

# Traffic Impact Assessment

## Multi Storey Residential Development

Lot 3, No 57 Railway Street, Griffith NSW

Final Report Issue E 14 May 2024



Prepared by  
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### Document Control

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### Appendix A

Traffic Classifier Data

## 1. Executive Summary

This report provides an assessment of the traffic impacts of a proposed multi storey residential development at Lot 3, No 57 Railway Street, Griffith NSW.

The site is located on the northern side of Railway Street between Ulong Street and Kooyoo Street. The site is situated within the Griffith CBD and located in the B2 Local Centre Zone, pursuant to the *Griffith Local Environmental Plan 2010* (GLEP2014). The subject land is currently vacant with a total area of approximately 3,353m<sup>2</sup>. It is proposed to construct a four-storey residential development consisting of a ground floor car parking and levels 1 - 3 comprising a total of 18 residential apartments with vehicles access from Kooyoo Street and pedestrian access form Railway Street. The proposed development will provide 39 ground floor parking spaces with garbage truck pick up at the rear of the development.

This report investigates the traffic and parking impacts on Kooyoo Street and the wider road network arising from development of the site. This includes assessment of access driveway and the key roundabout intersection of Kooyoo Street and Railway Street.

The report concludes that the additional traffic generated by the proposed development (8 vehicle trips per hour in the peak periods) will have no significant adverse impacts on the surrounding road network, the key roundabout intersection Kooyoo Street and Railway Street or the access driveway.

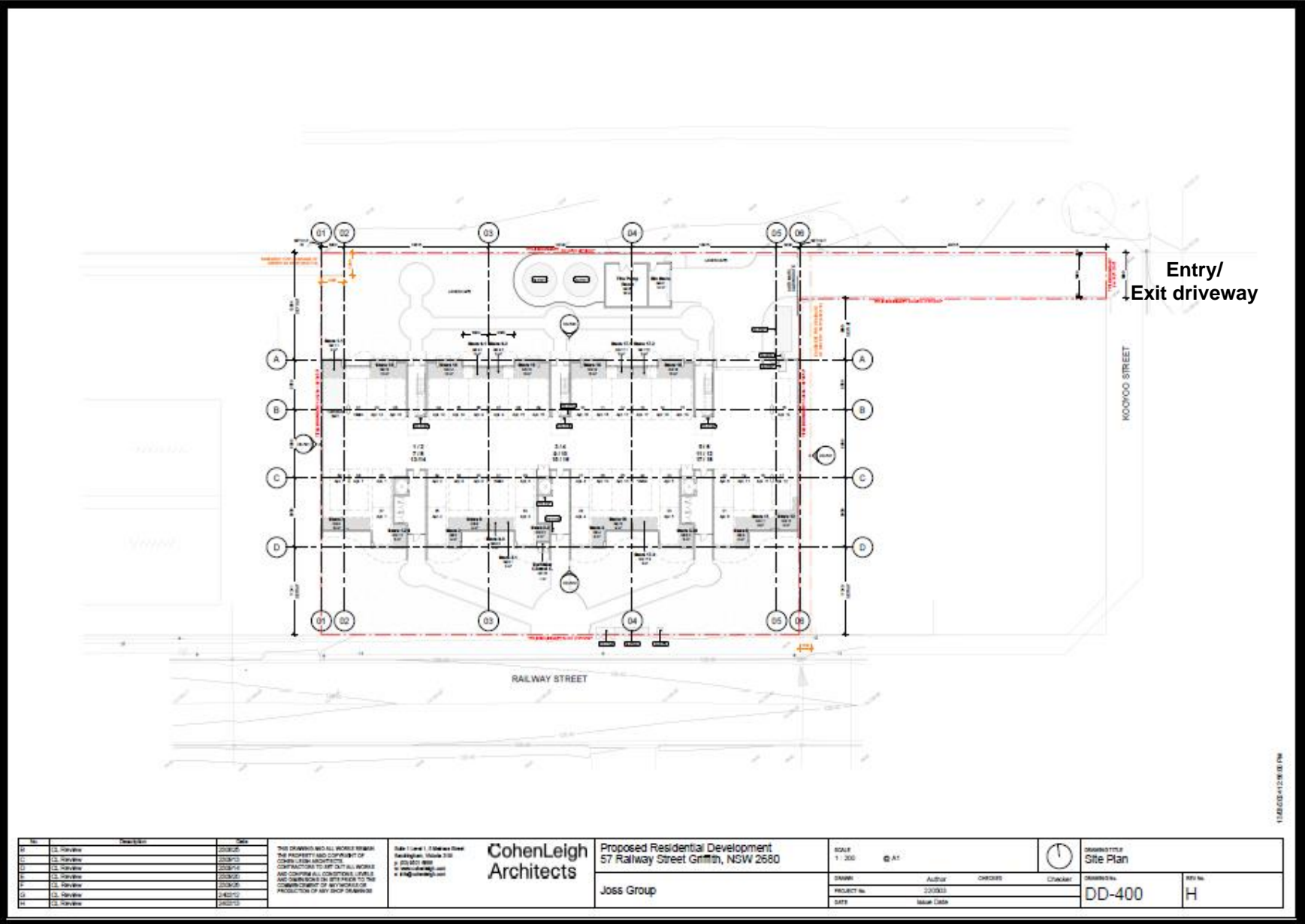
It is concluded that the proposed development will provide adequate parking to cater for the peak demand with no significant adverse impact expected to on-street parking in the surrounding road network and adequate provision for service/delivery vehicles.

Access to the site via an entry/exit driveway from Kooyoo Street, as well as the parking and internal manoeuvring areas, meets the minimum requirements of AS2890.

## 1.1 Locality Plan

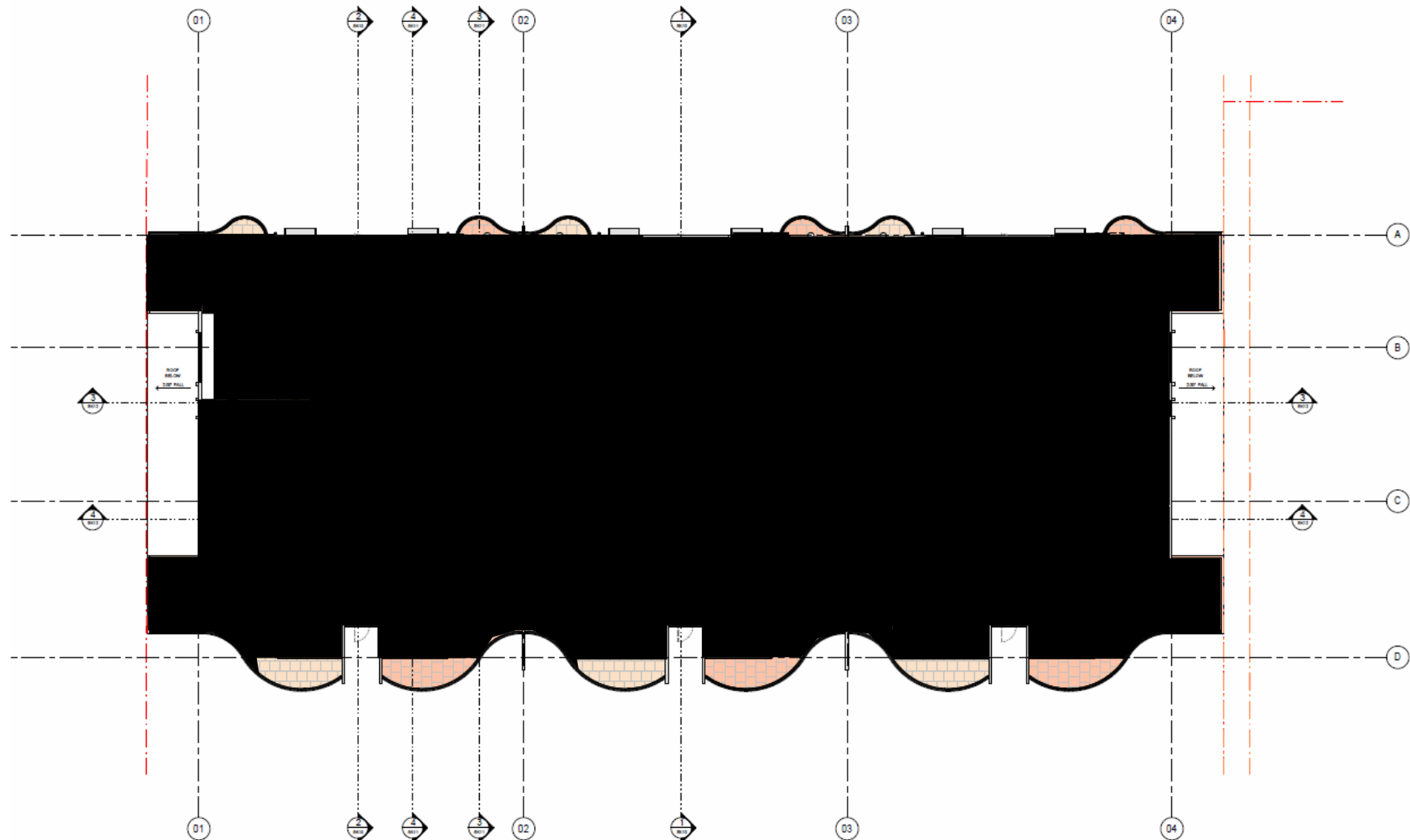


1.2 General Arrangement Plans





## Typical Floor Plan



No.	Description	Date									
A	CL Review	230304	<p>THIS DRAWING AND ALL WORKS REMAIN THE PROPERTY AND COPYRIGHT OF COHENLEIGH ARCHITECTS. CONTRACTORS TO SET OUT ALL WORKS AND CONFIRM ALL CONDITIONS, LEVELS AND DIMENSIONS ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORKS OR PRODUCTION OF ANY SHOP DRAWINGS.</p> <p>20/09/2023 9:43:19 AM</p>			<p><b>CohenLeigh Architects</b></p> <p>Railway Street, Griffith, NSW 2680</p> <p>Joss Group</p>		<p>SCALE 1:100 @ A1</p> <p>DRAWING TITLE Floor Plan - L1</p>		<p>DRAWING No. SK04</p> <p>REV No. F</p>	
B	CL Review	230305									
C	CL Review	230313									
D	CL Review	230314									
E	CL Review	230320									
F	CL Review	230326									
			<p>Scale 1 Level 1, 3 Railway Street Sunderland, Victoria 3181 p: 03 9521 6666 w: www.cohenleigh.com e: info@cohenleigh.com</p>			<p>PROJECT No. 220503</p> <p>DATE Issue Date</p>		<p>DRAWN Author CHECKED Checker</p>			

### 1.3 Site Characteristics

<b>Address</b>	57 Railway Street, Griffith NSW
<b>Road Hierarchy</b>	Railway Street two-way road and classified as a collector CBD ring road. Kooyoo Street classified as an urban access road.
<b>Proposed Use</b>	Medium density residential – 18 Apartments
<b>Access</b>	Kooyoo Street to residential on-site ground level car parking.
<b>Parking</b>	39 on-site parking spaces for residents and visitors with garbage truck ingress and egress movements located at the rear of the development.
<b>Existing Traffic Volumes</b>	<b>Kooyoo Street</b> Both directions (north & south bound) traffic peaks AM (commuter) 56vph, 33vph PM (midday shopping) 46vph PM (commuter) and 297vpd
<b>Traffic Generation</b>	The RTA Guide includes a traffic generation figure for medium density residential AM & PM peak 8vph and 72 vpd

### 1.4 Recommendations

Griffith City Council concurs with the proposed on-site car parking and access arrangements in Kooyoo Street for the proposed multi-storey residential development in Railway Street;

## 2. Introduction

Peter Meredith Consulting has been engaged to prepare a report assessing the traffic impacts of a proposed multi storey residential development consisting of a ground floor car park and 3 levels of residential apartments. The apartments consist of eighteen 3-bedroom dwellings at 57 Railway Street, Griffith NSW.

The site is located on the northern side of Railway Street on the eastern end between Ulong Street and Kooyoo Street.

Vehicle access to the residential development ground floor tenancy car park is via a 6.0m wide entrance located on Kooyoo Street. The new Kooyoo Street access driveway will operate as left-in and right-out. The proposed development will provide 39 ground floor parking spaces with garbage truck ingress and egress movements located at the rear of the development. Pedestrian access is via the Railway Street frontage.

The Traffic Impact Assessment Report (TIAR) investigates the potential traffic and parking impacts on Kooyoo Street and the wider road network arising from the medium density residential development.

The assessment uses existing traffic movement data, on-site observations and traffic generating development figures.

### 2.1 Documentation

The documentation and information provided by Martin Reid from Joss Constructions for this assessment includes:

- Preliminary floor plans, site plans and elevations of the proposed residential development prepared by CohenLeigh Architects;

### 2.2 References

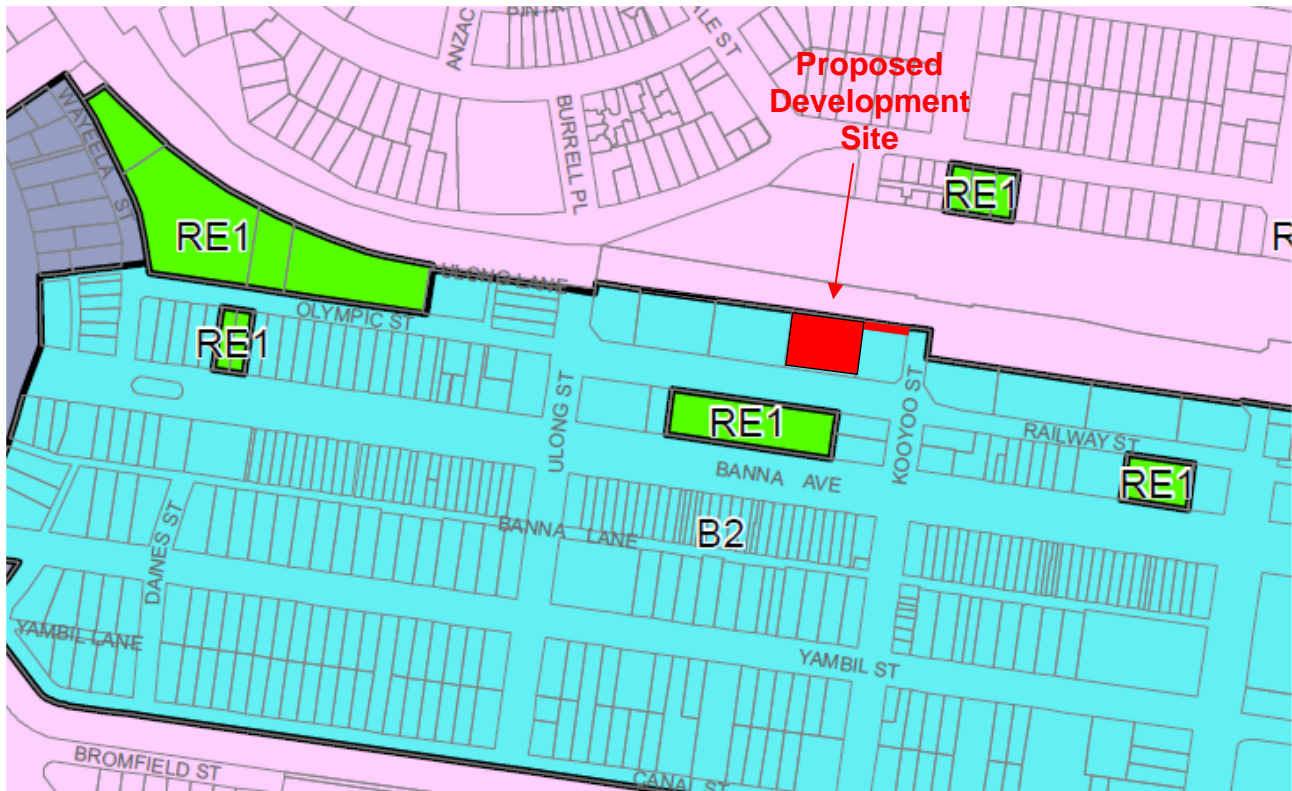
References used in the preparation of this assessment include the following:

- *Austroads Guide to Road Design (AGRD) Part 4A: Unsignalised and Signalised Intersections.*
- *RMS supplement to Austroads Guide to Road Design Part 4A: Unsignalised and Signalised Intersections*
- *RTA Guide to Traffic Generating Developments Version 2.2 October 2002*
- *AS2890.1 parking facilities Part 1: Off-street Car Parking*
- *Griffith City Council Development Control Plan 2020 (GDGP2020)*
- *Griffith City Council DCP number 20 off-street parking (2011)*
- *Local Environmental Plan 2014 (GLEP2014)*

### 3. Existing Conditions

#### 3.1 Land Use

The site is identified as Lot 3, No 57 Railway Street, Griffith and has a total site area of approximately 3,353m<sup>2</sup>. The site is situated within the Griffith CBD and is in the B2 Local Centre Zone, pursuant to the *Griffith Local Environmental Plan 2014* (GLEP201). The Site comprises a primary frontage to Railway Street, along the southern boundary. Access to the site is afforded for vehicles is via Kooyoo Street and pedestrians from Railway Street.



#### 3.2 Road Network

##### 3.2.1 Railway Street

Railway Street forms the southern boundary frontage of the development site. Railway Street is classified as a collector CBD ring road and is under the management of Griffith City Council. Railway Street forms part of the northern CBD ring road. Railway Street provides a connection between the proposed development and the Griffith CBD and other business and residential areas of Griffith. The Griffith Railway Station is located approximately 100m from the front of the site.

Adjacent to the development site Railway Street has a road reserve width measured at approximately 30.2m between property lines and consists of the following characteristics:

- The 11.0m wide east-west carriageway consists of line a marked centre line with unmarked parallel parking on each side a located between the edge of the kerb and the traffic lane. There are existing No Stopping zones located on either side of Railway Street to allow for clear sight lines and the free flow of traffic in and out of other driveways;
- There is 3.6m wide nature strip on the northern side of Railway Street;

- To the south and adjacent to the through traffic lanes, a service road that runs parallel to the through section of Railway Street provides off-street parking and access to the Griffith Local Court and the Telstra Exchange. Railway Street and the service road are separated by a 5.0m wide landscaped and treed median. The service road is essentially a car park that provides pedestrian connections to Memorial Park, Banna Street and the CBD. Parking is at 90 degrees to the kerb and there are two entry/exit access driveways located towards each end of Railway Street between Ulong Street and Kooyoo Street.
- The intersection of Railway Street and Ulong Street is controlled by single lane roundabout and the intersection of Railway Street and Kooyoo Street is also controlled by a single lane roundabout;
- Pedestrian crossing facilities in Railway Street include a mid-block flat top marked Pedestrian Crossing connecting Memorial Park the service road car park to the northern side of Railway Street;
- There are also pedestrian crossing refuges at the roundabouts to the east and west of the development section of Railway Street;
- A concrete footpath 1.5m wide on the north side of Railway Street extents across the frontage of the Quest Apartments and a full width concrete path around the frontage of the public car park on the corner of Railway Street and Kooyoo Street;
- Posted speed limit is 50km/h.
- *Refer to the Locality Plan in Section 1.1 for details.*



Photo 1: Railway Street looking westbound from eastern boundary of the development site



Photo 2: Railway Street looking eastbound approaching mid-block flat top marked pedestrian crossing.



Photo 3: Mid-block flat top marked pedestrian crossing looking south across to Memorial Park and the service road car park.



Photo 4: Looking north from Memorial Park across the service road car park towards Mid-block flat top marked pedestrian crossing.

### 3.2.2 Kooyoo Street

Kooyoo Street forms the eastern boundary of the access way to the development site. Kooyoo Street is classified as an urban CBD access road and is under the management of Griffith City Council. Kooyoo Street provides access connections to the Griffith Railway Station, and Coach terminal parking and the Griffith City Council public car park on the corner of Railway Street and Kooyoo Street.

Adjacent to the development site Kooyoo Street has a road reserve width measured at approximately 20.1m between property lines and consists of the following characteristics:

- The 9.0m wide north-south unmarked carriageway with a No Stopping zone located on the western side of Kooyoo Street fronting the public car park to allow for clear sight lines and the free flow of traffic in and out of the driveway;
- There is along ditched invert that extends along the eastern side for a section of Kooyoo Street and this provides vehicle access to the Griffith Railway Station and coach Terminal and car park.
- There is 3.6m wide paved nature strip on the western side and a 5.0m paved nature strip on the eastern side of Kooyoo Street;
- To the south and adjacent to the through traffic lanes, a service road that runs parallel to the through section of Railway Street provides off-street parking and access to the Griffith Local Court and the Telstra Exchange. Railway Street and the service road are separated by a 5.0m wide landscaped and treed median. The service road is essentially a car park that provides pedestrian connections to Memorial Park, Banna Street and the CBD. Parking is at 90 degrees to the kerb and there are two entry/exit access driveways located towards each end of Railway Street between Ulong Street and Kooyoo Street.
- The intersection of Railway Street and Kooyoo Street is controlled by single lane roundabout;
- Pedestrian crossing facilities in Railway Street include a mid-block flat top marked Pedestrian Crossing connecting Memorial Park the service road car park to the northern side of Railway Street;

- There are also pedestrian crossing refuges at the roundabouts to the east and west of the development section of Railway Street;
- A concrete footpath 1.5m wide on the north side of Railway Street extends across the frontage of the Quest Apartments and a full width concrete path around the frontage of the public car park on the corner of Railway Street and Kooyoo Street;
- Posted speed limit is 50km/h.
- *Refer to the Locality Plan in Section 1.1 for details.*



Photo 5: Kooyoo Street looking southbound from the proposed access driveway for the residential development. Shows clear sight lines to the south and locations of adjoining public car park access driveway and opposite access to the Griffith Railway Station.



Photo 6: Kooyoo Street looking west from the Griffith Railway Station access to the location of the proposed access driveway for the residential development.



Photo 7: Kooyoo Street looking north from the roundabout intersection of Railway Street and Kooyoo Street. Shows location of the proposed access driveway for the residential development.

### 3.3 Existing Traffic

#### 3.1 Railway Street

Existing mid-block traffic data for Railway Street between Ulong Street and Kooyoo Street from 24 July to 14 August 2020 was provided by Griffith City Council. The results of the traffic counts are shown in tables in Appendix A1. When analysing the traffic data Thursdays appeared to be on average the busiest day of the week across the working hours. Thursday 30 July 2020 was chosen as a typical day. A summary of the average daily traffic (ADT) and morning, midday and evening peak hour traffic volumes (vph) in both directions are listed in the Table 3.1 below:

**Table 3.1 ADT, AM, Midday and PM peak traffic volumes**

<b>Railway Street</b>	<b>ADT 5-day week</b>	<b>AM peak 8.00 to 9.00</b>	<b>Midday peak 12.30 to 13.30</b>	<b>PM peak 17.00 to 18.00</b>
<b>Both directions East and west bound</b>	3,844vpd	271vph	417vph	292vph

Results of the traffic counts indicate that the morning (AM 8.00 to 9.00) and afternoon (17.00 to 18.00) commuter peak hours have less volumes than the midday shopping peak on each day. It is concluded that the Railway Street service road car park would be the biggest contributor to the high midday/business shopping traffic volumes. It is established that the service road car park is popular with shoppers and business activities because the car park is very close to the CBD and parking times are unrestricted. Generally, traffic on Railway Street is being generated from the ring road users and motorists seeking long term parking in the service road car park and the two public car parks located at each end of Railway Street between Ulong Street and Kooyoo Street.

#### 3.2 Kooyoo Street

Existing mid-block traffic data for Kooyoo Street between Railway Street and the dead end of Kooyoo Street from 8 November to 16 November 2023 was provided by Griffith City Council. The results of the traffic counts are shown in tables in Appendix A2. When analysing the traffic data Thursdays appeared to be on average the busiest day of the week across the working hours. Thursday 9 November 2023 was chosen as a typical day. A summary of the average daily traffic (ADT) and morning, midday and evening peak hour traffic volumes (vph) in both directions are listed in the Table 3.2 below:

**Table 3.2 ADT, AM, Midday and PM peak traffic volumes**

<b>Kooyoo Street</b>	<b>ADT 5-day week</b>	<b>AM peak 8.30 to 9.30</b>	<b>Midday peak 13.00 to 14.00</b>	<b>PM peak 17.00 to 18.00</b>
<b>Both directions North and South bound</b>	297vpd	56vph	33vph	46vph

Results of the traffic counts indicate that the morning (AM 8.00 to 9.00) and afternoon (17.00 to 18.00) commuter peak hours have higher volumes than the midday shopping peak on each day. It is concluded that the Kooyoo Street and Railway Station public car parks are the biggest contributor to the AM and PM peaks. It is established that the public car parks are popular with commuters because they are very close to the CBD and parking times are unrestricted. Generally, traffic on Kooyoo Street is being generated by CBD commuters and users of the Griffith Railway Station.

### **3.4 Pedestrians and Bicycle Facilities**

The Railway Street service road car park has a high flow of pedestrians crossing into Memorial Park and onto Banna Street and CBD businesses. There is a light flow of pedestrians across the pedestrian crossing in Railway Street to the Quest apartments. In addition, there also a light flow of pedestrians from the public car parks located at each end of Railway Street between Ulong Street and Kooyoo Street. There is a network of existing concrete footpaths linking the two public car parks and Memorial Park to the CDB. Listed below are pedestrian facilities on Railway Street that allows pedestrians to cross roads safely:

- Pedestrian crossing points in the splitter islands at each of the Ulong Street and Kooyoo Street roundabouts;
- A marked mid-block pedestrian crossing with a raised flat top threshold on Railway Street.

*Refer to the Locality Plan in Section 1.1 for details.*

There are no on-road or off-road bicycle facilities within the development section of Kooyoo Street or Railway Street.

### **3.5 Existing On street Parking**

On street car parking fronting the development section of Railway Street is unmarked and parallel at 2.5m wide and is located between the edge of the kerb and the traffic lane. There are existing No Stopping zones located on either side of the development frontage to allow for clear sight lines and the free flow of traffic in and out of other driveways. There is no on street parking in the development section of Kooyoo Street and there are No Stopping zones on both sides of the street north of Railway Street.

On-street parking is also available in the Railway Street southern service road that runs parallel to the through section of Railway Street. The service road parking provides connections to Memorial Park and pedestrian access to Banna Street and the CBD. Parking is at 90 degrees to the kerb and there are two entry/exit access driveways located towards each end of Railway Street between Ulong Street and Kooyoo Street. *Refer to the Locality Plan in Section 1.1 for details.*

## 4. Proposed Development

The proposed residential development at 57 Railway Street Griffith consists of the following elements:

- Three storeys of residential apartments consisting of 18 three-bedroom units divided into 3 separate wings for each level;
- Ground level car parking of 39 spaces for residential use with garbage truck ingress and egress movements located at the rear of the development;
- Parking spaces 90 degree at varying from 2.4m to 2.6m wide x 5.4m with a 6.4m aisle width. The narrow 2.4m wide spaces have clearances of 300mm along the edges;
- The following car parking spaces are provided as dual end to end spaces. Numbers 20-21, 22-23, 27-28, 29-30, 34-35 and 36-37;
- 18 ground floor resident storage spaces in the car park area;
- A ground floor bin room space and 3 bin storage spaces on each floor to be shared by apartments;
- Ground floor construction including pedestrian entry lobby area, 3 lifts (one for each apartment building wing), and stairs;
- Access to the ground level residential car park is via a 6.0m driveway on Kooyoo Street. Access will be left-in and right out;
- Garbage truck access will be via the ground floor car park 6.0m access driveway on Kooyoo Street and loading will be at the rear of the development;
- Pedestrian access via the ground floor lobby and lifts connected to a new footpath along the frontage of the development that connects to the existing footpath network.

## 5. Parking Requirement

Parking requirements for the proposed development depends on the land use. The Griffith Residential DCP 2020 Griffith specifies the following number of car parking spaces required for residential apartment building development in the Griffith CBD Precinct Specific Control as:

- **Residential flat building:** 1 car space per 1- or 2-bedroom dwelling. 2 car spaces per 3 or more-bedroom dwelling. 1 designated visitor space per 6 units.

### 5.1 Residential Flat Building

By applying the above rates, the parking requirement for the residential flat building development is calculated as:

- Eighteen 3-bedroom dwellings =  $2 \times 18 =$  **36 resident spaces**
- Visitor spaces calculate at  $18 \text{ units}/6 =$  **3 visitor spaces**
- **36 resident spaces** and **3 visitor spaces** are required totalling **39 carparking spaces** for the residential development

The proposed development is providing **39 ground floor residential parking spaces** and garbage truck ingress and egress movements located at the rear of the development.

It is concluded that the proposed development is providing off-street parking that is above the requirements of the Griffith Residential DCP 2020 and there will be no significant impact on parking demand.

In accordance with the *National construction Code of Australia 2011 (NCC2011)* the residential apartment building is classified as Class 2: (a building containing 2 or more sole-occupancy units each being a separate dwelling) no parking for people with a disability is required. The proposed development is not providing an accessible parking space.

Car parking bay dimensions for the 90-degree on-site car park are 2.4m to 2.6m wide x 5.4m with a 6.4m aisle width are in accordance with the dimensions shown in *AS2890.1 parking facilities Part 1: Off-street Car Parking* and *Griffith Residential DCP 2020*.

## 5.2 Bicycle and Motorcycle Parking

In accordance with DCP number 20 off-street parking (2011) bicycle and motorcycle parking is not required for residential developments.

## 6. Future Traffic Growth

### 6.1 Traffic Generation

Traffic generation levels for the proposed residential development are established using the rates suggested in the *RTA Guide to Traffic Generating Developments*. The amount of traffic generated depends on the land use.

#### 6.1.1 Residential flat building

The RTA Guide includes traffic generation figures for medium density residential flat buildings (Section 3.3.2) for metropolitan sub-regional centres as:

##### **Larger units up to three bedrooms**

- Peak hour vehicle trips = 0.5-0.65 per dwelling;
- Daily vehicle trips = 5.0-6.5 per dwelling

*Note: the lower figure of peak hour vehicle trips has been selected because the development is very close the CBD and residents are more likely to walk than use their vehicles.*

By applying the above rates to the proposed 18 three-bedroom residential flats could generate:

- Peak hour vehicle trips =  $18 \times 0.4 = 7.2$  say **8 vehicles per hour**
- Daily vehicle trips =  $18 \times 4 =$  **72 vehicles per day**

The total traffic generated by the proposed residential development is **8 vehicles per hour** during peak periods and **72 daily vehicle trips**.

## 6.2 Traffic Distribution

Traffic generated by the development will be distributed throughout the network depending on origin/destination and route choices and management of vehicles onsite. This can be estimated by assessing likely origins and destinations based on land use traffic flows. Of the total trips generated by the residential development the following assumptions are made to the distribution to generated traffic:

### 6.2.1 Ground floor residential car park Kooyoo Street

It is assumed that 100% (8vph) would be expected to be outbound (right turn out only) in the AM peak, as residents leave for work etc and return in the PM peak left turn in-only. The generated traffic will head southbound in the AM and distribute into the existing road network via the Railway Street and Kooyoo Street roundabout. In the PM the generated traffic will return to the ground floor car park northbound via the Railway Street and Kooyoo Street roundabout.

It is concluded that the very low volume of additional traffic generated by the proposed residential development will have no significant impact on the existing traffic operations of Kooyoo Street or Railway Street.

## 7. Impacts & Mitigating Works

The impacts of the proposed residential development are primarily related to:

- The low speed turning manoeuvres at the residential access driveway on Kooyoo Street;
- The minor increases in traffic at the roundabout intersections of Railway Street/ Ulong Street and Railway Street/Kooyoo Street during peak periods.

The impacts are quantified below, and appropriate mitigating works are recommended, if required.

### 7.1 Kooyoo Street Residential Access Driveway

Under *AS2890.1 Off-Street Car Parking*, the proposed development is considered User Class 2 (long term – full opening, all doors). For a User Class 2 facility with 25 to 100 off-street parking spaces accessed from a local road, AS2890.1 requires a minimum of a single entry and exit access driveway with a width of between 6.0-9.0m (noting that if separate entry and exit driveways are provided, each should be a minimum width of 3.0m). The proposed development provides an entry/exit (left-in and left-out only) driveway on Kooyoo Street with a minimum width of 6.0m, and therefore meets the requirements.

The proposed 6.0m wide two lane two-way residential access driveway to the ground floor car park in Kooyoo Street is location at the dead-end section of Kooyoo Street adjacent to the Griffith Railway Station. The location of this driveway will not result in the loss of on-street parallel parking as there is clear sight distance for motorists along Kooyoo Street and across to the adjoining public car park access driveway and the Griffith Railway Station access

Garbage truck swept paths will use most of the width of access driveway to enter and exit the car park to pick up garbage bins. To avoid traffic conflicts the pickup of garbage should be undertaken out of peak hours.

### 7.1.1 Sight distance and traffic

The minimum safe driveway access sight distance as set out in *Section 3.2.4 Sight distance at access driveway exits, in AS2890.1 parking facilities Part 1: Off-street Car Parking* requires clear visibility along the road frontage of a minimum 45m for a 50 km/h road speed. Existing inter-visible clear sight-distances of over 60 metres on the southbound approach to the proposed access driveway at Kooyoo Street satisfies these criteria (*Refer to Photos 5, 6 & 7 above*). A sight triangle of 2.5m x 2.0m is also achieved at the exit of the proposed driveway.

It is determined that the very low volume of 8vph generated from the residential ground floor car park will have no significant effect on the existing peak hour traffic flows on Kooyoo Street or the surrounding street network.

### 7.2 Garbage Truck Manoeuvring

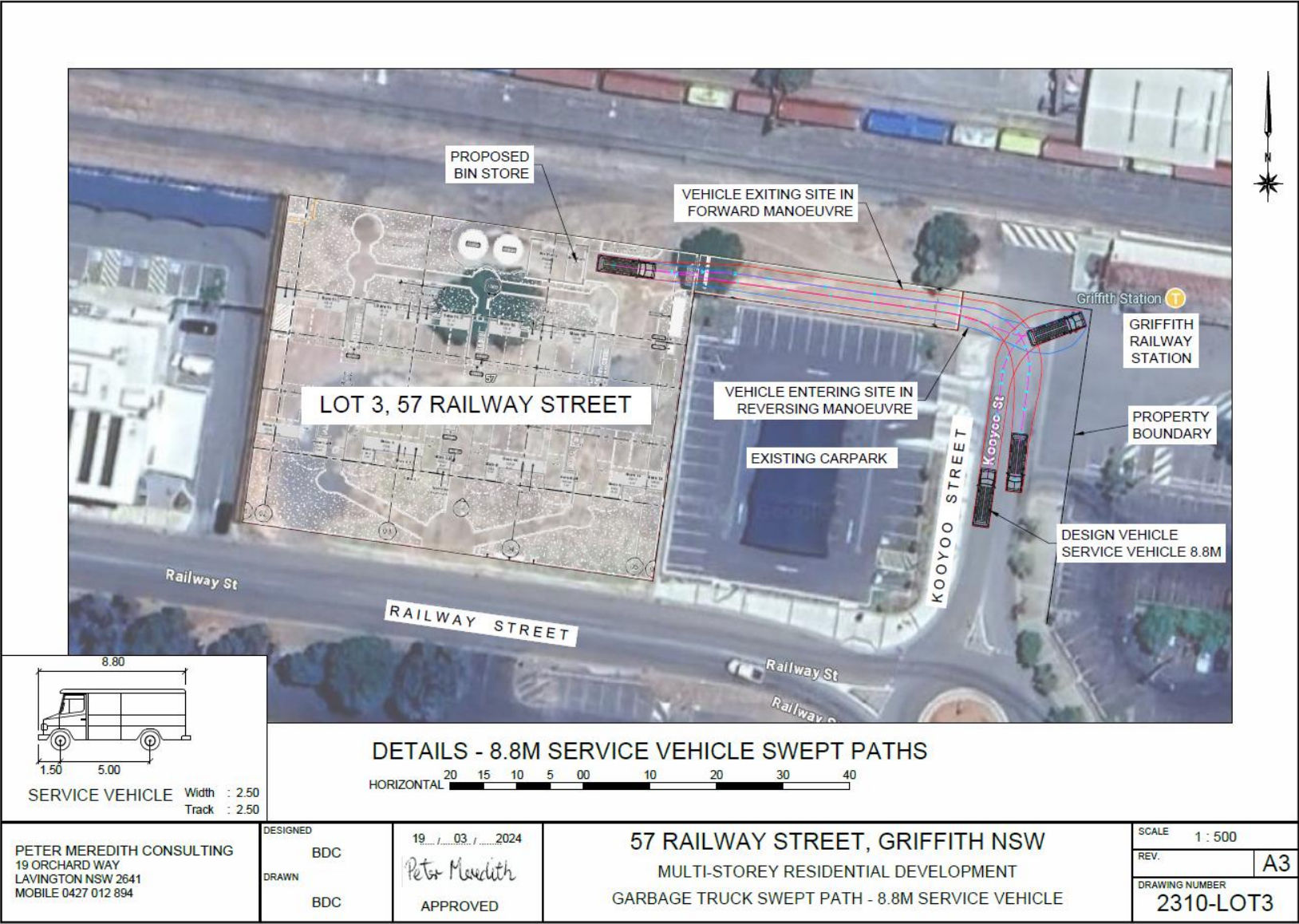
An 8.8m (approximately) garbage truck will be used to collect the garbage from the bin storage enclosure routinely once per week. The garbage truck will take advantage of the alternative access from Kooyoo Street and will reverse into the access driveway from Kooyoo Street and collect the garbage using a rear lift pick-up. The garbage truck will then exit onto Kooyoo Street in a forward direction. Swept paths for the manoeuvring of the garbage truck have been developed and they show that all movements can take place within the road reserve. Refer to Photo 8 below of the type of garbage truck to be used. *Also refer to below for Garbage Truck Swept Paths.*

To ensure safety and to reduce traffic conflicts between the garbage truck and resident's, collections will be during the mid-morning on the day of collection. Its envisage that most of the residents will be absent from the apartment building at this time of day. In addition, the garbage service will provide a spotter to advise any residents exiting in vehicles that the garbage truck is reversing onto the site.



Photo 8: Typical 8.8m (approximately) rear pick up garbage truck

Garbage Truck Swept Paths



### 7.3 Traffic Management Plan

A Construction Traffic Management Plan, which will utilise Austroads, and Council guidelines will be developed for all roads adjacent and to the development construction site. The Construction Traffic Management Plan shall be produced in accordance with TfNSW Traffic Control at Worksites 2022 Version 6.1 after an appropriate risk assessment has been carried out. In addition, to comply with Council standards, the Construction Traffic Management Plan should address periodic and dust control of the development site. Temporary traffic control arrangements may be required on Railway Street and Kooyoo Street along the frontages of the development site during the peak stages of construction traffic activity and on days when deliveries by oversize vehicles may be required.

## 8. Conclusions and Recommendations

### It is concluded that:

- The location of the new left-in/right-out residential ground floor car park access driveway in Kooyoo Street allows for the safe manoeuvring of traffic at Kooyoo Street and the additional low volumes (8vph) of traffic generated by the residential development will have no significant impact on the existing traffic operations of Kooyoo Street and Railway Street;
- The widths and gradients of the residential car park access driveway entrance meet the requirements of AS2890.1-2004 Off-Street Car Parking;
- Car parking bay dimensions for the 90-degree on-site car park are in accordance Griffith Residential DCP 2020 and AS2890.1 parking facilities Part 1: Off-street Car Parking and AS/NZS 2890.6 2009;
- Sight distance criteria is meet for the Kooyoo Street access driveway;
- The proposed development is providing off-street parking that is above the requirements of the Griffith Residential DCP 2020 and there will be no significate impact on parking demand in the local area;
- Adequate facilities have been provided for the storage and collection of garbage from the proposed development.

### It is recommended that:

- Griffith City Council concurs with the proposed on-site car parking and access arrangements in Kooyoo Street for the proposed multi-storey residential development in Railway Street;

## Appendix A

A1: Railway Street Traffic Data

A2: Kooyoo Street Traffic Data

### A1: Railway Street Traffic Data

#### **MetroCount Traffic Executive** **Vehicle Counts**

##### **VehicleCount-164 -- English (ENA)**

###### **Datasets:**

**Site:** [Railway1] Railway Street east of Ulong St  
**Attribute:**  
**Direction:** 6 - West bound A>B, East bound B>A. **Lane:** 0  
**Survey Duration:** 10:49 Friday, 24 July 2020 => 8:30 Friday, 14 August 2020,  
**Zone:**  
**File:** Railway1 0 2020-08-14 0830.EC0 (Regular )  
**Identifier:** U671ZJ59 MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default axle (v5.06)  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

###### **Profile:**

**Filter time:** 10:50 Friday, 24 July 2020 => 8:30 Friday, 14 August 2020 (20.9032)  
**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12  
**Speed range:** 10 - 160 km/h.  
**Direction:** North, East, South, West (bound), P = East, Lane = 0-16  
**Separation:** Headway > 0 sec, Span 0 - 100 metre  
**Name:** Default Profile  
**Scheme:** Vehicle classification (AustRoads94)  
**Units:** Metric (metre, kilometre, m/s, km/h, kg, tonne)  
**In profile:** Vehicles = 65444 / 65517 (99.89%)

**\* Friday, 24 July 2020 - Total=3104 (Incomplete) , 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	-	-	-	-	-	-	-	-	-	-	-	390	475	406	402	414	380	252	161	96	61	30	24	13
	-	-	-	-	-	-	-	-	-	-	-	90	131	109	106	96	85	74	43	30	20	10	7	6
5	-	-	-	-	-	-	-	-	-	-	-	87	118	94	98	116	93	63	38	31	14	7	8	2
5	-	-	-	-	-	-	-	-	-	-	-	96	107	102	103	102	122	59	45	19	21	10	6	4
1	-	-	-	-	-	-	-	-	-	-	62	117	119	101	95	100	80	56	35	16	6	3	3	1

PM Peak 1200 - 1300 (475), PM PHF=0.91

**\* Saturday, 25 July 2020 - Total=2751, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	13	5	7	7	3	19	21	44	100	189	358	436	400	238	174	164	122	133	108	79	55	31	20	25
	5	1	2	1	0	2	7	9	15	44	65	94	113	74	48	48	38	26	36	24	17	8	6	4
7	5	2	2	1	2	4	4	5	23	53	89	88	122	57	48	51	24	39	25	20	22	11	1	7
4	1	0	2	5	0	4	4	12	18	45	103	128	80	53	42	39	29	34	24	19	9	7	7	8
5	2	2	1	0	1	9	6	18	44	47	101	126	85	54	36	26	31	34	23	16	7	5	6	6

AM Peak 1130 - 1230 (489), AM PHF=0.96 PM Peak 1200 - 1300 (400), PM PHF=0.82

**\* Sunday, 26 July 2020 - Total=1475, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	22	7	5	6	2	7	22	25	45	99	123	150	136	161	139	119	121	112	60	46	25	22	13	8
	7	2	0	4	0	0	4	3	5	19	37	36	40	39	39	34	38	35	15	13	7	6	6	4
0	4	5	2	2	0	1	5	7	11	22	32	38	35	39	38	29	30	27	26	16	5	2	4	0
0	5	0	3	0	2	1	7	4	8	17	25	42	26	47	33	27	23	28	13	11	6	6	3	3
1	6	0	0	0	0	5	6	11	21	41	29	34	35	36	29	29	30	22	6	6	7	8	0	1

AM Peak 1115 - 1215 (154), AM PHF=0.92 PM Peak 1300 - 1400 (161), PM PHF=0.86

**\* Monday, 27 July 2020 - Total=3278, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	3	4	4	0	5	18	42	131	190	255	282	287	330	300	279	332	338	225	109	59	41	18	15	11
	0	1	1	0	0	2	6	18	33	73	63	68	97	96	71	79	74	70	39	22	13	7	4	3
5	0	2	2	0	1	3	7	24	37	64	71	72	72	70	52	77	106	65	26	17	10	6	2	0
1	1	1	0	0	2	6	7	39	54	55	72	68	80	68	75	80	87	54	26	14	9	2	7	6
1	2	0	1	0	2	7	22	50	66	63	76	79	81	66	81	96	71	36	18	6	9	3	2	2

AM Peak 1145 - 1245 (328), AM PHF=0.85 PM Peak 1545 - 1645 (363), PM PHF=0.86

**\* Tuesday, 28 July 2020 - Total=3352, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	8	7	8	3	4	19	47	102	190	209	266	299	337	299	326	363	333	262	110	70	48	21	11	10
	5	1	1	2	2	2	12	19	29	42	57	73	88	93	76	95	87	99	31	18	11	4	2	3
2	1	1	0	0	1	2	4	18	49	55	68	73	83	71	78	91	72	70	28	19	13	7	0	2
0	1	4	3	0	1	6	8	21	59	44	67	63	77	68	93	86	95	52	25	20	13	6	3	1
3	1	1	4	1	0	9	23	44	53	68	74	90	89	67	79	91	79	41	26	13	11	4	6	4

AM Peak 1145 - 1245 (338), AM PHF=0.94 PM Peak 1500 - 1600 (363), PM PHF=0.96

**\* Wednesday, 29 July 2020 - Total=3441, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	6	6	4	1	5	31	47	101	180	274	253	285	345	321	304	332	346	283	143	67	56	19	22	10
	2	1	0	0	0	2	9	17	28	71	65	73	85	92	65	86	84	93	36	19	20	4	6	2
1	0	3	2	0	2	5	5	21	39	64	60	69	84	78	83	80	91	74	48	19	15	5	2	1
2	3	1	2	0	2	6	10	28	46	72	64	64	91	84	74	76	103	71	33	14	11	4	9	1
2	1	1	0	1	1	18	23	35	67	67	64	79	85	64	82	90	68	45	26	15	10	6	5	6

AM Peak 1145 - 1245 (339), AM PHF=0.93 PM Peak 1545 - 1645 (368), PM PHF=0.89

**\* Thursday, 30 July 2020 - Total=3844, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	6	2	2	1	8	28	48	106	230	271	322	306	391	401	331	357	359	292	166	95	54	28	28	12
	1	1	0	0	3	2	6	17	47	78	59	74	91	111	78	77	94	97	63	31	27	8	12	4
1	2	1	1	0	4	5	9	31	41	75	81	71	89	95	86	98	94	85	54	25	11	6	3	2
3	2	0	0	1	1	5	14	17	60	50	84	81	100	83	85	77	98	63	34	23	8	6	11	2
0	1	0	1	0	0	16	19	41	82	68	98	80	111	112	82	105	73	47	15	16	8	8	2	4

AM Peak 1145 - 1245 (360), AM PHF=0.90 PM Peak 1230 - 1330 (417), PM PHF=0.94

**\* Friday, 31 July 2020 - Total=4319, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	6	13	8	5	7	24	45	125	196	289	328	455	462	423	373	434	440	287	156	87	62	44	23	27
3	1	0	2	0	2	0	5	19	38	71	73	104	141	113	104	113	124	95	42	26	24	9	5	6
4	3	4	2	1	0	1	7	32	39	57	73	101	109	107	81	96	106	84	42	26	22	11	6	7
0	0	8	1	0	2	9	9	26	48	70	83	111	94	96	95	104	118	56	35	18	6	13	5	10
0	2	1	3	4	3	14	24	48	71	91	99	139	118	107	93	121	92	52	37	17	10	11	7	4

AM Peak 1130 - 1230 (500), AM PHF=0.89 PM Peak 1545 - 1645 (469), PM PHF=0.95

**\* Saturday, 1 August 2020 - Total=2666, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	7	7	5	8	9	12	20	46	94	186	322	400	364	235	177	181	150	128	103	70	48	43	30	21
10	3	3	2	3	3	1	4	10	17	41	55	82	104	83	42	59	36	36	29	32	16	9	3	11
3	4	0	1	4	3	2	9	15	20	31	80	97	112	61	42	38	32	30	26	14	18	11	9	7
5	0	1	2	0	2	4	2	7	20	49	89	103	74	43	48	51	46	37	19	12	6	13	8	0
9	0	3	0	1	1	5	5	14	37	65	98	118	74	48	45	33	36	25	29	12	8	10	10	3

AM Peak 1130 - 1230 (437), AM PHF=0.93 PM Peak 1200 - 1300 (364), PM PHF=0.81

**\* Sunday, 2 August 2020 - Total=1574, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	27	19	7	8	6	5	12	34	46	100	163	163	150	150	152	133	125	93	53	45	33	25	18	7
1	10	3	3	0	4	0	1	10	12	15	41	31	47	40	56	38	34	20	11	17	7	10	4	3
1	3	7	3	4	1	1	0	6	10	21	30	45	42	39	27	27	34	16	17	12	11	6	5	2
0	5	8	0	1	1	3	3	9	12	30	49	49	35	36	42	30	31	33	12	8	6	5	5	2
1	9	1	1	3	0	1	8	9	12	34	43	38	26	35	27	38	26	24	13	8	9	4	4	0

AM Peak 1115 - 1215 (179), AM PHF=0.91 PM Peak 1315 - 1415 (166), PM PHF=0.74

**\* Monday, 3 August 2020 - Total=3068, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	3	2	5	3	6	23	38	118	182	245	248	256	273	275	293	306	300	269	106	44	40	18	10	5
1	1	0	2	0	0	2	11	17	27	58	46	56	88	75	67	75	80	89	23	10	9	2	1	1
0	1	0	2	0	2	1	3	22	32	70	63	65	42	71	70	79	79	81	36	17	13	5	1	0
0	0	1	0	0	4	7	8	21	49	71	65	69	72	58	75	68	64	56	26	9	8	6	3	1
1	1	1	1	3	0	13	16	58	74	46	74	66	71	71	81	84	77	43	21	8	10	5	5	3

AM Peak 1115 - 1215 (288), AM PHF=0.82 PM Peak 1515 - 1615 (311), PM PHF=0.93

**\* Tuesday, 4 August 2020 - Total=3445, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	2	6	1	2	5	22	53	99	170	251	287	312	347	307	310	344	363	260	143	62	51	26	18	4
0	1	2	1	1	4	4	11	16	18	57	69	65	96	89	73	85	100	83	53	17	15	7	6	0
2	0	2	0	0	0	0	6	20	44	52	81	78	96	69	79	95	94	78	33	14	15	7	4	1
0	0	1	0	0	1	11	11	18	45	59	66	89	72	76	74	77	82	54	26	19	13	6	3	2
0	1	1	0	1	0	7	25	45	63	83	71	80	83	73	84	87	87	45	31	12	8	6	5	1

AM Peak 1130 - 1230 (361), AM PHF=0.94 PM Peak 1545 - 1645 (363), PM PHF=0.91

**\* Wednesday, 5 August 2020 - Total=3299, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	2	5	6	5	4	25	53	104	211	229	251	256	302	336	286	331	290	285	142	73	52	31	12	8
2	0	3	1	1	0	2	11	19	23	60	61	50	84	108	73	71	75	85	47	16	16	14	5	6
0	2	1	1	1	1	3	6	27	54	50	67	55	65	80	59	88	71	72	34	18	12	6	3	1
2	0	0	4	2	1	5	13	20	55	53	58	68	81	79	59	82	70	70	40	21	13	7	1	0
0	0	1	0	1	2	15	23	38	79	66	65	83	72	69	95	90	74	58	21	18	11	4	3	1

AM Peak 1145 - 1245 (313), AM PHF=0.93 PM Peak 1230 - 1330 (341), PM PHF=0.79

**\* Thursday, 6 August 2020 - Total=3523, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	4	7	2	4	7	22	56	108	188	257	260	287	355	344	314	334	319	297	153	81	58	45	12	9
1	2	4	0	3	2	0	10	22	26	63	62	71	95	114	66	96	83	109	41	26	18	22	5	3
0	0	0	0	0	1	3	9	23	39	59	60	74	92	84	72	69	91	70	47	17	18	8	4	2
3	2	2	1	1	3	6	13	24	50	59	63	79	80	73	86	85	76	71	35	22	12	7	2	0
1	0	1	1	0	1	13	24	39	73	76	75	63	88	73	90	84	69	47	30	16	10	8	1	4

AM Peak 1145 - 1245 (330), AM PHF=0.87 PM Peak 1215 - 1315 (374), PM PHF=0.82

**\* Friday, 7 August 2020 - Total=4084, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
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Peter Meredith Consulting

Traffic Impact Assessment Proposed Residential Development 57 Railway Street, Griffith NSW

	5	8	3	7	10	24	30	101	168	300	311	417	456	473	475	403	325	239	121	94	44	28	25	17
2	1	0	0	0	3	1	2	14	18	75	69	106	107	148	114	105	73	73	50	24	11	4	6	7
3	0	1	3	1	1	1	5	28	38	71	63	90	116	116	116	102	95	71	32	26	10	7	7	5
8	3	5	0	5	3	9	9	24	44	59	90	111	95	99	108	90	90	55	24	26	15	8	7	3
3	1	2	0	1	3	13	14	35	68	95	89	110	138	110	137	106	67	40	15	18	8	9	5	2

AM Peak 1130 - 1230 (444), AM PHF=0.96 PM Peak 1245 - 1345 (501), PM PHF=0.85

**\* Saturday, 8 August 2020 - Total=2771, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	16	6	3	1	8	12	10	50	86	178	372	459	414	231	204	178	140	109	90	69	38	42	31	24
5	2	2	1	0	2	1	1	8	11	27	83	122	139	74	67	46	44	21	24	14	7	6	7	8
5	3	2	0	0	0	2	3	12	21	44	87	105	98	54	57	47	33	21	35	20	12	14	13	4
3	8	1	0	0	4	3	3	17	16	40	87	101	100	47	32	43	30	28	16	17	13	15	5	3
3	3	1	2	1	2	6	3	13	38	67	115	131	77	56	48	42	33	39	15	18	6	7	6	9

AM Peak 1115 - 1215 (476), AM PHF=0.86 PM Peak 1200 - 1300 (414), PM PHF=0.74

**\* Sunday, 9 August 2020 - Total=1493, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	16	19	24	4	1	8	7	21	40	100	135	149	154	147	134	131	113	89	63	60	37	24	11	6
2	5	6	4	0	1	2	0	9	3	16	34	30	37	41	33	39	25	23	12	9	12	12	2	2
0	5	5	6	2	0	1	2	2	7	23	31	38	45	38	35	32	39	26	15	17	10	7	3	3
0	3	4	7	2	0	3	1	4	11	28	38	41	39	31	28	31	31	19	17	19	7	4	3	0
2	3	4	7	0	0	2	4	6	19	33	32	40	33	37	38	29	18	21	19	15	8	1	3	1

AM Peak 1130 - 1230 (163), AM PHF=0.91 PM Peak 1215 - 1315 (158), PM PHF=0.88

**\* Monday, 10 August 2020 - Total=3330, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	4	2	1	3	8	21	40	137	195	242	250	298	317	332	293	333	291	288	128	65	40	24	8	10
0	2	1	0	0	3	2	7	20	24	48	55	69	91	81	83	74	76	91	39	20	10	7	1	2
5	0	0	0	1	1	2	4	23	49	74	61	79	72	90	75	88	87	78	29	16	10	7	1	4
0	0	0	0	0	2	3	9	44	44	51	70	78	75	82	58	87	69	54	34	17	11	5	1	1
0	2	1	1	2	2	14	20	50	78	69	64	72	79	79	77	84	59	65	26	12	9	5	5	3

AM Peak 1115 - 1215 (320), AM PHF=0.88 PM Peak 1515 - 1615 (335), PM PHF=0.95

**\* Tuesday, 11 August 2020 - Total=3358, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	5	4	3	3	13	22	49	109	226	235	227	303	308	321	286	323	349	275	127	64	56	33	9	8
3	0	0	0	0	5	2	10	17	38	54	53	75	79	99	71	85	95	99	44	17	19	4	3	3
2	5	0	0	0	2	4	8	32	58	58	48	73	72	67	71	83	82	75	28	17	14	19	0	2
1	0	1	2	1	3	8	6	21	47	64	54	72	75	73	83	87	86	52	35	16	10	6	0	1
1	0	3	1	2	3	8	25	39	83	59	72	83	82	82	61	68	86	49	20	14	13	4	6	2

AM Peak 1145 - 1245 (309), AM PHF=0.93 PM Peak 1615 - 1715 (353), PM PHF=0.89

**\* Wednesday, 12 August 2020 - Total=3442, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	7	2	5	7	4	31	42	110	214	256	231	289	341	328	311	313	348	307	133	81	31	30	12	9
2	3	1	0	1	0	0	4	16	36	70	55	73	90	97	95	75	85	88	50	24	10	5	2	4
0	2	1	1	0	0	5	6	30	51	59	58	61	63	93	71	78	105	76	31	19	6	5	6	4
1	1	0	2	1	2	7	14	20	53	54	58	69	90	68	80	77	91	89	30	21	10	12	3	1
0	1	0	2	5	2	19	18	44	74	73	60	86	98	70	65	83	67	54	22	17	5	8	1	0

AM Peak 1145 - 1245 (329), AM PHF=0.91 PM Peak 1230 - 1330 (378), PM PHF=0.96

**\* Thursday, 13 August 2020 - Total=3497, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	3	7	3	3	5	19	56	114	185	175	283	298	345	348	324	370	353	273	154	85	45	25	14	10
2	2	1	1	0	0	1	14	24	36	46	56	62	72	100	84	94	81	84	53	27	16	8	4	2
1	0	0	0	1	0	1	5	27	35	0	73	74	91	95	81	78	102	83	46	18	14	8	3	2
2	1	3	2	1	2	5	14	29	50	61	72	75	87	61	80	97	101	60	33	23	8	5	3	4
1	0	3	0	1	3	12	23	34	64	68	82	87	95	92	79	101	69	46	22	17	7	4	4	2

AM Peak 1145 - 1245 (337), AM PHF=0.93 PM Peak 1545 - 1645 (385), PM PHF=0.94

**\* Friday, 14 August 2020 - Total=268 (Incomplete) , 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	6	7	5	3	7	23	45	102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	2	1	0	0	0	2	7	16	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



## A2: Kooyoo Street Traffic Data

### MetroCount Traffic Executive Vehicle Counts

#### VehicleCount-184 -- English (ENA)

##### Datasets:

**Site:** [Koyoo Street] Kooyoo 30m north Railway Street  
**Attribute:**  
**Direction:** 3 - South bound, A trigger first. **Lane:** 0  
**Survey Duration:** 16:15 Wednesday, 8 November 2023 => 13:48 Thursday, 16 November 2023,  
**Zone:**  
**File:** Koyoo Street 0 2023-11-16 1348.EC0 (Regular )  
**Identifier:** S168WTP6 MC56-L5 [MC55] (c)Microcom 19Oct04  
**Algorithm:** Factory default axle (v5.06)  
**Data type:** Axle sensors - Paired (Class/Speed/Count)

##### Profile:

**Filter time:** 16:16 Wednesday, 8 November 2023 => 13:48 Thursday, 16 November 2023 (7.89762)  
**Included classes:** 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12  
**Speed range:** 10 - 160 km/h.  
**Direction:** North, East, South, West (bound), P = South, Lane = 0-16  
**Separation:** Headway > 0 sec, Span 0 - 100 metre  
**Name:** Default Profile  
**Scheme:** Vehicle classification (AustRoads94)  
**Units:** Metric (metre, kilometre, m/s, km/h, kg, tonne)  
**In profile:** Vehicles = 2055 / 2089 (98.37%)

**\* Wednesday, 8 November 2023 - Total=88 (Incomplete) , 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34	15	4	8	23	4	0
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	5	1	2	6	3	0	
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	16	10	0	1	15	1	0
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	8	0	3	3	2	0	0
0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	0	0	2	0	0	0

**\* Thursday, 9 November 2023 - Total=297, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	0	0	2	0	1	6	22	31	38	44	17	12	11	15	18	8	9	46	9	2	2	4	0	0
0	0	0	1	0	0	0	6	12	6	17	7	2	3	3	5	5	0	9	5	1	0	2	0	0
0	0	0	0	0	0	0	5	10	4	11	4	4	2	4	6	3	3	9	1	1	0	1	0	0
0	0	0	1	0	1	4	6	2	16	9	4	6	1	5	3	0	5	17	3	0	0	0	0	0
0	0	0	0	0	0	2	5	7	12	7	2	0	5	3	4	0	1	11	0	0	2	1	0	0

AM Peak 0830 - 0930 (56), AM PHF=0.82 PM Peak 1700 - 1800 (46), PM PHF=0.68

**\* Friday, 10 November 2023 - Total=337, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	0	1	1	1	0	7	9	17	32	45	18	17	15	18	15	10	45	63	2	5	11	1	1	3
0	0	0	0	0	0	1	4	4	4	15	2	5	3	4	7	2	5	14	2	2	2	1	0	1
1	0	0	0	0	0	1	2	1	3	11	5	4	7	5	4	4	16	21	0	1	2	0	0	1
0	0	0	1	1	0	2	1	4	10	12	6	4	2	3	2	2	18	14	0	1	2	0	1	1
0	0	1	0	0	0	3	2	8	15	7	5	4	3	6	2	2	6	14	0	1	5	0	0	0

AM Peak 0845 - 0945 (53), AM PHF=0.88 PM Peak 1700 - 1800 (63), PM PHF=0.75

**\* Saturday, 11 November 2023 - Total=181, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	1	2	0	0	0	14	5	3	7	33	13	12	4	13	7	6	7	28	14	2	1	4	1	4
0	0	0	0	0	0	1	3	2	1	9	0	4	0	4	4	2	1	7	10	0	1	2	0	1
2	1	0	0	0	0	5	0	0	1	8	3	2	2	3	1	3	0	5	1	0	0	1	0	1
0	0	0	0	0	0	2	0	0	2	8	6	5	2	3	2	1	2	6	2	2	0	1	0	1
1	0	2	0	0	0	6	2	1	3	8	4	1	0	3	0	0	4	10	1	0	0	0	1	1

AM Peak 0900 - 1000 (33), AM PHF=0.92 PM Peak 1715 - 1815 (31), PM PHF=0.78

**\* Sunday, 12 November 2023 - Total=127, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	3	1	0	1	0	11	33	7	3	12	7	2	1	2	2	2	5	17	4	0	7	5	2	0
0	0	1	0	0	0	1	12	3	0	3	2	2	0	0	1	0	0	1	4	0	3	2	0	0
0	2	0	0	1	0	2	11	1	1	3	2	0	0	0	0	1	1	6	0	0	0	1	0	0
0	0	0	0	0	0	2	7	1	0	3	2	0	0	1	0	0	4	8	0	0	0	1	0	0
0	1	0	0	0	0	6	3	2	2	3	1	0	1	1	1	1	0	2	0	0	4	1	2	0

AM Peak 0545 - 0645 (36), AM PHF=0.75 PM Peak 1715 - 1815 (20), PM PHF=0.63

**\* Monday, 13 November 2023 - Total=268, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	0	0	1	0	1	9	6	43	28	50	13	9	10	20	19	4	13	22	3	1	5	4	3	4
0	0	0	0	0	0	3	5	5	17	15	3	4	4	4	6	0	3	2	0	0	2	1	0	0
0	0	0	0	0	0	3	0	4	8	14	4	1	4	3	8	0	2	6	0	1	0	2	2	1
0	0	0	1	0	1	1	0	29	6	12	1	2	1	5	3	0	2	6	3	0	2	1	1	3
0	0	0	0	0	0	5	3	5	9	7	3	3	1	8	2	4	6	8	0	0	1	0	0	0

AM Peak 0845 - 0945 (52), AM PHF=0.76 PM Peak 1330 - 1430 (27), PM PHF=0.84

**\* Tuesday, 14 November 2023 - Total=264, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	0	0	2	2	1	11	5	15	33	44	22	18	8	19	14	1	18	30	5	0	0	9	1	6
0	0	0	1	0	0	1	4	6	1	13	6	7	2	4	6	0	3	10	2	0	0	1	0	5
0	0	0	0	0	0	2	0	3	3	12	4	4	2	4	4	0	4	11	1	0	0	6	0	1
0	0	0	1	2	1	4	0	1	11	10	4	1	1	5	3	1	4	5	2	0	0	2	0	0
1	0	0	0	0	0	4	1	5	18	9	8	6	3	6	1	0	7	4	0	0	0	0	1	0

AM Peak 0830 - 0930 (54), AM PHF=0.75 PM Peak 1645 - 1745 (33), PM PHF=0.75

\* **Wednesday, 15 November 2023 - Total=279, 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	1	1	2	2	5	6	13	14	35	31	10	6	26	17	8	7	15	34	9	8	17	4	4	4
0	0	1	0	2	0	1	6	4	4	7	2	0	8	7	3	3	5	7	3	2	2	1	0	2
0	0	0	0	0	0	1	0	2	5	13	2	3	10	5	2	1	3	17	0	0	10	1	2	0
0	0	0	1	0	3	1	2	5	11	8	1	0	3	1	3	2	5	5	4	5	3	1	0	2
0	1	0	1	0	2	3	5	3	15	3	5	3	5	4	0	1	2	5	2	1	2	1	2	0

AM Peak 0830 - 0930 (46), AM PHF=0.77 PM Peak 1700 - 1800 (34), PM PHF=0.50

\* **Thursday, 16 November 2023 - Total=209 (Incomplete) , 15 minute drops**

	0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
	0	1	2	0	3	8	26	32	32	47	13	15	14	16	-	-	-	-	-	-	-	-	-	-
-	0	0	0	0	0	0	9	18	6	14	1	5	5	6	-	-	-	-	-	-	-	-	-	-
-	0	0	1	0	1	1	1	3	3	11	3	5	3	6	-	-	-	-	-	-	-	-	-	-
-	0	1	1	0	1	2	7	7	12	14	4	5	1	3	-	-	-	-	-	-	-	-	-	-
-	0	0	0	0	1	5	9	4	11	8	5	0	5	1	-	-	-	-	-	-	-	-	-	-

AM Peak 0845 - 0945 (50), AM PHF=0.89