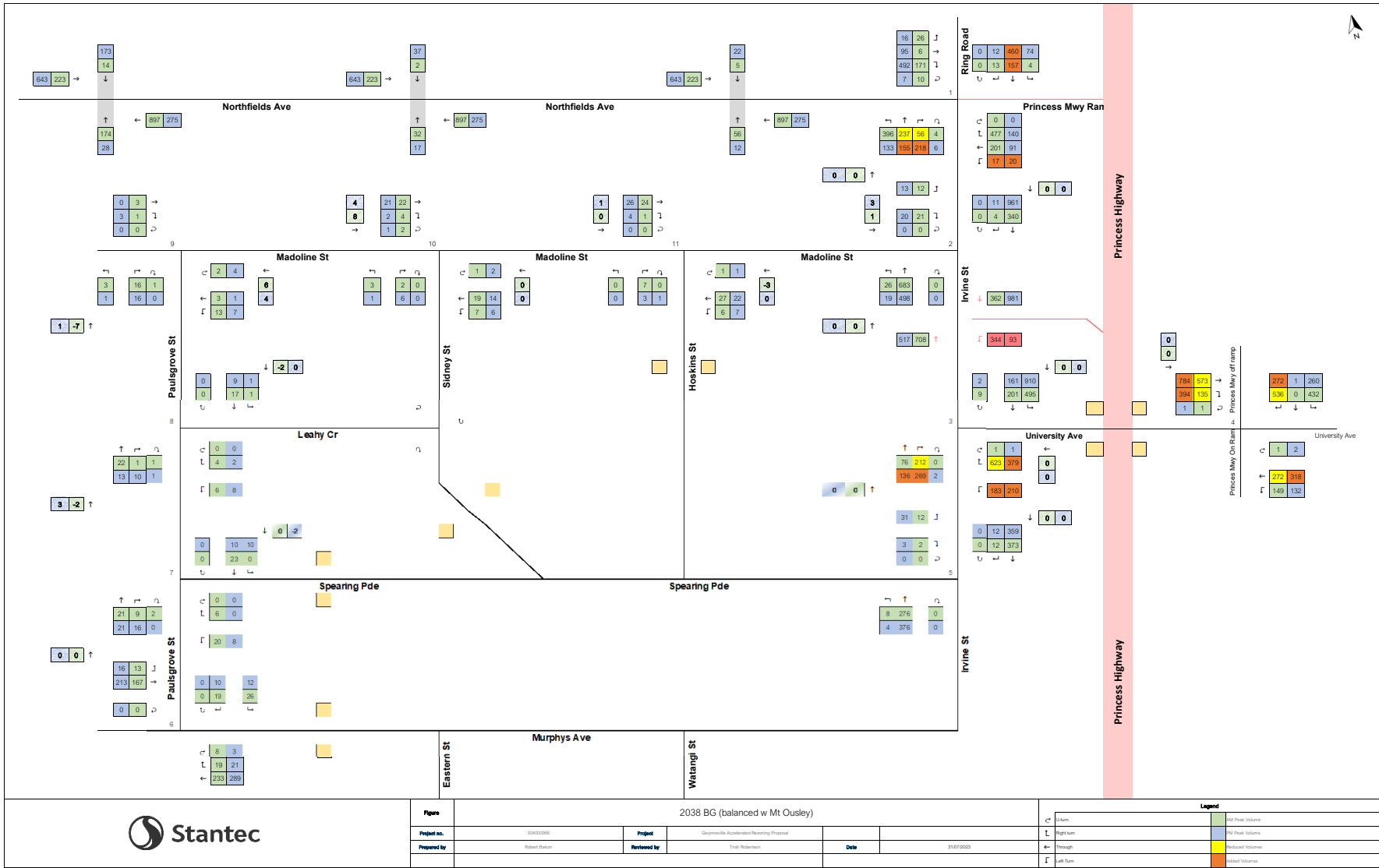
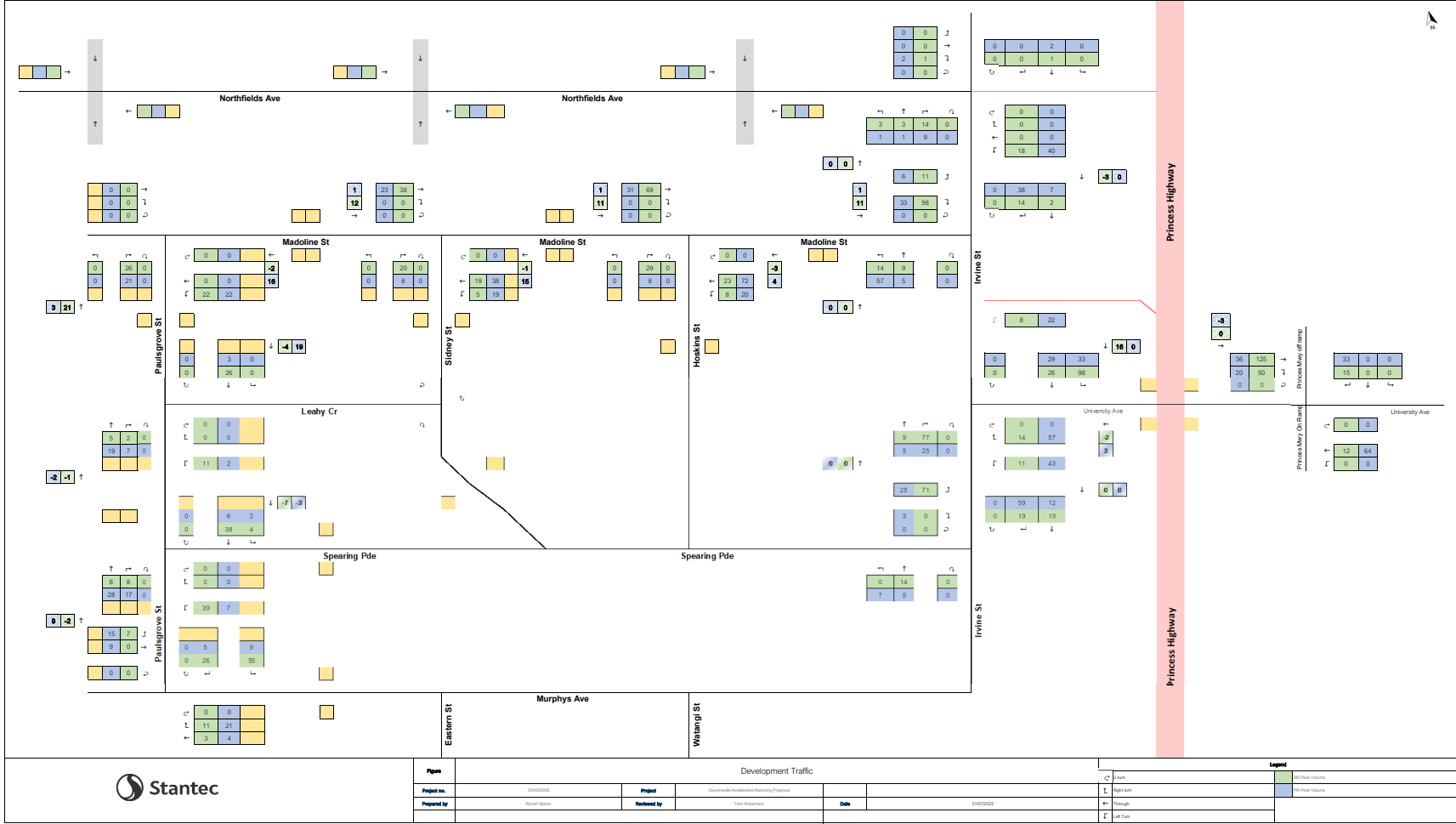
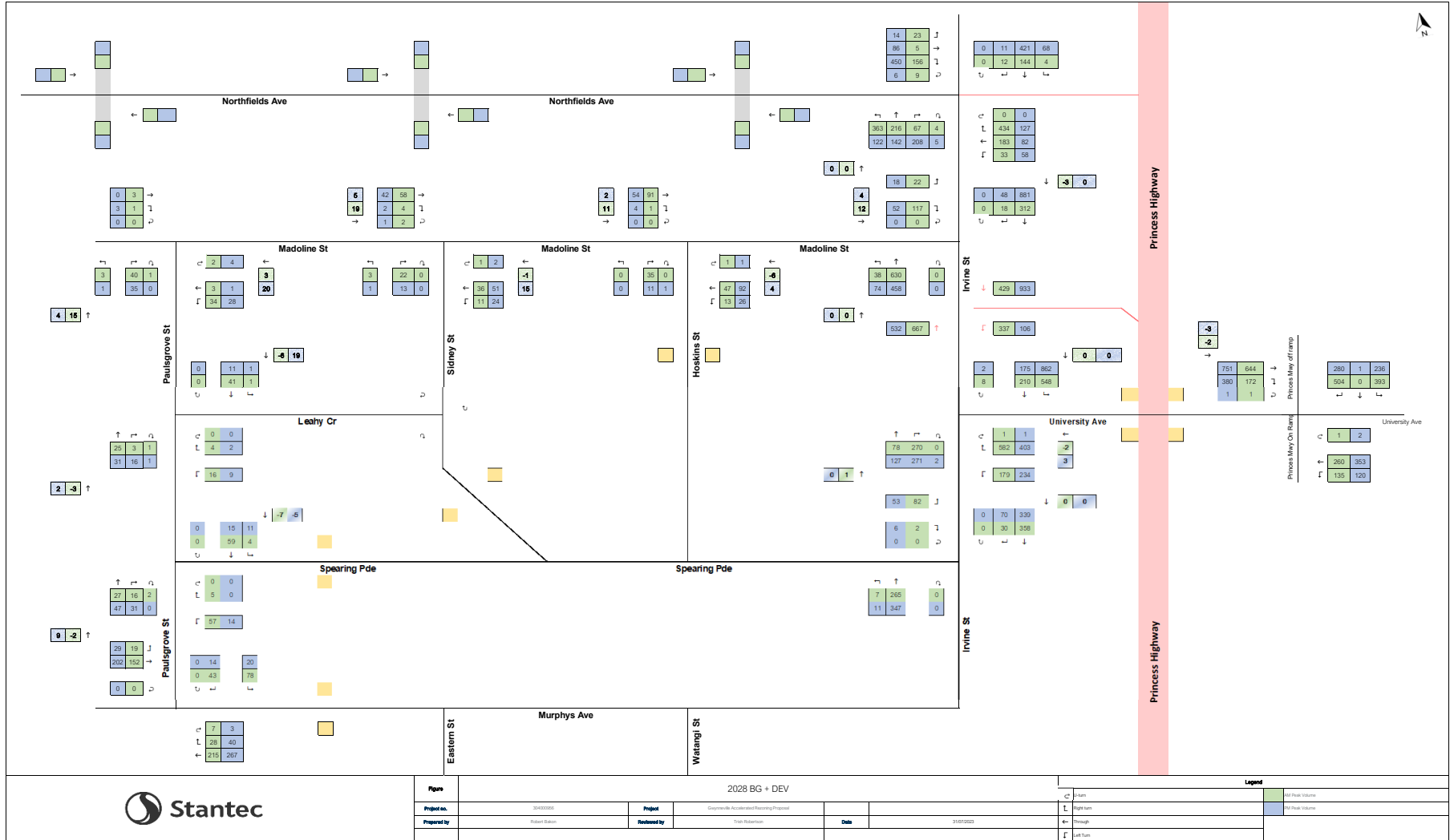


Figure	2038 BG (balanced w Mt Ousley)				Legend	
Project no.	50000000	Project	Geoprocurement/Recreation Program	Date	31/07/2023	
Prepared by	Robert Baker	Reviewed by	Trish Robinson			





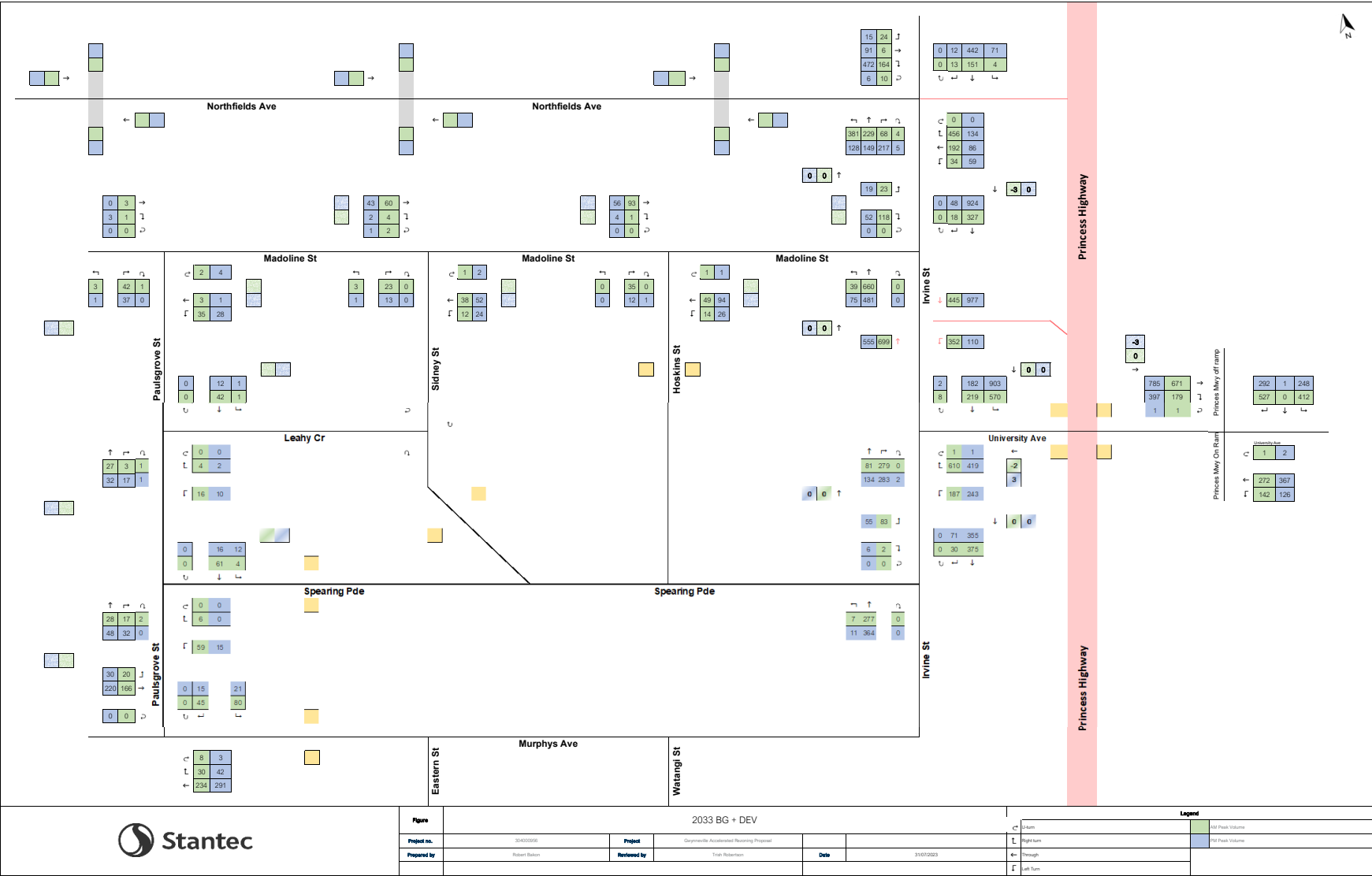


Figure	2033 BG + DEV				Legend			
Project no.	34400000	Project	Geospatial Assessment Project		Left Turn	All Peak Volume		
Prepared by	Robert Baker	Reviewed by	Trish Robinson	Date	Right Turn	PM Peak Volume		
					Through			
					Left Turn			

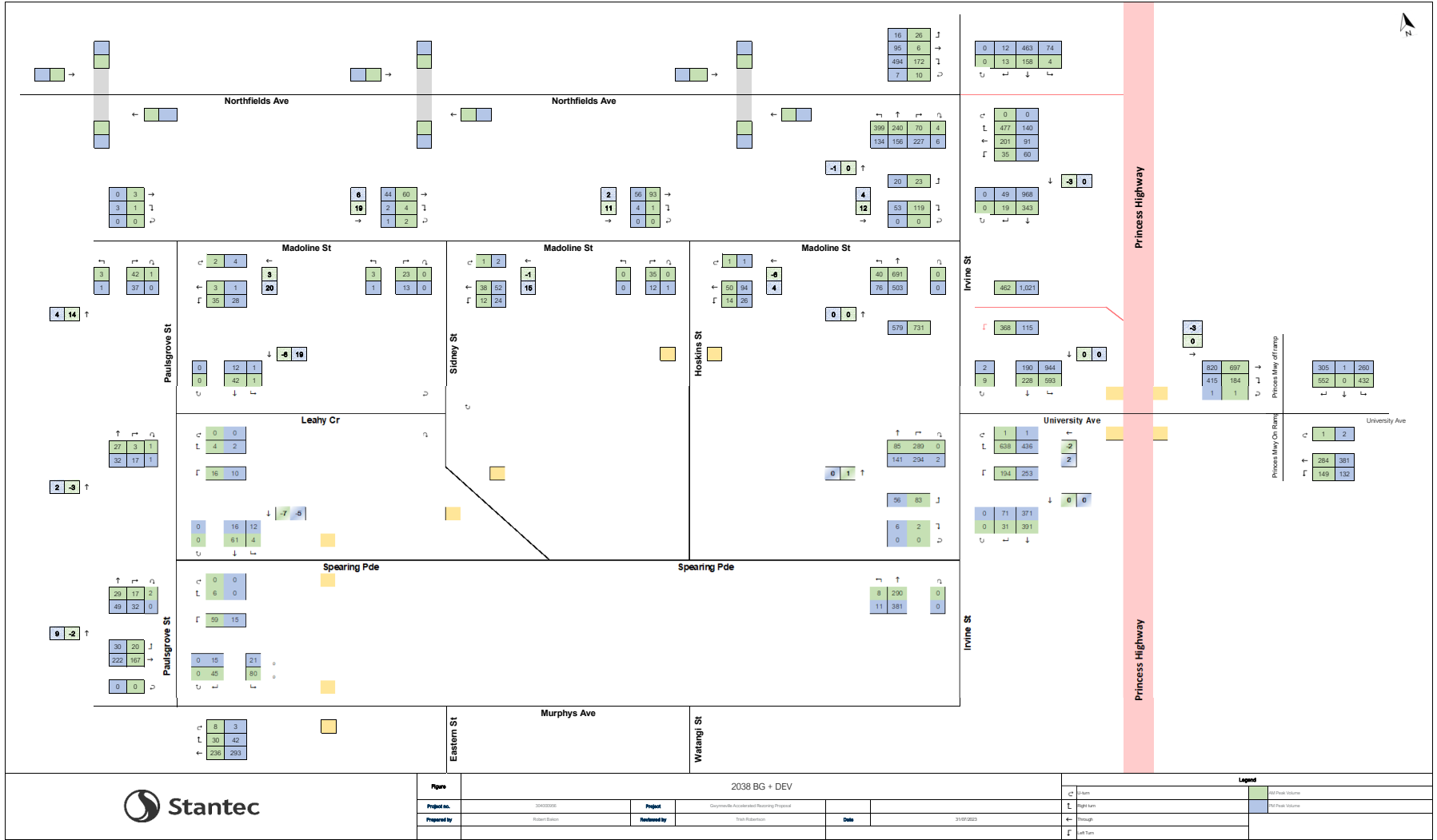


Figure	2038 BG + DEV			
Project no.	20400005	Project	Gwynedd Accelerated Planning Proposal	
Prepared by	Robert Sutton	Reviewed by	Yoshie Robinson	Date
				31/07/2023

Legend	
Red Peak Volume	
Blue Peak Volume	

