Traffic Impact Assessment

Lithgow, 353 Main Street Service Station

Main Street Cap Pty Ltd

Prepared by:

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SLR Project No.: 610.031536

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Revision: 1.0

Making Sustainability Happen

Revision Record

Revision	Date	Prepared By	Checked By	Authorised By
1.0	8 July 2024	Kris Stone	Charlie Seventekin	Kris Stone

Basis of Report

This report has been prepared by SLR Consulting Australia (SLR) with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Main Street Cap Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR.

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

Executive Summary

SLR Consulting Pty Ltd (SLR) has been commissioned by Main Street Cap Pty Ltd to prepare a Traffic Impact Assessment (TIA) for the proposed Service Station and Take-away Food Premises with Drive-through development located at 353 Main Street, Lithgow, New South Wales, formally described as Lots 113-115 of Deposited Plan (DP) 9370.

A copy of the development plan layout is included in **Appendix A**.

The development site has a frontage to Main Street which is defined as a Classified Road by Transport for New South Wales (TfNSW). The purpose of this TIA is to inform an evaluation of the application by Lithgow City Council (Council) and TfNSW.

Based on the development plans, it is proposed to develop the site with the associated Gross Floor Areas (GFA) as follows:

- Convenience Store 125m^2 GFA;
- Car parking 6 car parking spaces;
- Truck Canopy 1 fuel bowser and 2 refuelling positions;
- Car Canopy 3 fuel bowsers and 6 refuelling positions.

The proposed development has been assessed with reference to Council's Development Control Plan (DCP), NSW RMS (now TfNSW) *Guide to Traffic Generating Developments (2002), and the draft TfNSW* Guide to Transport Impact Assessment (2024) with respect to parking and design specifications and assessment processes.

Based on the analysis and discussion documented herein, the following is concluded.

- The development provides six on-site car parking spaces on site, including one accessible space. This supply is consistent with Council DCP and TfNSW guidance.
- The proposed development vehicle access, car parking and servicing arrangements are appropriate and satisfy the relevant AS2890 requirements.
- Provision is made for on-site servicing with a designated truck loading space.
- The development layout can accommodate all forecast design vehicle manoeuvres with sufficient clearance. No queueing near or onto the fronting roads is anticipated.
- The incremental traffic generated by the development will have an insignificant impact on the safe and efficient operation of the surrounding road network. No safety or capacity mitigations are warranted to enable the proposed development.

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1.0 Introduction

1.1 Context

SLR Consulting Pty Ltd (SLR) has been commissioned by Main Street Cap Pty Ltd to prepare a Traffic Impact Assessment (TIA) for the proposed Service Station and Take-away Food Premises with Drive-through development located at 353 Main Street, Lithgow, New South Wales, formally described as Lots 113-115 of DP9370.

A copy of the development plan layout is included in **Appendix A**.

1.2 Assessment Scope

This TIA report assesses the consistency of the development with Council and State planning and evaluates the impacts of the proposed development on the surrounding transport networks.

This TIA identifies the transport infrastructure required to enable the development, and ensure that it functions in a safe and efficient manner cognisant of the following relevant authority requirements and guidance:

- Lithgow City Council;
- Transport for New South Wales.

2.0 Existing Situation

2.1 Subject Site

The subject site is located at 353 Main Street Lithgow, NSW. The land is formally described as Lots 113-115 of DP9370. The site is currently vacant but did accommodate some type of depot or similar use as recently as 2010 based on aerial imagery. The site has two public road frontages, one to Main Street and the other to Enfield Street. The site location in the local context is shown in **Figure 1**.

Figure 1 Site Location in Local Context

Source: Sixmaps

Main Street is a TfNSW classified road and therefore, TfNSW concurrence will be required by way of referral.

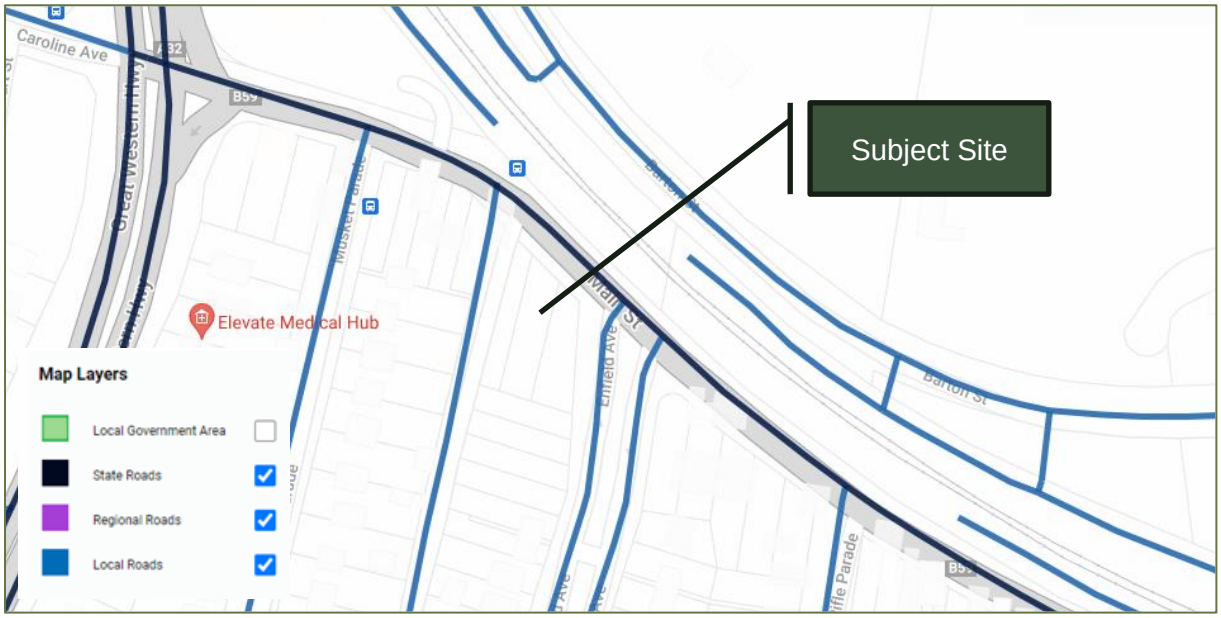
2.2 Surrounding Road Network

Details of the key roads surrounding the subject site are provided in **Table 1**.

Table 1 Key Roads

Road Name	Classification	Authority	Existing Form	Posted Speed
Main Street	State Road	TfNSW	One traffic lane in each direction, undivided carriageway. In the vicinity of the site: - approximate 12.8m pavement width; - breakdown lane in eastbound direction; - parking permitted along the kerb in the westbound direction.	50km/h
Enfield Avenue	Local Street	Council	One traffic lane in each direction, divided carriageway with parking possible along all kerbs.	50km/h, unposted

Figure 2 TfNSW Road Classification



Source: TfNSW

2.3 Existing Vehicular Access

There is an existing vehicle crossover that has been constructed on Main Street, approximately central to the site's frontage. This crossover was likely constructed in association with the now defunct depot or similar use.

2.4 Road Network Planning

SLR undertook a review of the publicly available planning and road project material[1] [2]. No major traffic upgrade projects along the site frontages were identified.

2.5 Crash History

SLR undertook a review of the publicly available crash data [3] including the most recent documented five-year period between 2018 and 2022. The findings are summarised in **Table 2** and **Figure 3**.

Table 2 Road Crash Details

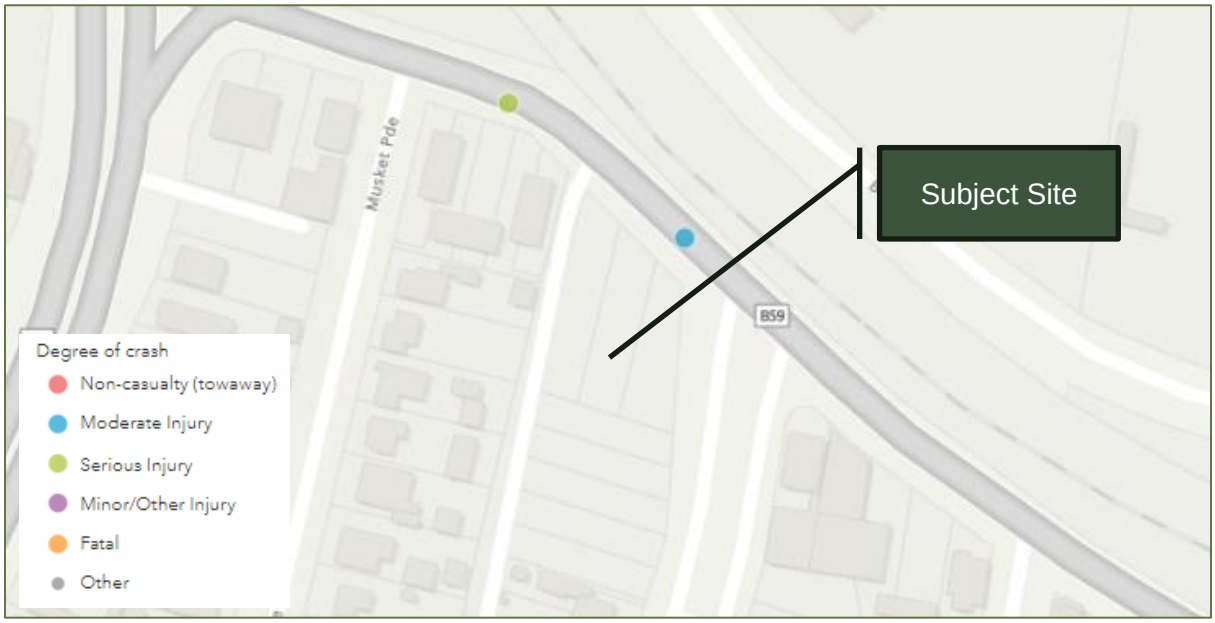
Location	Year	ID	Injury Severity	RUM Code	Description
Main Street	2019	1200289	Serious Injury	47	Emerging from driveway
	2020	1244207	Moderate Injury	02	Pedestrian far side

[1] https://www.transport.nsw.gov.au/projects

[2] https://council.lithgow.com/development/contribution-plans/

[3] https://roadsafety.transport.nsw.gov.au/statistics/interactivecrashstats/lga_stats.html?tablga=4

Figure 3 Road Crash Location and Severity



Source: TfNSW

The 2020 crash involving a pedestrian was reported on the site's frontage to Main Street near the intersection with Enfield Avenue. While the pedestrian crash is noted, the limited dataset does not indicate that there is a recurring crash occurrence or theme in the immediate vicinity of the site that would preclude development or warrant mitigation to enable development.

3.0 Development Overview

3.1 Proposed Development

Based on the **Appendix A** plans, the proposed Service Station and Take-away Food development will comprise a single building and separate refuelling canopies for light and heavy vehicles. The proposed land uses and yields associated with the development are described in **Table 3**.

Table 3 Development Summary

Land Use	Yield
Convenience Store	125m^2 GFA
Light vehicle fuel bowsers	3
Heavy vehicle bowsers	1
Light vehicle parking spaces	6
Heavy vehicle servicing/loading bay	1

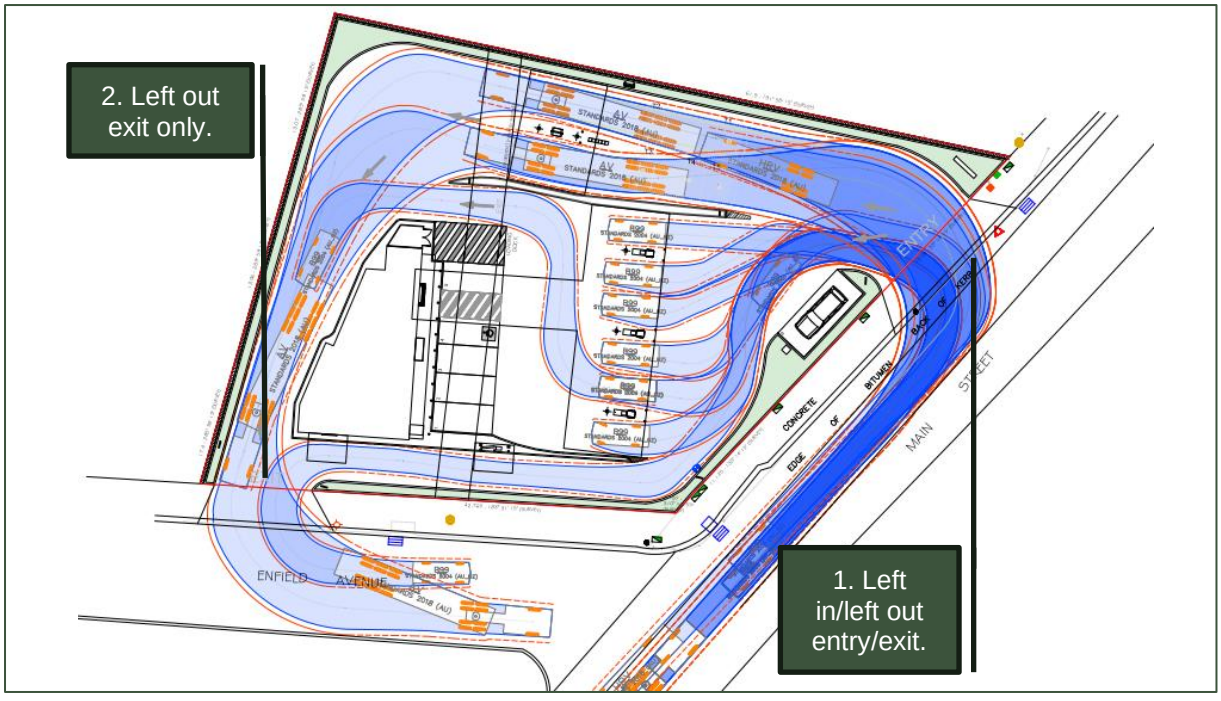
3.2 Site Access

Vehicular access/egress to/from the development is proposed via the two driveway crossovers described below:

1. Entry and exit via a left in/left out crossover on Main Street.
2. Exit only (left turn) on Enfield Avenue.

The proposed site access arrangements are shown in **Figure 4**.

Figure 4 Proposed Site Access Arrangements



3.3 Car Parking

The proposed car parking and fuelling breakdown for the subject site is as follows:

- Six car parking spaces for light vehicles.
- One loading space for light and heavy service vehicles.
- Three fuel bowsers to service six light vehicles.
- One fuel bowser to service two heavy vehicles.

3.4 Servicing

3.4.1 Deliveries

Deliveries of consumer goods and supplies will be undertaken wholly on-site. A single dedicated 3.5m wide and 6.5m long loading space is proposed adjacent to the building.

Fuel deliveries will be undertaken wholly-on-site by an articulated tanker up to 20m. The swept path for filling of the underground tank is the same as that shown on the SK101 swept path plans for typical truck customer refuelling. The truck can stand at this location and not block movement to/from the site.

3.4.2 Waste Collection

The bin storage area is proposed within the Service Yard area located in the south-western corner of the site adjacent to the building. Waste collection is anticipated to be undertaken by a 10.2m bulk-refuse collection vehicle (RCV). A swept path assessment was completed to illustrate these internal manoeuvres and the results are attached at **Appendix B**.

4.0 Traffic Engineering Design

4.1 Overview

A review of the proposed internal traffic arrangements was completed with reference to the following relevant standards and guidance:

- Australian Standards for Parking facilities Part 1: Off-street car parking (AS2890.1).
- Australian Standards for Parking facilities Part 2: Off-Street Commercial Vehicle Facilities (AS2890.2).
- Australian Standards for Parking facilities Part 6: Off-street parking for people with disabilities (AS2890.6).
- Lithgow Development Control Plan 2021 (Section 2.5).
- Austroads Guidelines (multiple).

4.2 Site Access

4.2.1 Main Street

The Main Street site access is proposed as a left in/left out arrangement. The **Appendix B** swept paths indicate that the 11.5m crossover (at the property boundary) is sufficient to accommodate vehicles concurrently entering and exiting the site.

The existing double barrier centre line marking opposite the existing and proposed Main Street crossover does permit legal movement to/from the subject site.

A physical site inspection has not been conducted and reference is instead made to Google Maps and Nearmap imagery. Sight distance along Main Street is good and should enable clear visibility of potential conflict situations.

4.2.2 Enfield Avenue

The Enfield Avenue site egress is proposed as a left-out arrangement. The **Appendix B** swept paths indicate that the 8.7m crossover (at the property boundary) is sufficient to accommodate vehicles exiting the site.

The existing physical median is sufficient to enforce the left turn egress movement.

Sight distance along Enfield Avenue is good and should enable clear visibility of potential conflict situations.

4.3 Internal Traffic Design

4.3.1 Car Parking, Circulation and Servicing

The design of the proposed car parking and circulation elements has been assessed against the requirements within AS2890.1, AS2890.2 and AS2890.6. This assessment is summarised in **Table 4**.

Table 4 Car Park and Circulation Compliance Review

Design Element	AS2890 Requirement	Proposed Provision	Compliant
Parking Spaces	2.6m x 5.4m with 6.6m wide aisle (Class 3A)	2.6m x 5.4m with 6.6m wide aisle	✓
PWD Parking Spaces	2.4m x 5.4m space plus 2.4m x 5.4m adjacent area	2.6m x 5.4m space plus 2.6m x 5.4m adjacent area	✓
Parking Spaces Next to Walls	300mm parking space extension.	No high kerbs or walls next to parking spaces.	✓
Blind Aisle Extension	1.0m manoeuvring space adjacent to last parking space at dead-end aisle	>1.0m manoeuvring area adjacent to Parking Space #1	✓
Parking Module Gradients	1:40 (2.5%) maximum – any direction	Not provided in concept plans but must comply in the detailed design drawings	✓
One-way Circulation Aisle	3.0m minimum between kerbs	3.5m - drive-through 5.1m (minimum) – rear one-way circulation aisle	✓
Driveway Gradients	Transitions: 1 in 16 for a minimum 7.0m Remainder: 1 in 6.5 maximum.	Less steep than 1 in 50.	✓

As summarised in **Table 4** and demonstrated by plans and swept path assessments, the proposed internal traffic arrangements comply with or exceed the spatial requirements of AS2890.1, AS2890.2 and AS2890.6.

4.3.2 Drive-Through

The Council DCP refers to the NSW RMS (now TfNSW) *Guide to Traffic Generating Developments* with respect to parking and design specifications for service stations and food and drink developments.

The TfNSW guidance outlines 6-12 car lengths are required for take-away food drive through like KFC or McDonalds. SLR data indicates that lower hierarchy offerings like *On the Run* generate substantially less peak customer demand and queuing.

The concept plans indicate readily available queue length for 5-6 vehicles in a dedicated lane and extended queueing for 10+ vehicles within the broader site that would not materially restrict site function or extend to the fronting road.

4.4 Car Parking Provision

4.4.1 DCP Requirement

The minimum car parking provisions for a take-away food and drink premise are specified in Section 2.5.5 of the Lithgow DCP 2021 which in turn references the NSW RTA (now TfNSW) guidance. The relevant guidance is reproduced in **Table 5**.

Table 5 DCP Minimum Car Parking Requirements

Source	Land Use Description	Car Parking Rate
Lithgow DCP (2021)	Service Station	As per Guide to Traffic Generating Development (as amended)
	Fast Food / Take Away Food Outlets	As per Guide to Traffic Generating Developments (as amended).
NSW RTA Guide to Traffic Generating Developments (2002)	Service Station	*5 spaces per 100m^2 GFA of convenience store*
	Fast Food / Take Away Food Outlets	*1 space per 3 seats (internal and external) plus queueing for 5-12 cars.*

4.4.2 2024 TfNSW Guidance

The **Table 5** rates are based on historical data. TfNSW has referenced more survey evidence as part of the in the *Draft Guide to Transport Impact Assessment* (2024) that has been issued to the development and traffic engineering industry for comment.

The TfNSW parking demand data released for Service Station sites, some of which included Fast Food/Take-away components is summarised in **Figure 6**.

Table 6 TfNSW Service Station Car Parking Demand Survey Results

Land Use Description	Surveyed Parking Demand Metric	Rate
Service Station	Average peak parking demand	2.8 per 100m^2 GFA
	85th percentile peak parking demand	4.1 per 100m^2 GFA
	Maximum peak parking demand	4.2 per 100m^2 GFA

4.4.3 Parking Provision

The plans of development showing the internal building fit-out do not show any customer seating. Whilst there is a drive-through component, the development is not a typical fast food/take away establishment that enables on-site dining.

Accordingly, the car parking requirement has been assessed based on the service station use. The application of the 2002 RTA rate and the more recent 2024 TfNSW surveyed rates would equate to a parking provision in the order of 3.5-6.25 spaces.

The plans propose six parking spaces (seven if consideration is made for the short-term loading space). Based on the various guidance and survey data, this supply is considered sufficient based.

4.4.4 PWD Provision

The Building Code of Australia (BCA) stipulates the PWD car parking requirements based on the building classification. The Service Station development is a Class 6 building which requires one PWD space for every 50 parking spaces or part thereof (for up to 1,000 parking spaces).

The plans of development show one accessible car parking space is proposed immediately in front of the convenience store entrance. This provision accords with the BCA requirements.

4.5 Development Servicing

The Council DCP does not outline any specific service vehicle requirements.

Deliveries of consumer goods and supplies for the convenience store will be undertaken wholly on-site. A Small Rigid Vehicle (SRV) is anticipated for the majority of supplies given the scale of development. The SRV can be accommodated in the designated loading space and larger and less frequent deliveries by a Medium Rigid Vehicle (MRV) can still be accommodated, however, it would locally reduce the forecast vehicle circulation area such that 7.2m was available in front of the western-most fuel bowser.

Regardless, deliveries should ideally be scheduled to occur outside of peak trading periods.

5.0 Traffic Assessment

5.1 Scope

The scope of the traffic assessment documented herein is limited to the two site vehicle crossovers and the adjacent Main Street/Enfield Avenue priority-controlled T-junction intersection.

The evaluation of broader potential traffic impacts beyond the site frontage is not warranted based on the incremental traffic generation, especially with due consideration that as much as 90% of site traffic could be categorised as pass-by trips that are already made on the network and fronting roads.

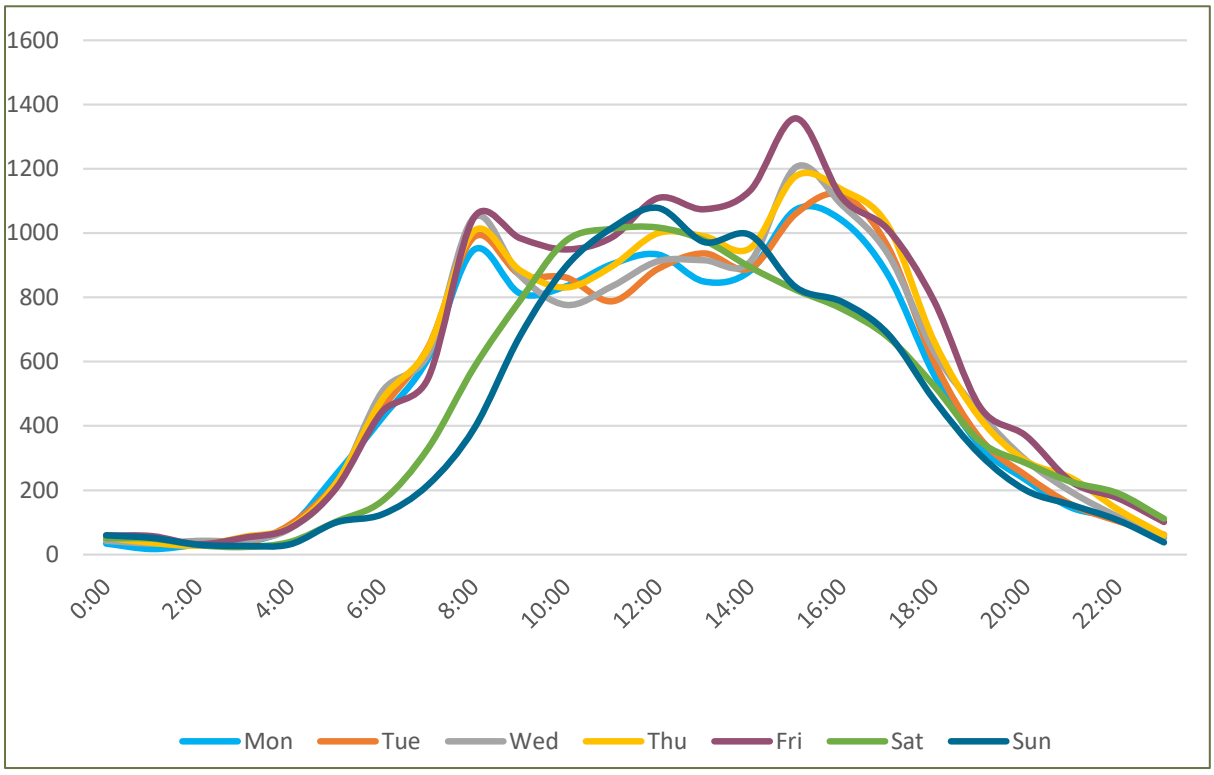
5.2 Existing Traffic Demands

The following traffic surveys were undertaken to ascertain the existing traffic demand and speed situation:

- 7-day pneumatic tube surveys on Main Street to establish traffic volumes and speeds during the period 18-24 July 2023. The bi-directional traffic flows are summarised in **Figure 5**.
- Weekday AM and PM surveys at Main Street/Enfield Avenue intersection to establish turning movements on 1 December 2023.

The detailed traffic survey data is included at **Appendix C**.

Figure 5 Main Street Traffic Survey



5.3 Background Traffic Demands

The TfNSW Traffic Volume Viewer online portal was queried to determine whether there was any historical survey data available in the subregion that could be used to establish a background traffic growth rate. No data was available in the subregion.

In the absence of any historical trend data, a 2% per annum growth rate was assumed. The existing traffic survey already shows that Main Street traffic flows are comparably high during peak hour periods which will likely temper ongoing higher growth during the peak hour via alternate routes and peak hour spreading.

5.4 Proposed Development Traffic Generation

Peak hour traffic demand for the proposed development has been forecast based upon traffic generation rates outlined in the RTA (now TfNSW) *Guide to Traffic Generating Developments* (2002).

The adopted peak hour traffic generation rates and resultant traffic demand estimate for the proposed development are presented in **Table 7**.

Table 7 Development Peak Hour Traffic Generation Estimate

Land Use	Yield (m^3 GFA)	TfNSW PM Peak Hour Trip Rate	TfNSW PM Peak Generation	Adopted Peak Generation
Service Station	125	0.66*GFA of convenience store	83vph	120vph

A 50% factor of safety was also adopted to ensure a conservative analysis of the potential traffic impacts. Furthermore, the worst-case PM peak was also adopted for the AM assessment period.

A directional in/out distribution of 50% entry/50% egress trips has also been adopted consistent with typical traffic engineering practice. The 120vph would therefore equate to a traffic flow across the site crossovers (combined) of one vehicle entering and one vehicle exiting per minute.

5.5 Trip Assignment

The development traffic was assigned to the fronting road network based on consideration of the restricted site access that will not accommodate right turns to/from the site on both frontages.

Typical traffic engineering practice for a service station would be to assume that the vast majority (80-90%) of development trips are drop-in trips i.e. trips already occurring on the fronting road but dropping into the site because of the development.

This assessment assumes that 80% of development generated trips are drop-in trips.

Reflective of all assumptions documented above, the desktop traffic model volumes adopted for the operational assessment are summarised in **Appendix D**.

6.0 Site Access Assessment

Both site access intersections have been assessed as priority-controlled (unsignalised) left in/left out formations. A turn warrant assessment was undertaken to establish the appropriate turn treatment type based on the forecast traffic demands. The turn warrant assessment was undertaken in accordance with the research summarised within the *Department for Transport and Main Roads' Supplement to Austroads Guide to Road Design Part 4a: Unsignalised and Signalised Intersections (2021)*.

The adoption of the Austroads methodology is very conservative as it relates to site access given the underlying research and guidance is primarily intended for road intersections.

To assist interpretation of the assessment, a pictorial description of the various turn treatments that may be considered is summarised in **Figure 6**.

Figure 6 Turn Treatment Types

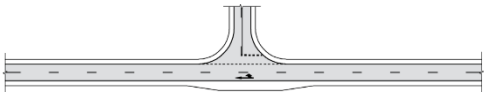
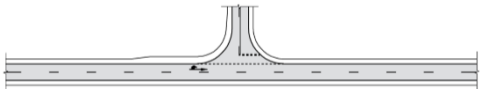
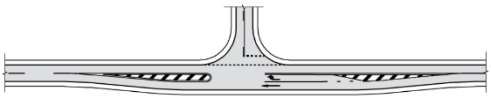
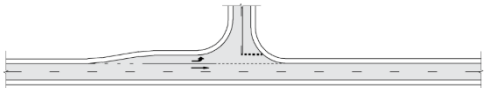
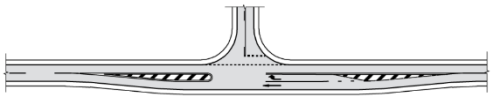
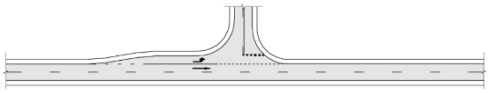
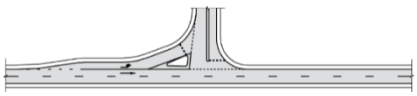
Acronym	Right Turn Treatment	Left Turn Treatment
BAR or BAL	 Basic Right Turn (**BAR**)	 Basic Left Turn (**BAL**)
CHR(S) or AUL(S)	 Channelised Right Turn [Short] (**CHR[S]**)	 Auxiliary Left Turn [Short] (**AUL[S]**)
CHR or AUL/CHL	 Channelised Right Turn (**CHR**)	 Auxiliary Left Turn (**AUL**)  Channelised Left Turn (**CHL**)

Figure 7 and **Figure 8** overleaf present the turn warrant findings for the Main Street/Site Access driveway at the 2035 design horizon year for the 'With Development' traffic scenario. The assessment is based on the following criteria:

- Design Domain – Extended Design Domain (i.e. brownfield site);
- Road configuration – two-lane two-way;
- Design speed – less than 70km/h (based on 85% percentile speeds); and
- Left turn splitter island – n/a.

Figure 7 Turn Warrant Assessment – 2036 Weekday AM Peak

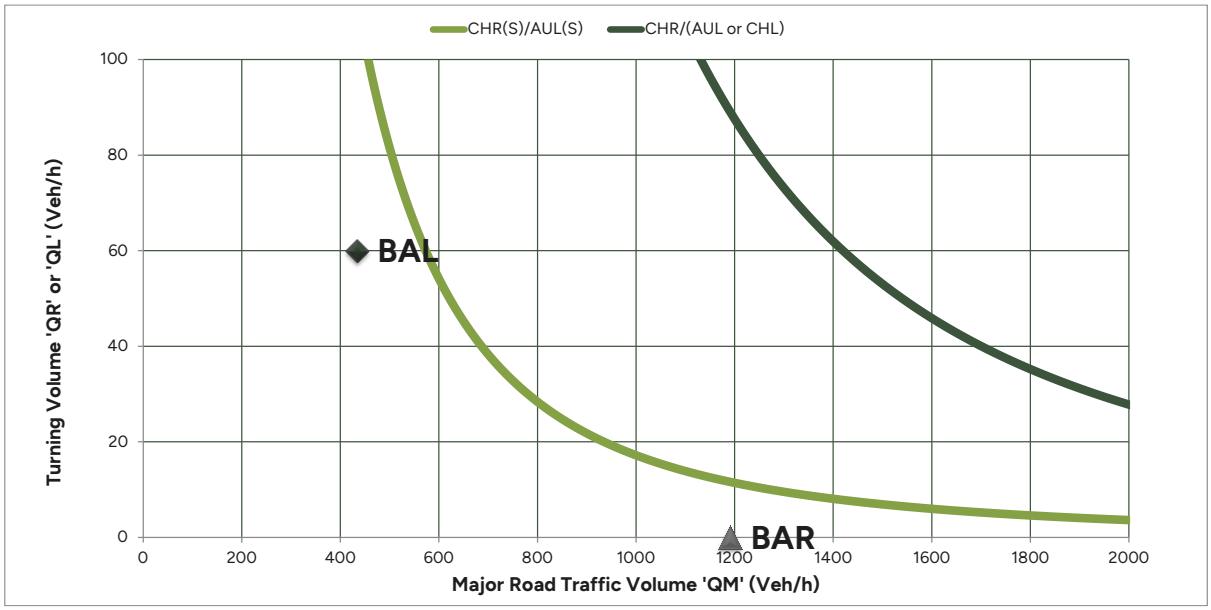
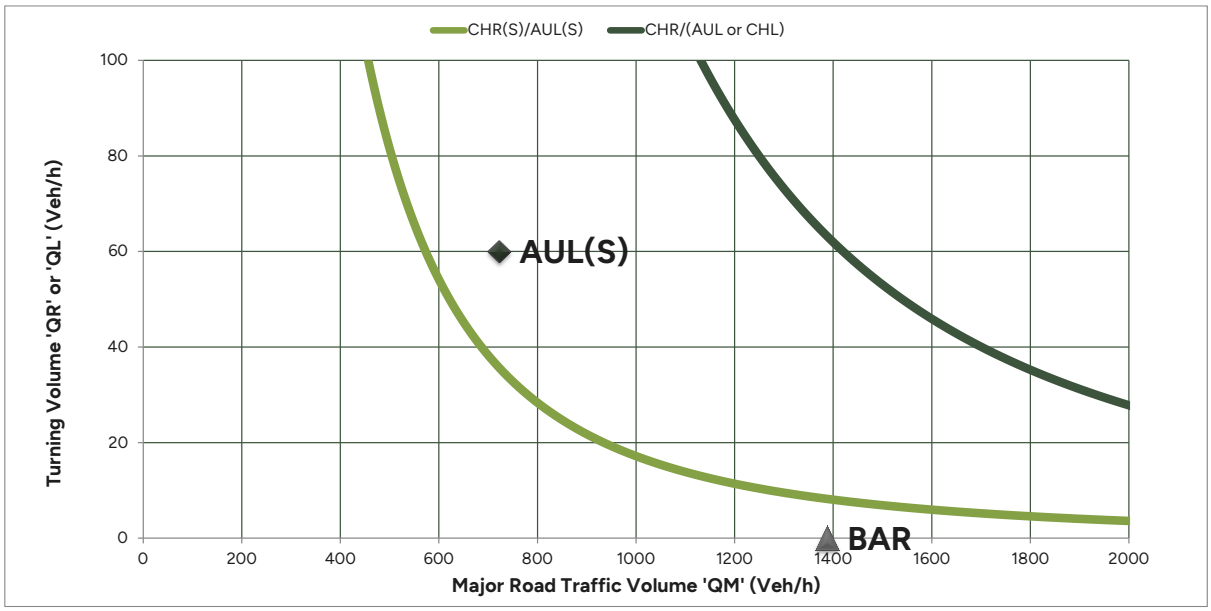


Figure 8 Turn Warrant Assessment – 2036 Weekday PM Peak



The combined Figure 7 and **Figure 8** indicate that an AUL(s) auxiliary lane treatment is warranted at the site access.

As noted earlier herein, the Austroads guidance is not intended for strict adoption for low and medium-order driveways. It is also noted that there are no existing auxiliary lane treatments along Main Street, even for intersections and developments that likely have significantly higher traffic generation potential.

Aerial imagery indicates that the Main Street westbound traffic lane is approx. 6.8m. This width, in tandem with parking restrictions that should be implemented along the site frontage, would accommodate vehicles decelerating and turning left into the site.

Based on this information, no auxiliary turn lane is warranted for the Main Street site access, and none is proposed.

7.0 Road Network Assessment

7.1 SIDRA Assumptions

The traffic analysis has been undertaken using existing and forecast volumes developed in line with the assumptions documented herein. The desktop spreadsheet model is included at **Appendix D** for reference.

The performance of the nominated study intersections was assessed using SIDRA Intersection 9.1 (SIDRA), a computer-based modelling software that determines intersection operation based on input parameters, including carriageway geometry and traffic volumes. Amongst other parameters, SIDRA provides an estimate of the intersection's Degree of Saturation (DOS), queues and delays.

The maximum DOS thresholds identified by the *Austroads Guide to Traffic Management Part 12: Traffic Impacts of Developments (AGTM12-19)* for each intersection type are reproduced in **Table 8**.

Table 8 Degree of Saturation Thresholds

Intersection Type	DOS Threshold
Signalised intersections	Less than or equal to 0.90
Roundabouts	Less than or equal to 0.85
Priority controlled intersections	Less than or equal to 0.80

TfNSW (formerly RMS) defines intersection performance based on vehicle delay. SIDRA calculates the average delay encountered by all vehicles that travel through the modelled intersection and determines a level of service per intersection, approach, and lane. The TfNSW *Guide to Traffic Generating Developments (2002)* criteria is reproduced in **Table 9**.

Table 9 TFNSW SIDRA Level of Service Criteria

Level of Service (LOS)	Average Delay per Vehicle (sec/veh)	Signalised Intersections and Roundabouts	Give Way & Stop Sign
A	0 to 14.5	Good operation	Good operation
B	14.5 to 28.5	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	28.5 to 42.5	Satisfactory	Satisfactory, but accident study required
D	42.5 to 56.5	Operating near capacity	Near capacity, accident study required
E	56.5 to 70.5	At capacity; at signals, incidents will cause excessive delays	At capacity, requires other control mode
F	Greater than 70.5	Extra capacity required	Extreme delay, major treatment required

Level of Service (LOS) values exceeding LOS D indicate that an intersection is nearing its practical capacity and capacity upgrading or other interventions may be required. It should also be noted that for roundabouts and priority control intersections, the critical movement for LOS assessment should be that with the worst movement delay.

7.2 SIDRA Assessment Scenarios

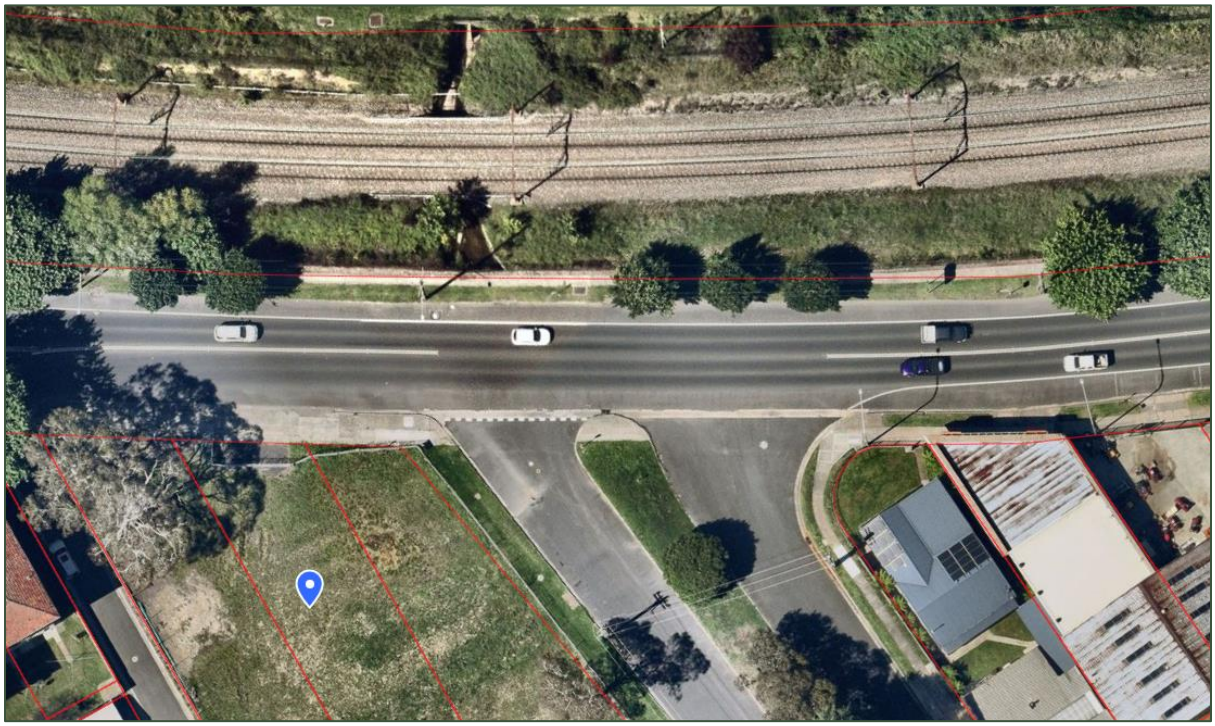
This assessment assumes that the development year of opening is 2025. The following scenarios were assessed:

- **2023 'Base'**: to establish the current background traffic conditions for model validation purposes.
- **2025 'Background'**: to establish the background traffic conditions in the absence of any development traffic at the year of opening.
- **2025 'Background + Development'**: to identify the incremental impact of development traffic on any movement during the year of opening.
- **2035 'Background'**: to establish the background traffic conditions in the absence of any development traffic 10 years after the year of opening, and
- **2035 'Background + Development'**: to identify the incremental impact of development traffic on any movement 10 years after the year of opening.

7.3 SIDRA Analysis

The Main Street/Enfield Avenue intersection is an existing priority-controlled T-junction intersection (**Figure 9**).

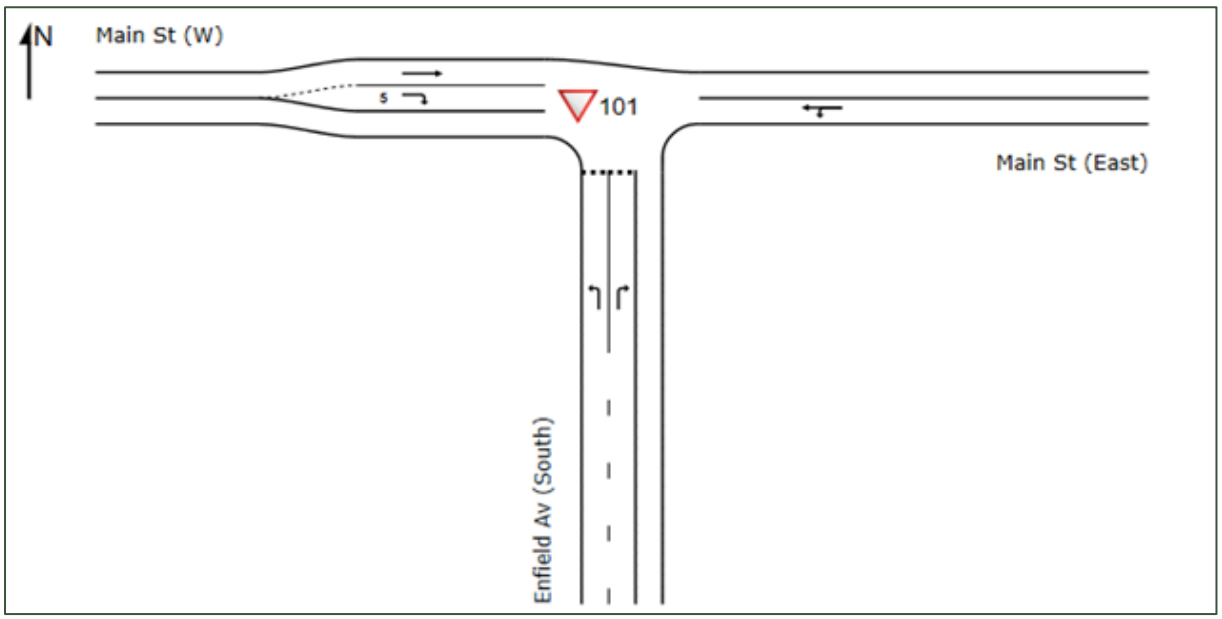
Figure 9 Main Street/Enfield Avenue – Aerial Intersection Layout



Whilst there are no formal auxiliary turn lanes at the intersection, site observations confirm that eastbound vehicles travelling along Main Street consistently use the kerbside lane to pass vehicles turning right into Enfield Avenue.

The **Figure 10** layout was adopted for the SIDRA analysis which considers this observed behaviour**.**

Figure 10 Main Street/Enfield Avenue – SIDRA Site Layout



The 2023 Background SIDRA models were developed with the surveyed traffic movements. The output delays and queues were compared to actual observations made using the survey video to ensure the models were sufficiently validated. The SIDRA operational analysis outputs are summarised in **Table 10**. Detailed outputs are included at **Appendix E**.

Table 10 Main Street/Enfield Avenue– SIDRA Summary

Year	AM Peak				PM Peak			
	DOS	Average Delay (sec)	Critical Delay (sec) [1]	95%ile Queue	DOS	Average Delay (sec)	Critical Delay (sec) [1]	95%ile Queue
Background								
2023	0.395	0.6 sec	20.5	1.7m	0.375	0.6	24.0	1.3
2025	0.389	0.7	20.6	1.9	0.390	0.7	26.1	1.5
2035	0.464	0.9	30.3	3.2	0.466	0.9	41.8	2.9
Background + Development								
2025	0.389	1.0	21.0	2.3	0.395	1.1	26.8	2.8
2035	0.464	1.2	31.9	4.1	0.471	1.3	44.7	4.0

[1] Critical right turn out from Enfield Avenue delay

The **Table 10** results indicate that the Main Street/Enfield Avenue intersection is currently operating within typically accepted performance thresholds. However, right-turn movements exiting Enfield Avenue are subject to elevated delays.

The subject development will have a minor impact on Background operations; however, not sufficient in scale or type to warrant capacity mitigation or upgrading. Delays for the critical movement are forecast to increase to approx. 44 seconds at 2035 With Development which would be categorised as at the lower end of LOS D which equates to “Near capacity, accident study required”.

Based on this information, no capacity or safety upgrading is warranted for the Main Street/Enfield Avenue intersection, and none is proposed.

8.0 Summary

SLR Consulting Pty Ltd (SLR) has been commissioned by Main Street Cap Pty Ltd to prepare a Traffic Impact Assessment (TIA) for the proposed Service Station and Take-away Food Premises with Drive-through development located at 353 Main Street, Lithgow, New South Wales, formally described as Lots 113-115 of DP9370.

Based on the analysis and discussion documented herein, the following is concluded:

- The development provides six on-site car parking spaces on site, including one accessible space. This supply is consistent with the Council DCP and TfNSW guidance including 2024 .
- The proposed development vehicle access, car parking and servicing arrangements are appropriate and satisfy the relevant AS2890 requirements.
- Provision is made for on-site servicing with a designated truck loading space.
- The development layout can accommodate all forecast design vehicle manoeuvres with sufficient clearance. No queueing near or onto the fronting roads is anticipated.
- The incremental traffic generated by the development will have an insignificant impact on the safe and efficient operation of the surrounding road network. No safety or capacity mitigations are warranted to enable the proposed development.

Appendix A Plans of Development

Traffic Impact Assessment

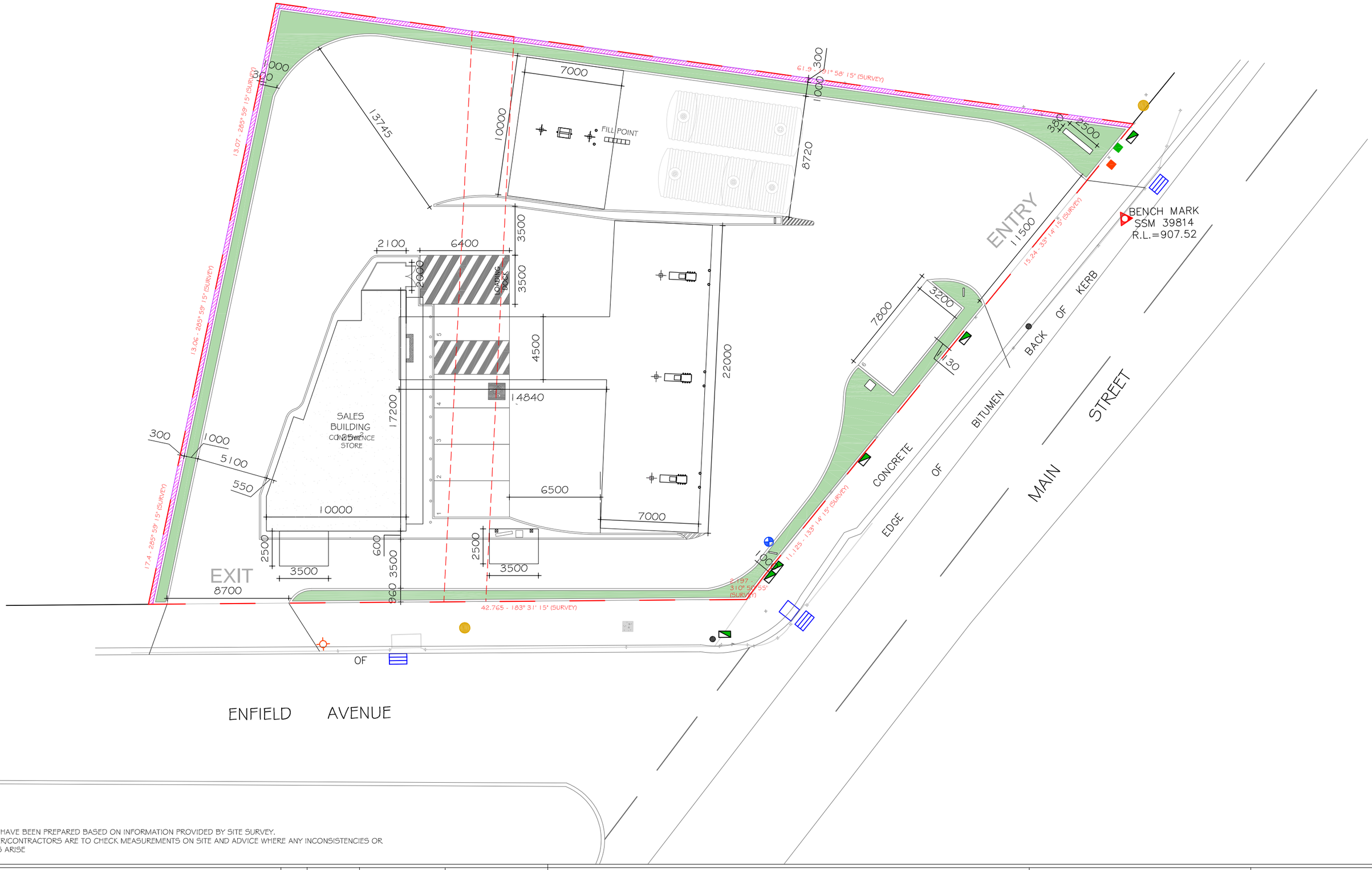
Lithgow, 353 Main Street Service Station

Main Street Cap Pty Ltd

SLR Project No.: 610.031536

8 July 2024

SLR



NOTE

DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY SITE SURVEY.
THE BUILDER/CONTRACTORS ARE TO CHECK MEASUREMENTS ON SITE AND ADVICE WHERE ANY INCONSISTENCIES OR OMISSIONS ARISE

ISSUE	AMENDMENT	DRAWN	DATE
A	ISSUED FOR DISCUSSION	MB/SH	24/06/2024

DO NOT SCALE DRAWING

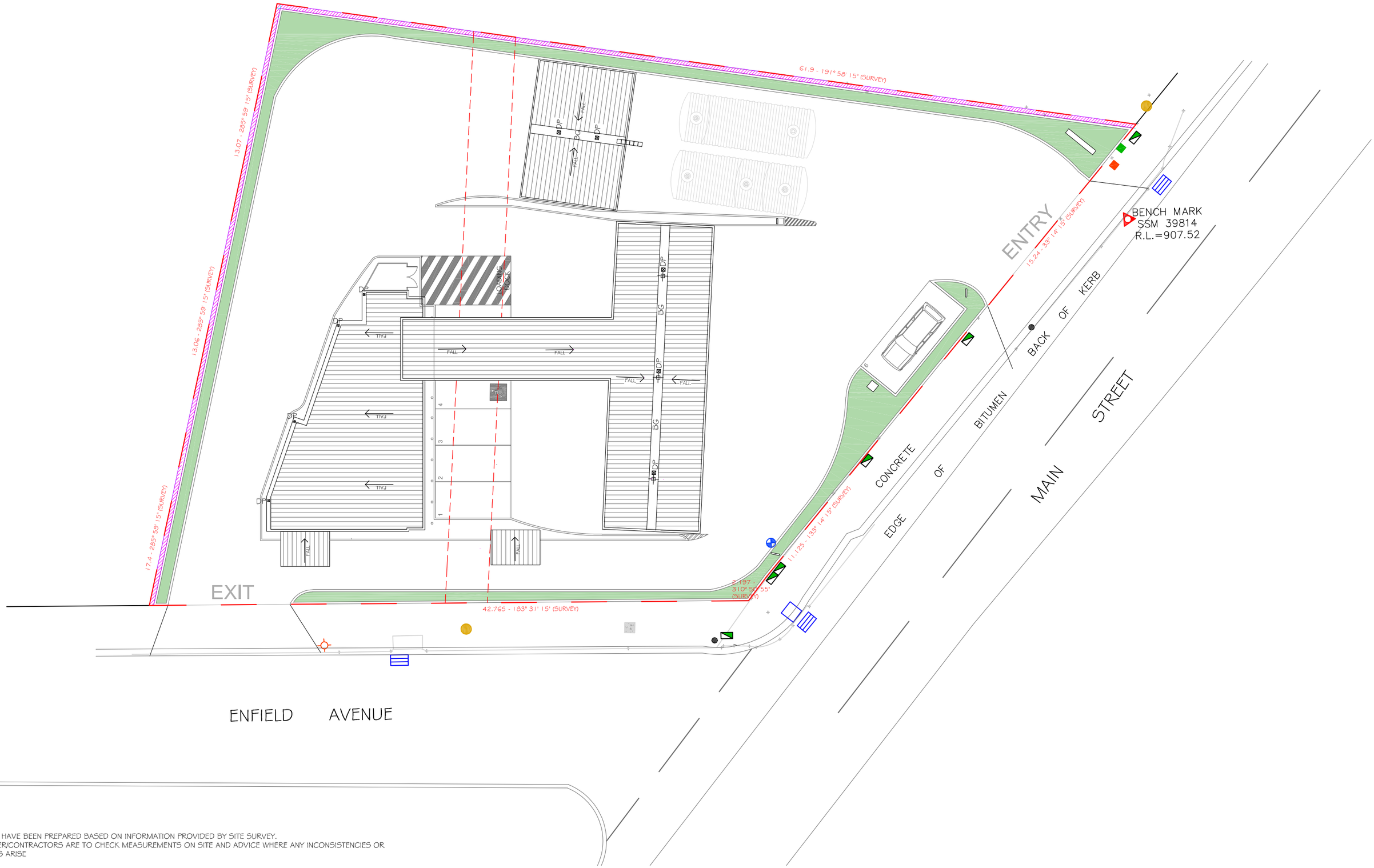
CONTRACTORS TO CHECK ALL SITE DIMENSIONS & LEVELS BEFORE COMENCEMENT OF WORK WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE

Go Go Petroleum
Builder, developer & specialist retailer since 1993
No. 666 Main St, BAIRNSDALE, VIC, 3875
ph 0417 492 759
email mick2374@gmail.com
'Concept to completion'

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

CLIENT: MAIN STREET CAP PTY LTD
PROJECT: 353 MAIN STREET LITHGOW NSW
TITLE: DIMENSIONED SITE PLAN

DATE: 24/06/2024
SHEET SIZE: A3
DWG No: DA 002
SCALE: 1:250



NOTE

DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY SITE SURVEY.
THE BUILDER/CONTRACTORS ARE TO CHECK MEASUREMENTS ON SITE AND ADVICE WHERE ANY INCONSISTENCIES OR OMISSIONS ARISE

ISSUE	AMENDMENT	DRAWN	DATE
A	ISSUED FOR DISCUSSION	MB/SH	24/06/2024

DO NOT SCALE DRAWING

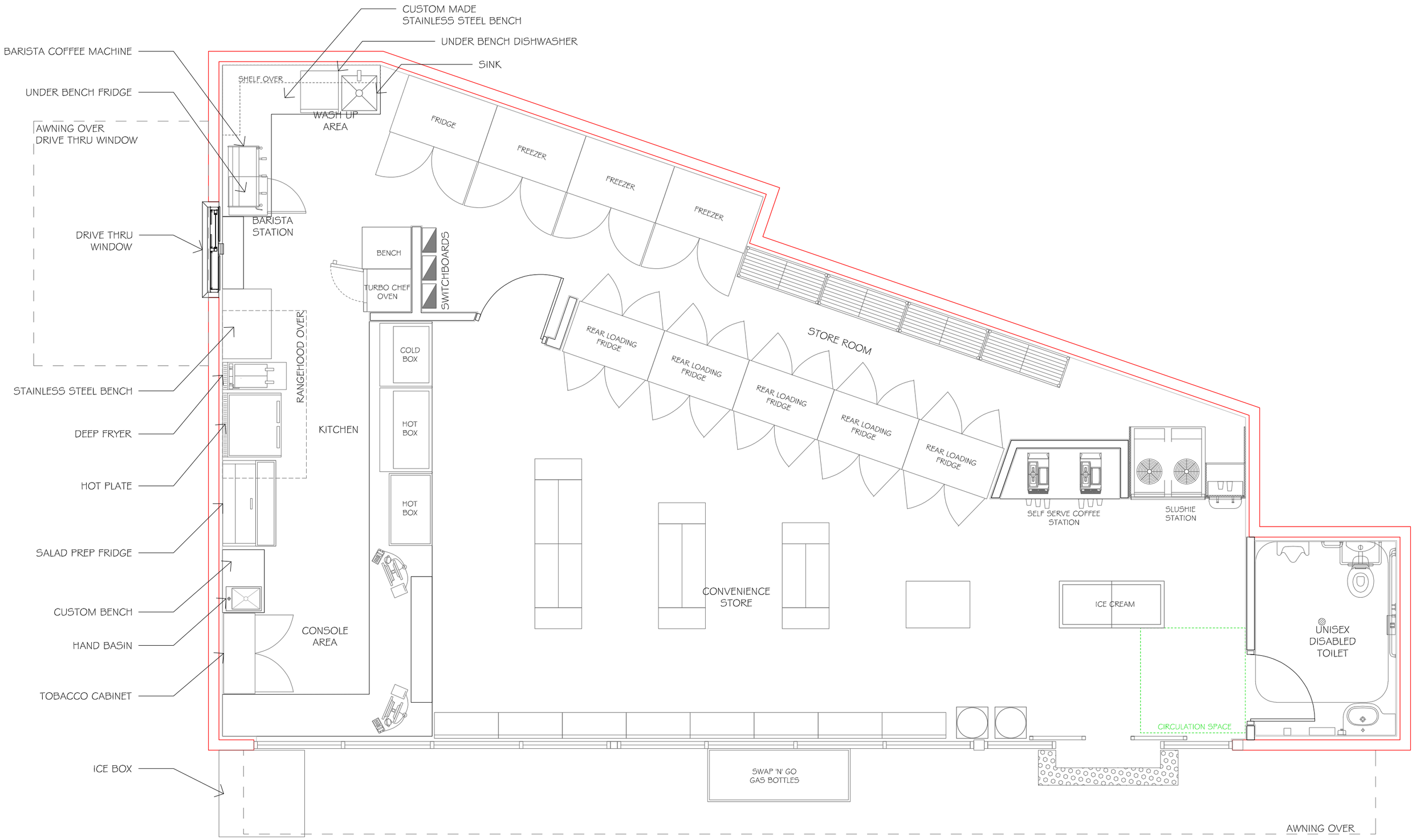
CONTRACTORS TO CHECK ALL SITE DIMENSIONS & LEVELS BEFORE COMENCEMENT OF WORK WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE

Go Go Petroleum
Builder, developer & specialist retailer since 1993
No. 666 Main St, BAIRNSDALE, VIC, 3875
ph 0417 492 759
email mick2374@gmail.com
'Concept to completion'

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

CLIENT: MAIN STREET CAP PTY LTD
PROJECT: 353 MAIN STREET LITHGOW NSW
TITLE: ROOF PLAN

DATE: 24/06/2024
SHEET SIZE: A3
DWG No: DA 003
SCALE: 1:250



NOTE

DRAWINGS HAVE BEEN PREPARED BASED ON INFORMATION PROVIDED BY SITE SURVEY.
THE BUILDER/CONTRACTORS ARE TO CHECK MEASUREMENTS ON SITE AND ADVICE WHERE ANY INCONSISTENCIES OR OMISSIONS ARISE

ISSUE	AMENDMENT	DRAWN	DATE
A	ISSUED FOR DISCUSSION	MB/SH	24/06/2024

DO NOT SCALE DRAWING

CONTRACTORS TO CHECK ALL SITE DIMENSIONS & LEVELS BEFORE COMENCEMENT OF WORK WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALE

Go Go Petroleum
Builder, developer & specialist retailer since 1993
No. 666 Main St, BAIRNSDALE, VIC, 3875
ph 0417 492 759
email mick2374@gmail.com
'Concept to completion'

ISSUED FOR DEVELOPMENT APPROVAL
NOT FOR CONSTRUCTION

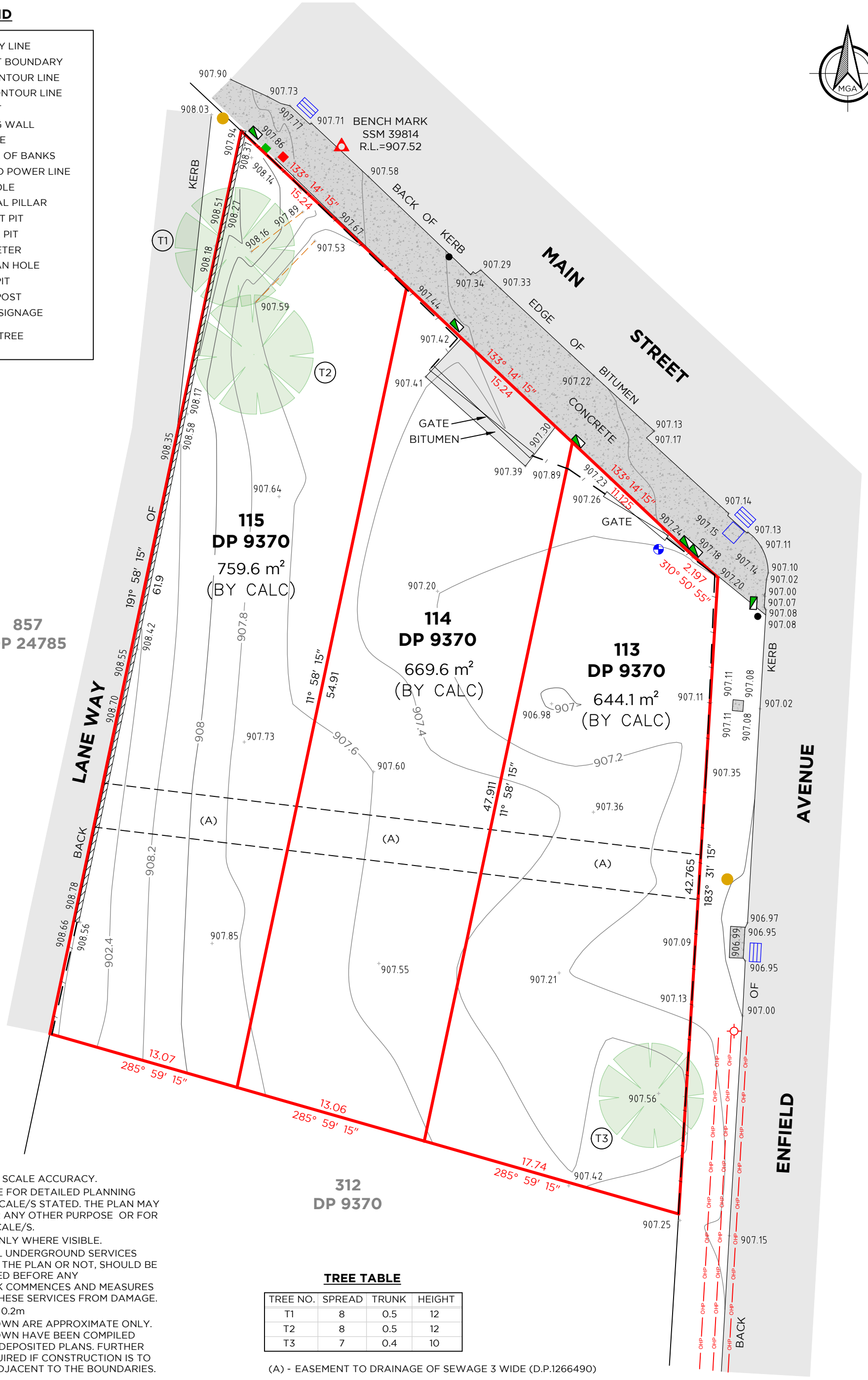
CLIENT: MAIN STREET CAP PTY LTD
PROJECT: 353 MAIN STREET
LITHGOW
NSW

TITLE: PROPOSED SHOP FLOOR PLAN

DATE: 24/06/2024
SHEET SIZE: A3
DWG No: DA 004
SCALE: 1:50

LEGEND

- BOUNDARY LINE
- ADJACENT BOUNDARY
- MINOR CONTOUR LINE
- 10 MAJOR CONTOUR LINE
- EASEMENT
- RETAINING WALL
- FENCE LINE
- TOP & TOE OF BANKS
- OHP OVERHEAD POWER LINE
- POWER POLE
- ELECTRICAL PILLAR
- KERB INLET PIT
- DRAINAGE PIT
- WATER METER
- SEWER MAN HOLE
- TELSTRA PIT
- TELSTRA POST
- DENOTES SIGNAGE
- DENOTES TREE



NOTES:

1. FEATURES SHOWN TO SCALE ACCURACY.
2. THIS PLAN IS SUITABLE FOR DETAILED PLANNING AND DESIGN AT THE SCALE/S STATED. THE PLAN MAY NOT BE SUITABLE FOR ANY OTHER PURPOSE OR FOR USE AT ANY OTHER SCALE/S.
3. SERVICES LOCATED ONLY WHERE VISIBLE.
4. THE LOCATION OF ALL UNDERGROUND SERVICES WHETHER SHOWN ON THE PLAN OR NOT, SHOULD BE PRECISELY DETERMINED BEFORE ANY CONSTRUCTION WORK COMMENCES AND MEASURES TAKEN TO PROTECT THESE SERVICES FROM DAMAGE.
5. CONTOUR INTERVAL - 0.2m
6. THE BOUNDARIES SHOWN ARE APPROXIMATE ONLY. THE BOUNDARIES SHOWN HAVE BEEN COMPILED FROM THE RELEVANT DEPOSITED PLANS. FURTHER SURVEY WILL BE REQUIRED IF CONSTRUCTION IS TO TAKE PLACE ON OR ADJACENT TO THE BOUNDARIES.

TREE TABLE

TREE NO.	SPREAD	TRUNK	HEIGHT
T1	8	0.5	12
T2	8	0.5	12
T3	7	0.4	10

(A) - EASEMENT TO DRAINAGE OF SEWAGE 3 WIDE (D.P.1266490)

REV.	DATE	AMENDMENT(S)	SUR	DFT	CHK
A	22.07.21	ORIGINAL ISSUE	LM	JD	LM

DELFS LASCELLES
CONSULTING SURVEYORS
260 MAITLAND ROAD,
MAYFIELD NSW 2304
ABN: 28 164 260 100
T: (02) 4964 4886
E: admin@delacs.com.au
delacs.com.au
CAD REF: 21484 - DET

DETAIL SURVEY OF LOTS 113-115 DP9370

SITE ADDRESS:
353 MAIN STREET
LITHGOW

CLIENT:
SLR

POSITION DATUM:	SSM 39814
ORIENTATION:	MGA (GROUND)
EASTING:	234 093.260
NORTHING:	6 291640.485
CLASS: B	PU: 0.02
HEIGHT DATUM:	SSM 39814
CLASS: LB	PU: 0.02
RL: 907.521 (AHD)	DATE: 24.05.21

SURVEYED	DRAFTED	CHECKED
LM	JD	LM

SCALE	PAGE SIZE	DATE
1:250	A3	23.06.21

SHEET	REV.	PROJECT No.
1	A	21484

Appendix B Swept Path Assessment (SLR)

Traffic Impact Assessment

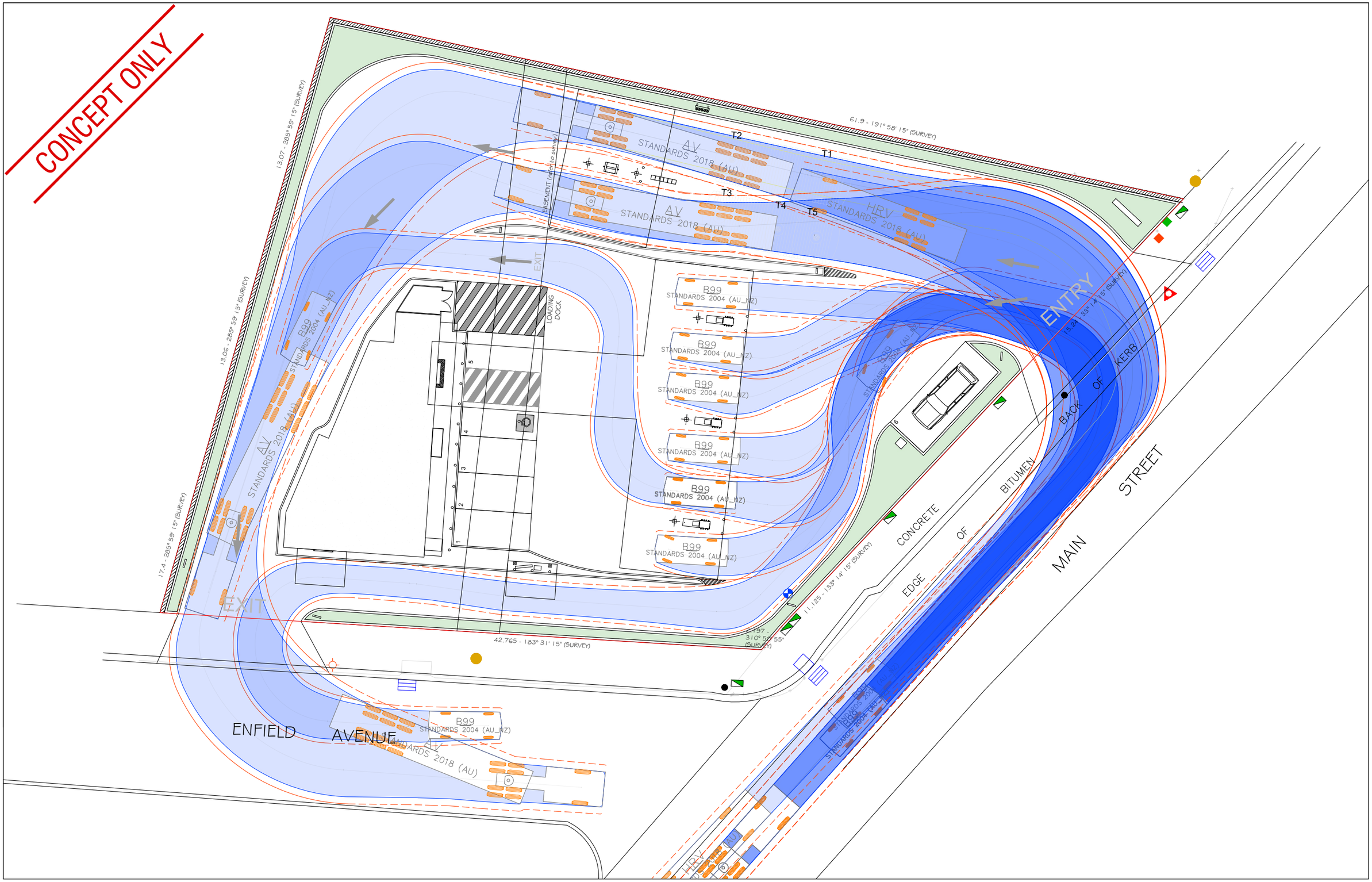
Lithgow, 353 Main Street Service Station

Main Street Cap Pty Ltd

SLR Project No.: 610.031536

8 July 2024

CONCEPT ONLY



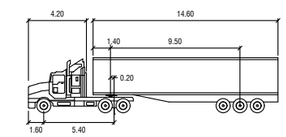
LEVEL 16, 175 EAGLE ST
BRISBANE
QUEENSLAND 4000
AUSTRALIA
T: 61 7 3858 4800

www.slrconsulting.com

Project No:	610.031536
Date:	18/11/2024
Drawn by:	KS
Checked by:	CS
Sheet Size:	A3
Projection:	-

SWEPT PATH LEGEND

- Vehicle Path
- Vehicle Body
- Body Clearance

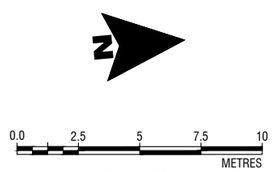


AV

meters			
Tractor Width	: 2.50	Lock to Lock Time	: 6.0
Trailer Width	: 2.50	Steering Angle	: 28.3
Tractor Track	: 2.50	Articulating Angle	: 72.0
Trailer Track	: 2.50		

B99

meters	
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9



SCALE 1:250

New Pleasant Investment

353 Main Street, Lithgow

Swept Path Assessment

FIGURE SK101

Appendix C Traffic Survey Data

Traffic Impact Assessment

Lithgow, 353 Main Street Service Station

Main Street Cap Pty Ltd

SLR Project No.: 610.031536

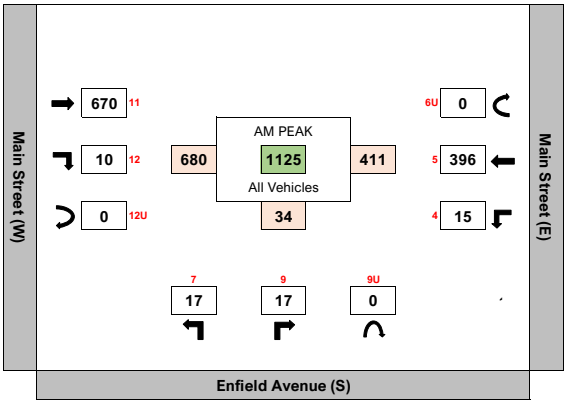
8 July 2024

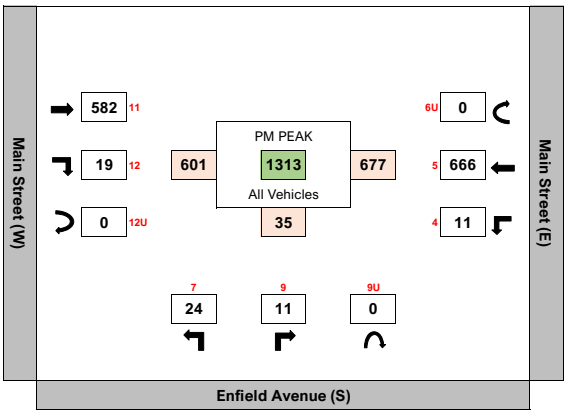
Report Type:	Peak Hour Volume Diagram
Geocounts Job ID:	1697172796430
Client Job Number:	n/a
Client Name:	SLR Consulting
Location:	Lithgow
Survey Site:	IC01 (Main Street/Enfield Avenue)
Survey Date:	**Friday, 1 December 2023**
Site Coordinates:	-33.4820762, 150.1388088

AM Peak Hour:	8:15 to 9:15
PM Peak Hour:	15:00 to 16:00

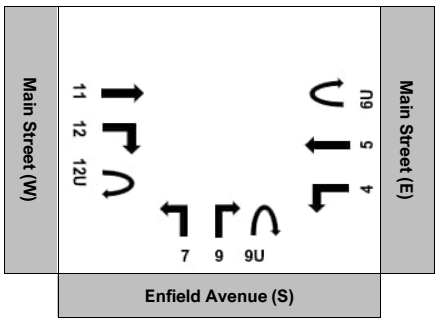
Select User Type

All Vehicles





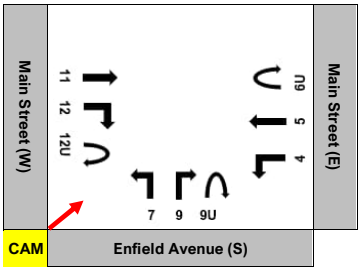
Report Type:	Classified Intersection Data - **60min**
Geocounts Job ID:	1697172796430
Client Job Number:	n/a
Client Name:	SLR Consulting
Location:	Lithgow
Survey Site:	IC01 (Main Street/Enfield Avenue)
Survey Date:	**Friday, 1 December 2023**
Site Coordinates:	-33.4820762, 150.1388088



AM Peak Hour:	**8:15 to 9:15**
PM Peak Hour:	**15:00 to 16:00**
AM Peak Hour Activity:	**1,125**
PM Peak Hour Activity:	**1,313**

Approach	**Main Street (E)**									**Enfield Avenue (S)**									**Main Street**				
Movement	Movement 4 (Left Turn)			Movement 5 (Through)			Movement 6U (U Turn)			Movement 7 (Left Turn)			Movement 9 (Right Turn)			Movement 9U (U-Turn)			Movement 11 (Through)			Movement (Right Tur	
Time Interval	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy
7:00 to 8:00	6	0	**6**	261	39	**300**	0	0	**0**	10	1	**11**	5	0	**5**	0	0	**0**	318	24	**342**	6	0
7:15 to 8:15	5	0	**5**	270	35	**305**	0	0	**0**	13	1	**14**	5	0	**5**	0	0	**0**	373	29	**402**	8	1
7:30 to 8:30	6	0	**6**	300	33	**333**	0	0	**0**	11	1	**12**	6	1	**7**	0	0	**0**	423	26	**449**	8	1
7:45 to 8:45	6	0	**6**	312	23	**335**	0	0	**0**	11	0	**11**	11	1	**12**	0	0	**0**	548	28	**576**	8	2
8:00 to 9:00	9	0	**9**	330	17	**347**	0	0	**0**	15	0	**15**	16	1	**17**	0	0	**0**	616	33	**649**	11	2
8:15 to 9:15	15	0	**15**	374	22	**396**	0	0	**0**	17	0	**17**	16	1	**17**	0	0	**0**	635	35	**670**	9	1
8:30 to 9:30	18	0	**18**	374	25	**399**	0	0	**0**	19	0	**19**	15	0	**15**	0	0	**0**	608	37	**645**	13	1
8:45 to 9:45	17	0	**17**	393	25	**418**	0	0	**0**	21	0	**21**	12	0	**12**	0	0	**0**	548	44	**592**	13	0
9:00 to 10:00	17	1	**18**	416	31	**447**	0	0	**0**	17	0	**17**	6	0	**6**	0	0	**0**	546	39	**585**	8	0

Report Type:	Classified Intersection Data - 15min
Geocounts Job ID:	1697172796430
Client Job Number:	n/a
Client Name:	SLR Consulting
Location:	Lithgow
Survey Site:	IC01 (Main Street/Enfield Avenue)
Survey Date:	**Friday, 1 December 2023**
Site Coordinates:	-33.4820762, 150.1388088



	Light	Heavy	HV%
Total Activity AM:	**2,614**	**188**	**6.7%**
Total Activity PM:	**3,553**	**112**	**3.1%**

Approach	**Main Street (E)**									**Enfield Avenue (S)**									**Main Street (W)**								
Movement	Movement 4 (Left Turn)			Movement 5 (Through)			Movement 6U (U Turn)			Movement 7 (Left Turn)			Movement 9 (Right Turn)			Movement 9U (U-Turn)			Movement 11 (Through)			Movement 12 (Right Turn)			Movement 12U (U Turn)		
Time Interval	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy	**Total**	Light	Heavy	**Total**
7:00 to 7:15	2	0	**2**	56	8	**64**	0	0	**0**	1	0	**1**	2	0	**2**	0	0	**0**	58	4	**62**	1	0	**1**	0	0	**0**
7:15 to 7:30	2	0	**2**	62	9	**71**	0	0	**0**	4	0	**4**	1	0	**1**	0	0	**0**	88	11	**99**	1	0	**1**	0	0	**0**
7:30 to 7:45	2	0	**2**	72	14	**86**	0	0	**0**	2	1	**3**	0	0	**0**	0	0	**0**	74	3	**77**	2	0	**2**	0	0	**0**
7:45 to 8:00	0	0	**0**	71	8	**79**	0	0	**0**	3	0	**3**	2	0	**2**	0	0	**0**	98	6	**104**	2	0	**2**	1	0	**1**
8:00 to 8:15	1	0	**1**	65	4	**69**	0	0	**0**	4	0	**4**	2	0	**2**	0	0	**0**	113	9	**122**	3	1	**4**	0	0	**0**
8:15 to 8:30	3	0	**3**	92	7	**99**	0	0	**0**	2	0	**2**	2	1	**3**	0	0	**0**	138	8	**146**	1	0	**1**	0	0	**0**
8:30 to 8:45	2	0	**2**	84	4	**88**	0	0	**0**	2	0	**2**	5	0	**5**	0	0	**0**	199	5	**204**	2	1	**3**	0	0	**0**
8:45 to 9:00	3	0	**3**	89	2	**91**	0	0	**0**	7	0	**7**	7	0	**7**	0	0	**0**	166	11	**177**	5	0	**5**	0	0	**0**
9:00 to 9:15	7	0	**7**	109	9	**118**	0	0	**0**	6	0	**6**	2	0	**2**	0	0	**0**	132	11	**143**	1	0	**1**	0	0	**0**
9:15 to 9:30	6	0	**6**	92	10	**102**	0	0	**0**	4	0	**4**	1	0	**1**	0	0	**0**	111	10	**121**	5	0	**5**	0	0	**0**
9:30 to 9:45	1	0	**1**	103	4	**107**	0	0	**0**	4	0	**4**	2	0	**2**	0	0	**0**	139	12	**151**	2	0	**2**	0	0	**0**
9:45 to 10:00	3	1	**4**	112	8	**120**	0	0	**0**	3	0	**3**	1	0	**1**	0	0	**0**	164	6	**170**	0	0	**0**	0	0	**0**
AM Total	32	1	**33**	1,007	87	**1,094**	0	0	**0**	42	1	**43**	27	1	**28**	0	0	**0**	1,480	96	**1,576**	25	2	**27**	1	0	**1**
15:00 to 15:15	1	0	**1**	168	5	**173**	0	0	**0**	3	1	**4**	1	0	**1**	0	0	**0**	125	4	**129**	4	0	**4**	0	0	**0**
15:15 to 15:30	5	0	**5**	148	10	**158**	0	0	**0**	7	0	**7**	1	0	**1**	0	0	**0**	158	2	**160**	4	1	**5**	0	0	**0**
15:30 to 15:45	3	0	**3**	164	9	**173**	0	0	**0**	10	1	**11**	4	0	**4**	0	0	**0**	134	8	**142**	4	1	**5**	0	0	**0**
15:45 to 16:00	2	0	**2**	159	3	**162**	0	0	**0**	2	0	**2**	5	0	**5**	0	0	**0**	142	9	**151**	5	0	**5**	0	0	**0**
16:00 to 16:15	4	0	**4**	127	4	**131**	0	0	**0**	3	0	**3**	0	0	**0**	0	0	**0**	125	6	**131**	10	0	**10**	0	0	**0**
16:15 to 16:30	5	0	**5**	134	4	**138**	0	0	**0**	7	0	**7**	2	0	**2**	0	0	**0**	132	3	**135**	6	0	**6**	0	0	**0**
16:30 to 16:45	3	0	**3**	137	1	**138**	0	0	**0**	5	0	**5**	3	0	**3**	0	0	**0**	147	7	**154**	6	0	**6**	0	0	**0**
16:45 to 17:00	2	0	**2**	145	1	**146**	0	0	**0**	9	0	**9**	2	0	**2**	0	0	**0**	140	6	**146**	6	0	**6**	0	0	**0**
17:00 to 17:15	2	0	**2**	127	0	**127**	0	0	**0**	5	0	**5**	8	0	**8**	0	0	**0**	158	4	**162**	6	0	**6**	0	0	**0**
17:15 to 17:30	6	0	**6**	133	5	**138**	0	0	**0**	6	0	**6**	2	0	**2**	0	0	**0**	126	3	**129**	4	0	**4**	0	0	**0**
17:30 to 17:45	5	0	**5**	127	2	**129**	0	0	**0**	3	0	**3**	4	0	**4**	0	0	**0**	132	1	**133**	4	0	**4**	0	0	**0**
17:45 to 18:00	2	0	**2**	151	4	**155**	0	0	**0**	3	0	**3**	5	0	**5**	0	0	**0**	109	7	**116**	5	0	**5**	1	0	**1**
PM Total	40	0	**40**	1,720	48	**1,768**	0	0	**0**	63	2	**65**	37	0	**37**	0	0	**0**	1,628	60	**1,688**	64	2	**66**	1	0	**1**

Appendix D Desktop Traffic Model (SLR)

Traffic Impact Assessment

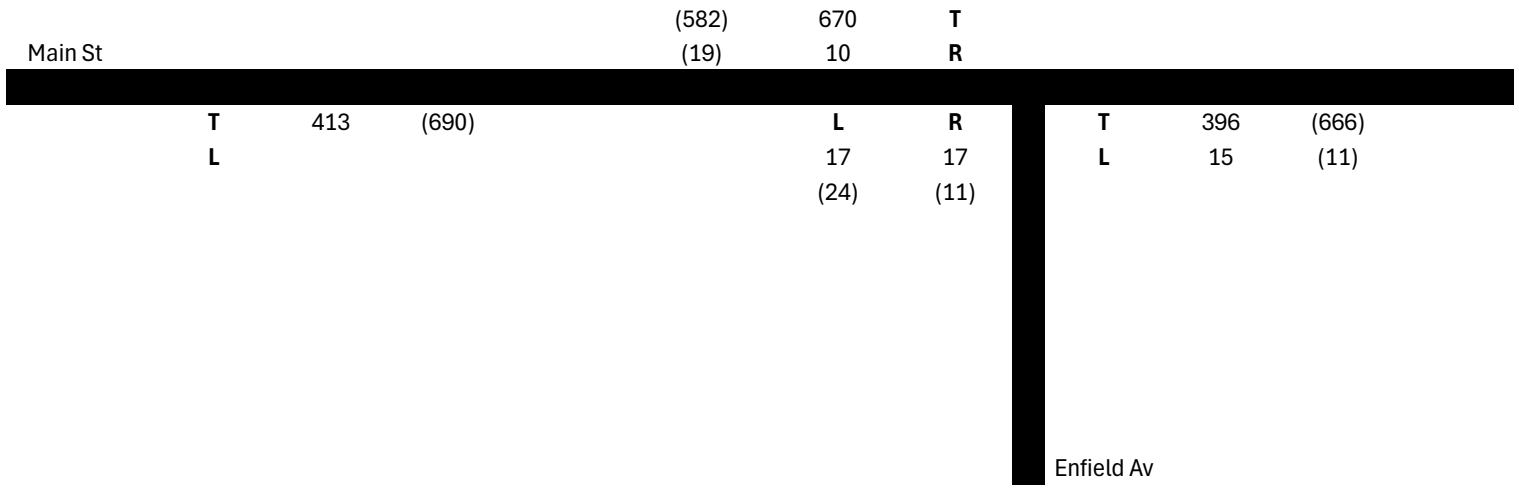
Lithgow, 353 Main Street Service Station

Main Street Cap Pty Ltd

SLR Project No.: 610.031536

8 July 2024

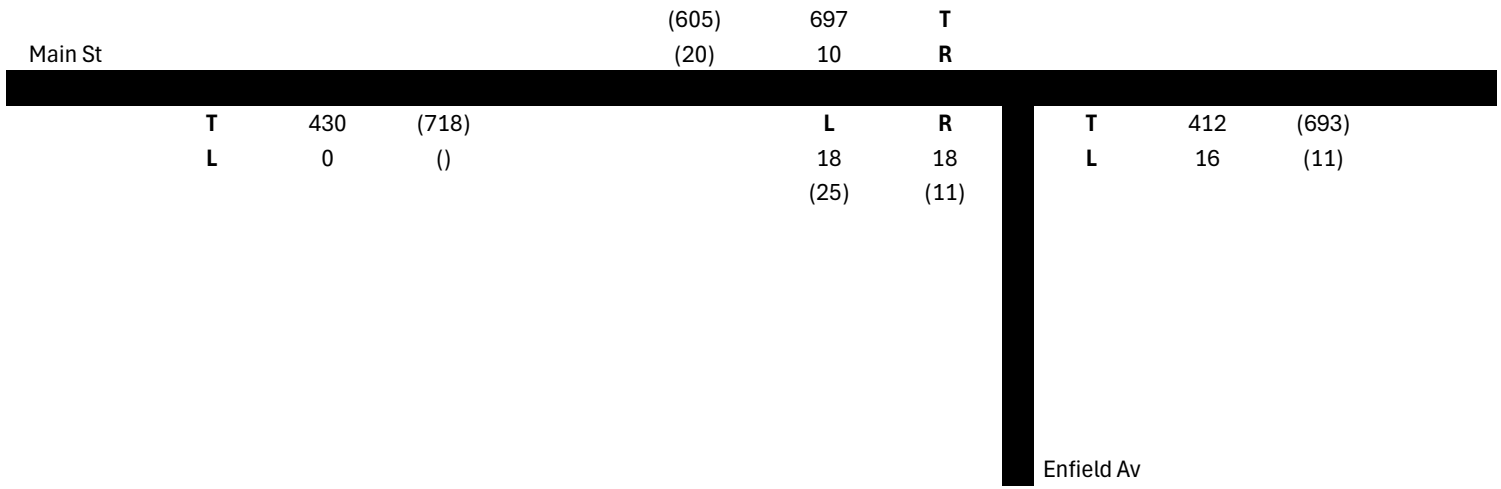
SLR



Legend

L	Left turn	###	Weekday AM
T	Through	(###)	Weekday PM
R	Right turn		
U	U-turn		

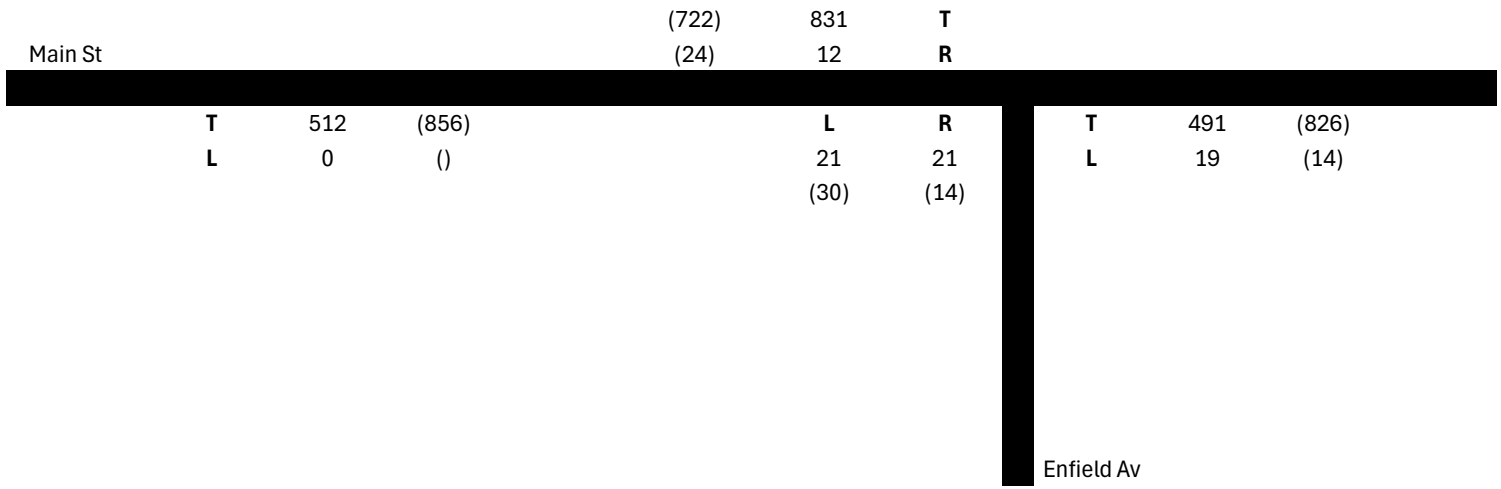
2023 Survey Base



Legend

L	Left turn	###	Weekday AM
T	Through	(###)	Weekday PM
R	Right turn		
U	U-turn		

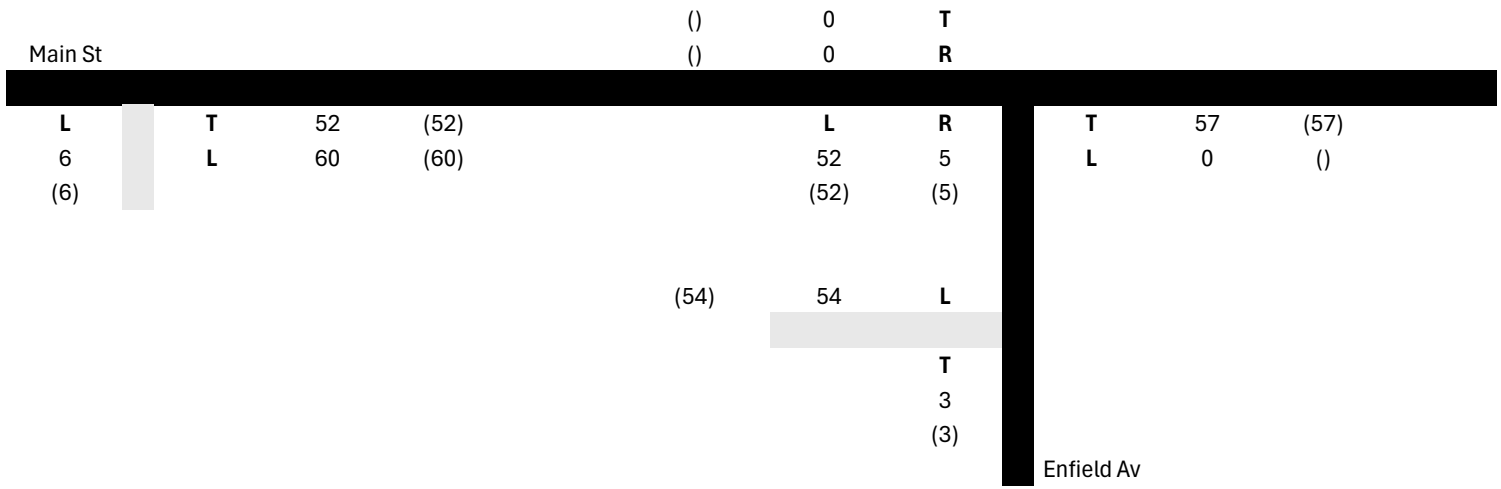
2025 Background



Legend

L	Left turn	###	Weekday AM
T	Through	(###)	Weekday PM
R	Right turn		
U	U-turn		

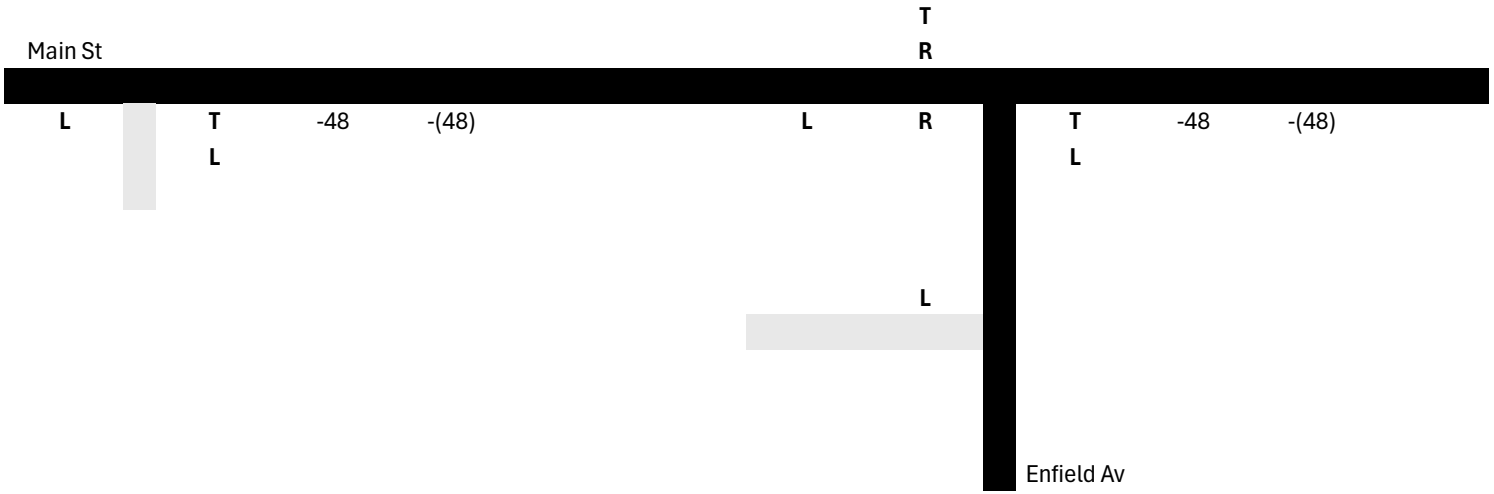
2035 Background



Legend

L	Left turn	###	Weekday AM
T	Through	(###)	Weekday PM
R	Right turn		
U	U-turn		

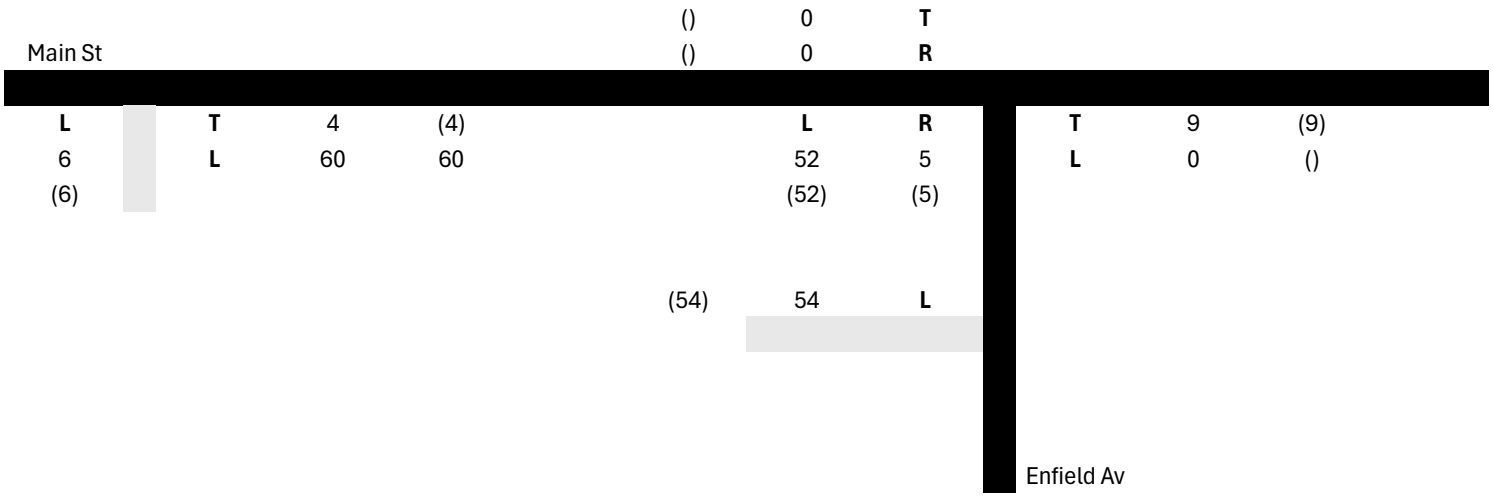
Development Traffic (ex Drop-in trips)



Legend

L	Left turn	###	Weekday AM
T	Through	(###)	Weekday PM
R	Right turn		
U	U-turn		

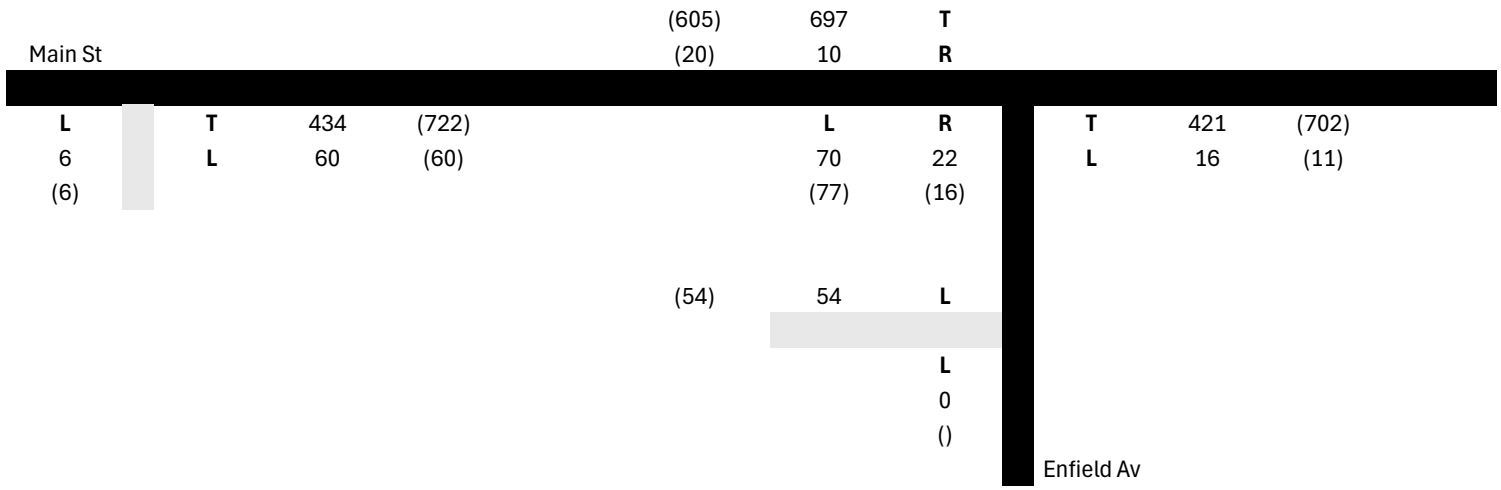
Drop-in Trips



Legend

L	Left turn	###	Weekday AM
T	Through	(###)	Weekday PM
R	Right turn		
U	U-turn		

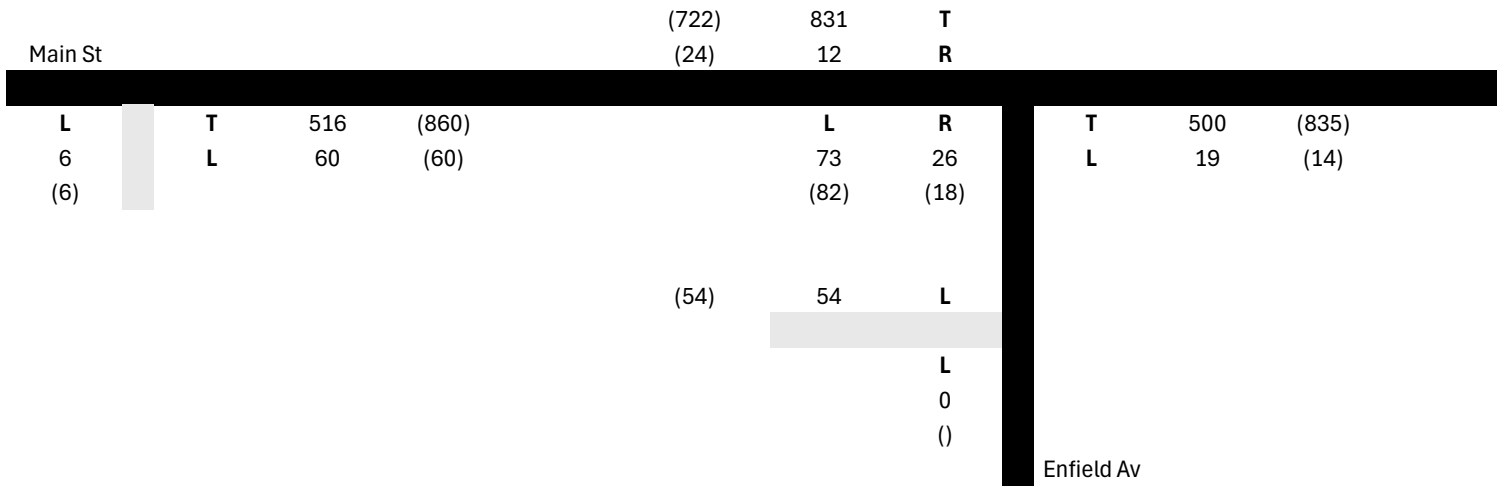
Development Traffic (with Drop-in trips)



Legend

L	Left turn	###	Weekday AM
T	Through	(###)	Weekday PM
R	Right turn		
U	U-turn		

2025 Background + Develoment



Legend

L	Left turn	###	Weekday AM
T	Through	(###)	Weekday PM
R	Right turn		
U	U-turn		

2035 Background + Develoment

Appendix E SIDRA Analysis Results (SLR)

Traffic Impact Assessment

Lithgow, 353 Main Street Service Station

Main Street Cap Pty Ltd

SLR Project No.: 610.031536

8 July 2024

MOVEMENT SUMMARY

Site: 101 [2023BG AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street/Enfield Street
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Enfield Av (South)															
1	L2	All MCs	18	2.0	18	2.0	0.016	7.0	LOS A	0.1	0.4	0.42	0.61	0.42	51.5
3	R2	All MCs	18	2.0	18	2.0	0.079	20.5	LOS B	0.2	1.7	0.83	0.93	0.83	43.2
Approach			36	2.0	36	2.0	0.079	13.8	LOS A	0.2	1.7	0.63	0.77	0.63	47.0
East: Main St (East)															
4	L2	All MCs	16	2.0	16	2.0	0.230	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.1
5	T1	All MCs	417	5.6	417	5.6	0.230	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	59.7
Approach			433	5.5	433	5.5	0.230	0.3	NA	0.0	0.0	0.00	0.02	0.00	59.6
West: Main St (W)															
11	T1	All MCs	744	5.2	744	5.2	0.395	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
12	R2	All MCs	11	2.0	11	2.0	0.009	7.0	LOS A	0.0	0.3	0.46	0.59	0.46	51.4
Approach			755	5.2	755	5.2	0.395	0.2	NA	0.0	0.3	0.01	0.01	0.01	59.6
All Vehicles			1223	5.2	1223	5.2	0.395	0.6	NA	0.2	1.7	0.02	0.04	0.02	59.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [2023BG PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street/Enfield Street
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Enfield Av (South)															
1	L2	All MCs	25	2.0	25	2.0	0.032	8.7	LOS A	0.1	0.8	0.55	0.73	0.55	50.5
3	R2	All MCs	12	2.0	12	2.0	0.062	24.0	LOS B	0.2	1.3	0.86	0.94	0.86	41.5
Approach			37	2.0	37	2.0	0.062	13.5	LOS A	0.2	1.3	0.65	0.80	0.65	47.3
East: Main St (East)															
4	L2	All MCs	12	2.0	12	2.0	0.375	5.7	LOS A	0.0	0.0	0.00	0.01	0.00	57.1
5	T1	All MCs	701	4.1	701	4.1	0.375	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.7
Approach			713	4.1	713	4.1	0.375	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.6
West: Main St (W)															
11	T1	All MCs	613	4.0	613	4.0	0.322	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
12	R2	All MCs	20	2.0	20	2.0	0.024	8.7	LOS A	0.1	0.6	0.58	0.72	0.58	50.4
Approach			633	3.9	633	3.9	0.322	0.4	NA	0.1	0.6	0.02	0.02	0.02	59.5
All Vehicles			1382	4.0	1382	4.0	0.375	0.6	NA	0.2	1.3	0.03	0.04	0.03	59.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [2025BG AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street/Enfield Street
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Enfield Av (South)															
1	L2	All MCs	19	2.0	19	2.0	0.017	7.1	LOS A	0.1	0.5	0.43	0.61	0.43	51.5
3	R2	All MCs	19	2.0	19	2.0	0.084	20.6	LOS B	0.3	1.9	0.83	0.93	0.83	43.1
Approach			38	2.0	38	2.0	0.084	13.9	LOS A	0.3	1.9	0.63	0.77	0.63	46.9
East: Main St (East)															
4	L2	All MCs	17	2.0	17	2.0	0.240	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.1
5	T1	All MCs	434	5.6	434	5.6	0.240	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	59.7
Approach			451	5.5	451	5.5	0.240	0.3	NA	0.0	0.0	0.00	0.02	0.00	59.6
West: Main St (W)															
11	T1	All MCs	734	5.2	734	5.2	0.389	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
12	R2	All MCs	11	2.0	11	2.0	0.009	7.1	LOS A	0.0	0.3	0.47	0.60	0.47	51.4
Approach			744	5.2	744	5.2	0.389	0.2	NA	0.0	0.3	0.01	0.01	0.01	59.6
All Vehicles			1233	5.2	1233	5.2	0.389	0.7	NA	0.3	1.9	0.02	0.04	0.02	59.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [2025BG PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street/Enfield Street
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Enfield Av (South)															
1	L2	All MCs	26	2.0	26	2.0	0.035	8.9	LOS A	0.1	0.9	0.56	0.75	0.56	50.4
3	R2	All MCs	12	2.0	12	2.0	0.069	26.1	LOS B	0.2	1.5	0.87	0.95	0.87	40.5
Approach			38	2.0	38	2.0	0.069	14.1	LOS A	0.2	1.5	0.66	0.81	0.66	46.9
East: Main St (East)															
4	L2	All MCs	12	2.0	12	2.0	0.390	5.7	LOS A	0.0	0.0	0.00	0.01	0.00	57.1
5	T1	All MCs	729	4.1	729	4.1	0.390	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.6
Approach			741	4.1	741	4.1	0.390	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.6
West: Main St (W)															
11	T1	All MCs	637	4.0	637	4.0	0.335	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
12	R2	All MCs	21	2.0	21	2.0	0.026	8.9	LOS A	0.1	0.7	0.59	0.73	0.59	50.2
Approach			658	3.9	658	3.9	0.335	0.4	NA	0.1	0.7	0.02	0.02	0.02	59.4
All Vehicles			1437	4.0	1437	4.0	0.390	0.7	NA	0.2	1.5	0.03	0.04	0.03	59.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [2035BG AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street/Enfield Street
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Enfield Av (South)															
1	L2	All MCs	22	2.0	22	2.0	0.022	7.5	LOS A	0.1	0.6	0.48	0.65	0.48	51.4
3	R2	All MCs	22	2.0	22	2.0	0.153	30.3	LOS C	0.4	3.2	0.90	0.96	0.91	38.7
Approach			44	2.0	44	2.0	0.153	18.9	LOS B	0.4	3.2	0.69	0.81	0.69	44.1
East: Main St (East)															
4	L2	All MCs	20	2.0	20	2.0	0.286	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.1
5	T1	All MCs	517	5.6	517	5.6	0.286	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	59.6
Approach			537	5.5	537	5.5	0.286	0.3	NA	0.0	0.0	0.00	0.02	0.00	59.5
West: Main St (W)															
11	T1	All MCs	875	5.2	875	5.2	0.464	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.6
12	R2	All MCs	13	2.0	13	2.0	0.012	7.5	LOS A	0.0	0.3	0.51	0.63	0.51	51.2
Approach			887	5.2	887	5.2	0.464	0.3	NA	0.0	0.3	0.01	0.01	0.01	59.5
All Vehicles			1468	5.2	1468	5.2	0.464	0.9	NA	0.4	3.2	0.03	0.04	0.03	58.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [2035BG PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street/Enfield Street
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Enfield Av (South)															
1	L2	All MCs	32	2.0	32	2.0	0.052	10.3	LOS A	0.2	1.2	0.65	0.84	0.65	49.5
3	R2	All MCs	15	2.0	15	2.0	0.151	41.8	LOS C	0.4	2.9	0.93	0.98	0.94	34.5
Approach			46	2.0	46	2.0	0.151	20.3	LOS B	0.4	2.9	0.74	0.88	0.74	43.5
East: Main St (East)															
4	L2	All MCs	15	2.0	15	2.0	0.466	5.7	LOS A	0.0	0.0	0.00	0.01	0.00	57.0
5	T1	All MCs	869	4.1	869	4.1	0.466	0.2	LOS A	0.0	0.0	0.00	0.01	0.00	59.5
Approach			884	4.1	884	4.1	0.466	0.3	NA	0.0	0.0	0.00	0.01	0.00	59.5
West: Main St (W)															
11	T1	All MCs	760	4.0	760	4.0	0.400	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
12	R2	All MCs	25	2.0	25	2.0	0.040	10.3	LOS A	0.1	1.0	0.67	0.82	0.67	49.3
Approach			785	3.9	785	3.9	0.400	0.5	NA	0.1	1.0	0.02	0.03	0.02	59.3
All Vehicles			1716	4.0	1716	4.0	0.466	0.9	NA	0.4	2.9	0.03	0.04	0.03	58.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [2025WD AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street/Enfield Street
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Enfield Av (South)															
1	L2	All MCs	74	2.0	74	2.0	0.068	7.2	LOS A	0.3	1.8	0.45	0.66	0.45	51.4
3	R2	All MCs	23	2.0	23	2.0	0.104	21.0	LOS B	0.3	2.3	0.84	0.93	0.84	42.9
Approach			97	2.0	97	2.0	0.104	10.5	LOS A	0.3	2.3	0.54	0.73	0.54	49.1
East: Main St (East)															
4	L2	All MCs	17	2.0	17	2.0	0.245	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.1
5	T1	All MCs	443	5.6	443	5.6	0.245	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	59.7
Approach			460	5.5	460	5.5	0.245	0.3	NA	0.0	0.0	0.00	0.02	0.00	59.6
West: Main St (W)															
11	T1	All MCs	734	5.2	734	5.2	0.389	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
12	R2	All MCs	11	2.0	11	2.0	0.009	7.1	LOS A	0.0	0.3	0.47	0.60	0.47	51.4
Approach			744	5.2	744	5.2	0.389	0.2	NA	0.0	0.3	0.01	0.01	0.01	59.6
All Vehicles			1301	5.0	1301	5.0	0.389	1.0	NA	0.3	2.3	0.04	0.07	0.04	58.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [2025WD PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street/Enfield Street
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Enfield Av (South)															
1	L2	All MCs	81	2.0	81	2.0	0.109	9.2	LOS A	0.4	2.8	0.59	0.82	0.59	50.2
3	R2	All MCs	17	2.0	17	2.0	0.102	26.8	LOS B	0.3	2.2	0.88	0.95	0.88	40.2
Approach			98	2.0	98	2.0	0.109	12.2	LOS A	0.4	2.8	0.64	0.84	0.64	48.1
East: Main St (East)															
4	L2	All MCs	12	2.0	12	2.0	0.395	5.7	LOS A	0.0	0.0	0.00	0.01	0.00	57.1
5	T1	All MCs	739	4.1	739	4.1	0.395	0.1	LOS A	0.0	0.0	0.00	0.01	0.00	59.6
Approach			751	4.1	751	4.1	0.395	0.2	NA	0.0	0.0	0.00	0.01	0.00	59.6
West: Main St (W)															
11	T1	All MCs	637	4.0	637	4.0	0.335	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.8
12	R2	All MCs	21	2.0	21	2.0	0.027	9.0	LOS A	0.1	0.7	0.60	0.74	0.60	50.2
Approach			658	3.9	658	3.9	0.335	0.4	NA	0.1	0.7	0.02	0.02	0.02	59.4
All Vehicles			1506	3.9	1506	3.9	0.395	1.1	NA	0.4	2.8	0.05	0.07	0.05	58.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [2035WD AM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street/Enfield Street
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Enfield Av (South)															
1	L2	All MCs	77	2.0	77	2.0	0.078	7.7	LOS A	0.3	2.1	0.49	0.70	0.49	51.2
3	R2	All MCs	27	2.0	27	2.0	0.193	31.9	LOS C	0.6	4.1	0.91	0.97	0.95	38.0
Approach			104	2.0	104	2.0	0.193	14.0	LOS A	0.6	4.1	0.60	0.77	0.61	47.0
East: Main St (East)															
4	L2	All MCs	20	2.0	20	2.0	0.291	5.6	LOS A	0.0	0.0	0.00	0.02	0.00	57.1
5	T1	All MCs	526	5.6	526	5.6	0.291	0.1	LOS A	0.0	0.0	0.00	0.02	0.00	59.6
Approach			546	5.5	546	5.5	0.291	0.3	NA	0.0	0.0	0.00	0.02	0.00	59.5
West: Main St (W)															
11	T1	All MCs	875	5.2	875	5.2	0.464	0.2	LOS A	0.0	0.0	0.00	0.00	0.00	59.6
12	R2	All MCs	13	2.0	13	2.0	0.012	7.6	LOS A	0.0	0.3	0.51	0.63	0.51	51.2
Approach			887	5.2	887	5.2	0.464	0.3	NA	0.0	0.3	0.01	0.01	0.01	59.5
All Vehicles			1538	5.1	1538	5.1	0.464	1.2	NA	0.6	4.1	0.05	0.07	0.05	58.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

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

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 101 [2035WD PM (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Main Street/Enfield Street
Site Category: (None)
Give-Way (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Enfield Av (South)															
1	L2	All MCs	86	2.0	86	2.0	0.144	10.7	LOS A	0.5	3.5	0.68	0.86	0.68	49.2
3	R2	All MCs	19	2.0	19	2.0	0.199	44.7	LOS D	0.6	4.0	0.94	0.99	0.98	33.6
Approach			105	2.0	105	2.0	0.199	16.8	LOS B	0.6	4.0	0.73	0.89	0.73	45.4
East: Main St (East)															
4	L2	All MCs	15	2.0	15	2.0	0.471	5.7	LOS A	0.0	0.0	0.00	0.01	0.00	57.0
5	T1	All MCs	879	4.1	879	4.1	0.471	0.2	LOS A	0.0	0.0	0.00	0.01	0.00	59.5
Approach			894	4.1	894	4.1	0.471	0.3	NA	0.0	0.0	0.00	0.01	0.00	59.5
West: Main St (W)															
11	T1	All MCs	760	4.0	760	4.0	0.400	0.1	LOS A	0.0	0.0	0.00	0.00	0.00	59.7
12	R2	All MCs	25	2.0	25	2.0	0.040	10.4	LOS A	0.1	1.0	0.67	0.83	0.67	49.2
Approach			785	3.9	785	3.9	0.400	0.5	NA	0.1	1.0	0.02	0.03	0.02	59.3
All Vehicles			1784	3.9	1784	3.9	0.471	1.3	NA	0.6	4.0	0.05	0.07	0.05	58.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Parameter Settings dialog (Options 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 (TWSC): Level of Service is not defined for major road approaches or the intersection as a whole for Two-Way Sign Control (HCM LOS rule).

Two-Way Sign Control Capacity Model: SIDRA Standard.

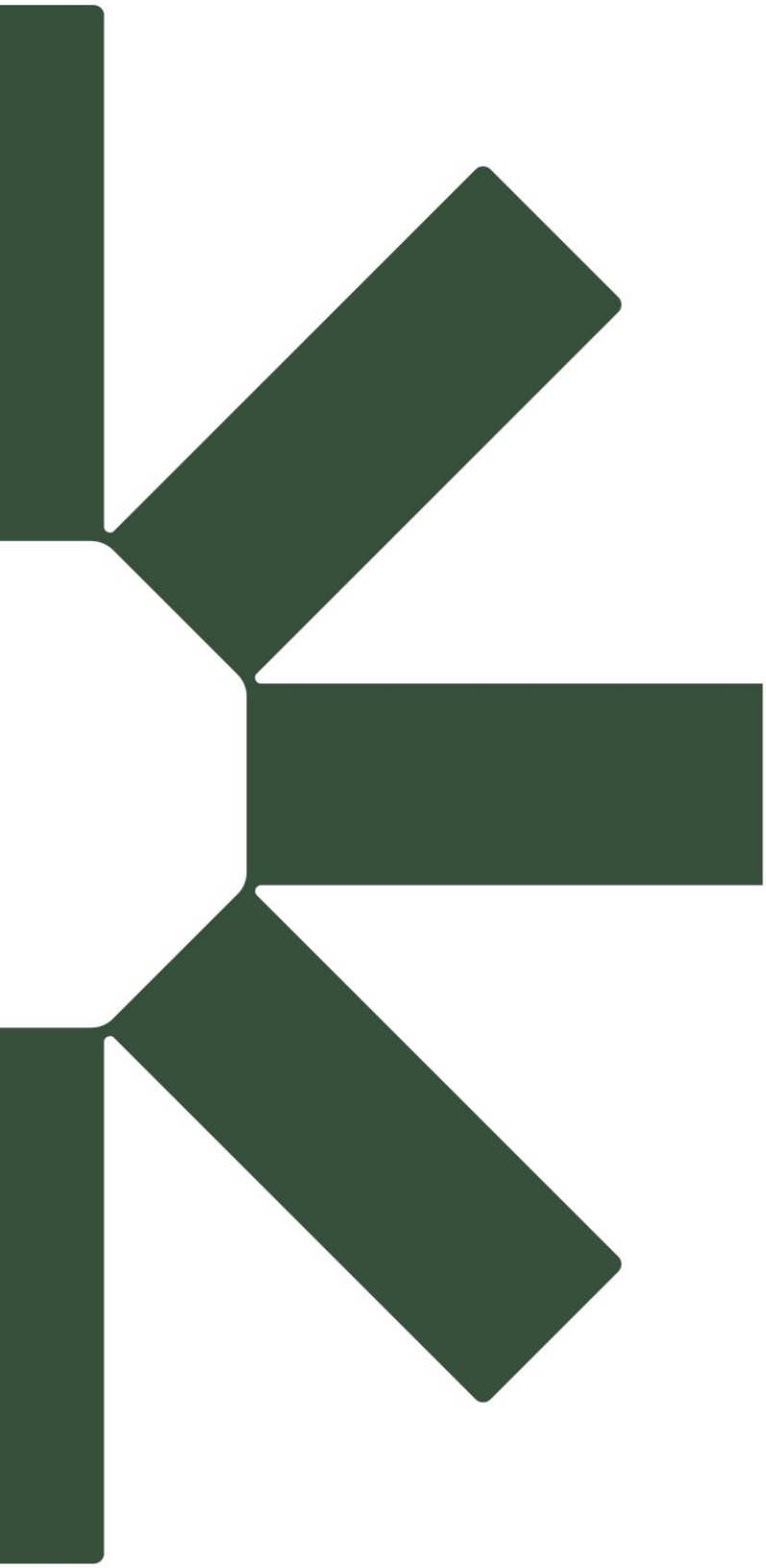
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

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

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

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.



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