PROPOSED MIXED USE DEVELOPMENT

321-331 CONDAMINE STREET, MANLY VALE

Traffic and Parking Assessment Report

14th March 2021

Ref: 20006

Prepared by

Terraffic Pty Ltd
Traffic and Parking Consultants

Terraffic Pty Ltd ABN 83 078 415 871
PO Box 563 Sylvania Southgate NSW 2224 Mob: 0411 129 346
Email: logan@terraffic.com.au Web: www.terraffic.com.au

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1. INTRODUCTION

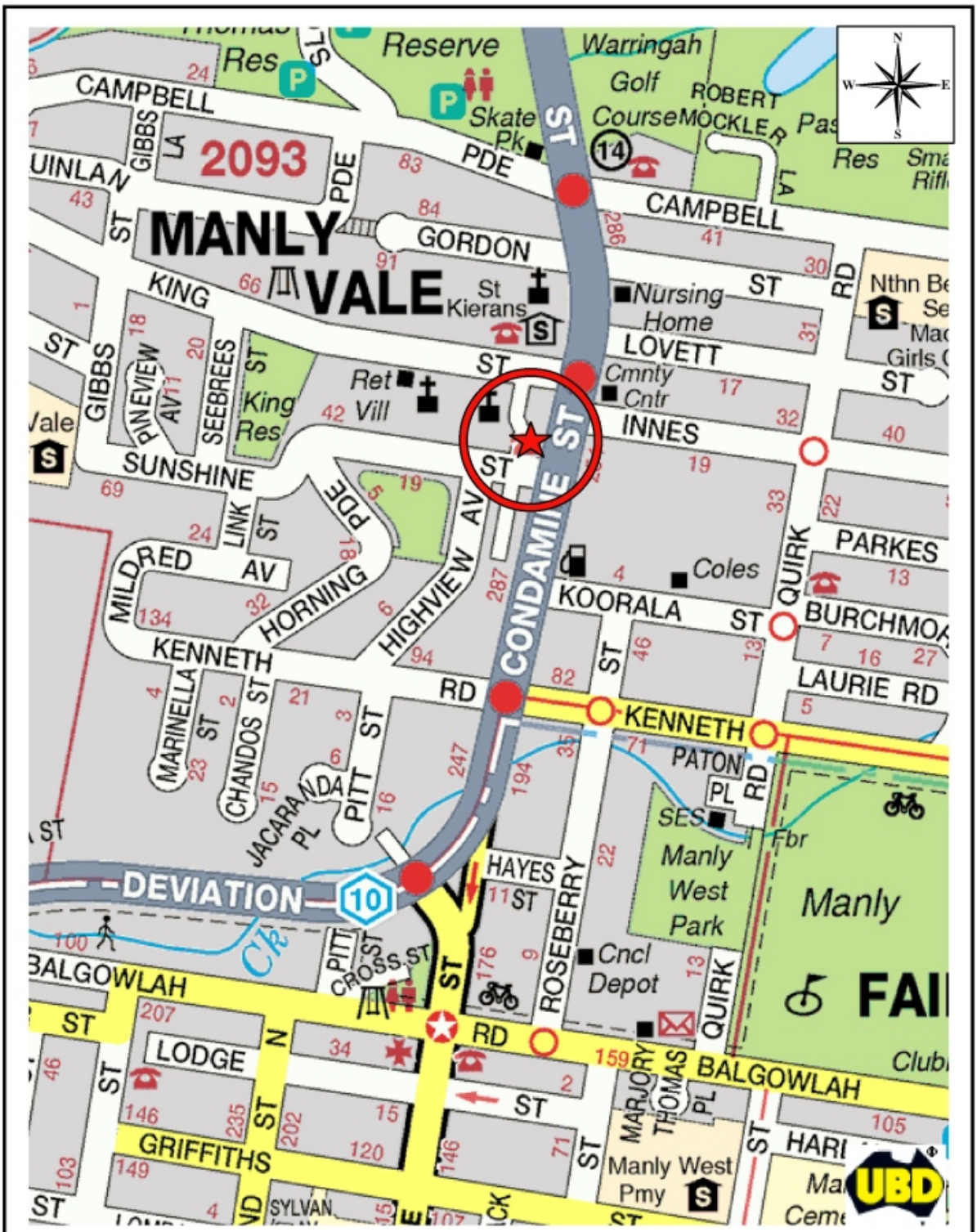
This report has been prepared to accompany a Development Application (DA) to Northern Beaches Council for a proposed mixed use development on a consolidated sate at 321-331 Condamine Street, Manly Vale (Figures 1 and 2).

The proposed development site is located on the north-western corner of the Condamine Street / Sunshine Street intersection. It has a total site area of approximately 1,274.4m^2 with frontages of approximately 35.65m to Condamine Street, 31.1m to Sunshine Street and 38.10m to Somerville Place at the rear of the site.

Existing Site Development

The existing site development comprises 4 mixed use buildings with a combined retail/commercial floor space of approximately 600m^2 and approximately 4 residential dwellings. As can be seen in the aerial photograph below, the buildings are served by at-grade carparks that gain direct access to Somerville Place.

Aerial photograph of the site

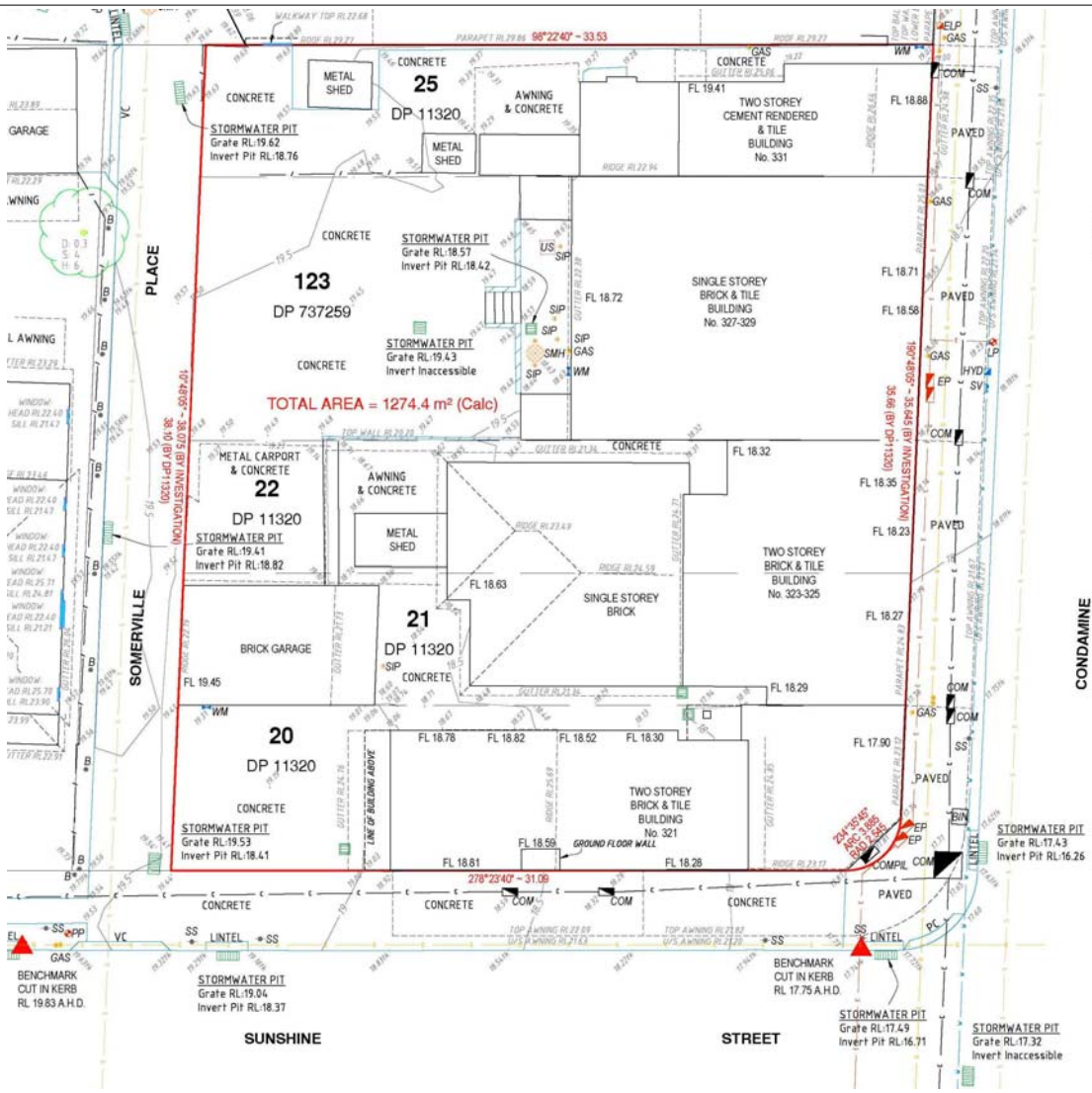


Terraffic Pty Ltd
TRAFFIC & PARKING CONSULTANTS

LOCATION

FIGURE 1


GORDO
N
W
E
S
LOVETT ST
KING ST
SOMERVILLE PL
CONDAMINE ST
INNES RD
SUNSHINE ST
AVE
PL
SOMERVILLE
LANE
ANE
HIGHVIEW
KOORALA ST
Terraffic Pty Ltd
TRAFFIC & PARKING CONSULTANTS
SITE
FIGURE 2



Site Survey

Proposed Development

The development proposal involves the demolition of the existing building and construction of a new mixed use building comprising 4 small retail shops with a combined floor area of 340.57m^2 and 30 residential apartments as follows:

Retail

Retail 1	59.22m^2
Retail 2	110.06m^2
Retail 3	120.51m^2
Retail 4	50.78m^2
Total Retail	**340.57m^2**

Residential	
1 bedroom units	4
2 bedroom units	24
3 bedroom units	2
Total Units	**30**

The proposed development is served by a total of 63 off-street car parking spaces comprising 36 resident spaces, 6 visitor and 21 retail spaces. An on-site loading space capable of accommodating a courier van is also proposed on the ground level. As per the current arrangement, larger delivery vehicles will temporarily park in the 1 HOUR PARKING zone along the Condamine Street frontage.

Vehicular access to the proposed development is off Somerville Place via a two-way 5.5m wide combined entry/exit driveway located adjacent to the northern site boundary.

Public Transport Accessibility

The subject site has convenient access to the following bus service operated by Sydney Buses:

Route B1 B-Line Mona Vale to City Wynyard via Warriewood, Narrabeen, Collaroy, Dee Why, Brookvale, Manly Vale, Mosman and Neutral Bay (operates daily)

Route 142 Pittwater Place Shopping Centre to Kamaroi Rudolf Steiner School (operates morning peak only)

Route 145 Warringah Mall to Seaforth via Manly Vale (operates weekdays only)

Route 154X Dee Why to Milsons Point (Express Service) via Brookvale, Manly Vale, Mosman, Neutral Bay and North Sydney Station (operates weekday peaks)

Route 165X South Curl Curl to City Wynyard (Express Service) via Freshwater, Manly Vale, Cremorne and Neutral Bay (operates weekday peaks)

Route 172X Warringah Mall to City Wynyard (Express Service) via Brookvale, Manly Vale, Balgowlah, North Balgowlah, Seaforth, Mosman, Cremorne and Neutral Bay (operates daily)

Route 173X Warringah Mall to City Wynyard (Express Service) via Brookvale, Manly Vale, Balgowlah, Mosman, Cremorne and Neutral Bay (operates daily)

Route 174X Narraweena to City Wynyard (Express Service) via Allambie Heights, Manly Vale, Cremorne and Neutral Bay (operates weekday peaks only)

Route 176X Dee Why to City Wynyard (Express Service) via North Curl Curl Brookvale, Manly Vale, Cremorne and Neutral Bay (operates weekday peaks only)

Route 177X Dee Why to City Wynyard (Express Service) via Wingala, North Curl Curl Brookvale, Manly Vale, Cremorne and Neutral Bay (operates weekday peaks only)

Route 180X Collaroy Plateau to City Wynyard (Express Service) via Dee Why, Brookvale, Manly Vale and Neutral Bay (operates weekday peaks only)

Route 181X Narrabeen to City Wynyard (Express Service) via Collaroy, Dee Why, Brookvale, Manly Vale, Mosman and Neutral Bay (operates weekday peaks only)

Route 190X Avalon Beach to City Wynyard (Express Service) via Newport, Mona Vale, Narrabeen, Mosman and Neutral Bay (operates weekday peaks only)

The purpose of this report is to assess the traffic, servicing and parking implications of the proposed development.

2. PARKING AND SERVICING ASSESSMENT

Parking Provision

Appendix 1 in Part H of the Warringah Development Control Plan (amendment 17) nominates the following parking requirements that are applicable to the proposed development:

Multi-dwelling housing, Residential flat buildings, Serviced apartments (including holiday flats), Shop-top housing (residential component)

- 1 space per 1 bedroom dwelling
- 1.2 spaces per 2 bedroom dwelling
- 1.5 spaces per 3 bedroom dwelling
- 1 visitor space per 5 units or part of dwellings

Shop (includes retail / business component of shop top housing, retail premises and neighbourhood shop)

- 1 space per 16.4 m^2 GLFA (6.1 spaces per 100 m^2 GLFA)

Application of those parking rates to the proposed development yields a total requirement of 63 spaces calculated as follows:

Residential	
4 x 1 bedroom units @ 1.0 space per dwelling	4.0 spaces
24 x 2 bedroom dwellings @ 1.2 spaces per dwelling	28.8 spaces
2 x 3 bedroom dwellings @ 1.5 spaces per dwelling	3.0 spaces
Total resident parking	*35.8 spaces (rounded to 36 spaces)*
30 dwellings @ 1 visitor space per 5 dwellings	6.0 spaces
Total	**41.8 spaces (rounded to 42 spaces)**
Retail	
340.57m^2 @ 6.1 spaces per 100m^2	20.8 spaces (rounded to 21 spaces)
Total	***62.6 spaces (rounded to 63 spaces)***

The proposed development satisfies the DCP requirement with the provision of 63 spaces comprising 36 resident spaces, 6 visitor and 21 retail spaces.

On-Site Loading Facilities

Part C2 of the Warringah Development Control Plan notes the following with regard to on-site loading facilities:

> **On-site loading and unloading**
>
> 6. Facilities for the loading and unloading of service, delivery and emergency vehicles are to be:
>
> - appropriate to the size and nature of the development;
> - screened from public view; and
> - designed so that vehicles may enter and leave in a forward direction.

Table 5.1 of the RMS's *"Guide to Traffic Generating Developments"* (October 2002) specifies the following requirement for delivery and service vehicles:

Restaurants/Shops <2,000m^2 GFA	1 space per 400m^2 GFA

Based on the RMS Guidelines, the proposed development requires 1 loading space as follows:

340.57m^2 Retail floorspace @ 1 loading bay per 400m^2 GFA	0.85 loading bay

The proposed development is served by a 7.3m x 4.5m loading bay on the ground level capable of accommodating a typical courier van similar in size to the B99 vehicle specified in the Australian Standard AS/NZS2890.1:2004. The B99 vehicle is similar to the Ford Transit Medium Wheelbase Van and measures 5.2m x 1.94m. This vehicle will adequately serve the 4 small retail shops.

As per the current arrangement, larger delivery vehicles will temporarily park in the 1 HOUR PARKING zone along the Condamine Street frontage.

Carpark and Access Compliance

The basement carpark and access ramps have been designed to generally satisfy the following requirements of the Australian Standard AS/NZS2890.1-2004 – *"Off-Street Car Parking"*:

- Long-term (Class 1) parking spaces are a minimum 5.4m long and 2.4m wide
- Short term (Class 3) parking spaces are a minimum 5.4m long and 2.6m wide
- Small car spaces are a minimum 5.0m long and 2.3m wide
- An additional 0.3m has been provided for spaces adjacent to a wall or obstruction
- Blind aisle extensions 1.0m wide have been provided as per Figure 2.3 of the Standard
- The access/manoeuvring aisle ranges in width from 5.8m to 6.2m
- Pavement cross-falls at parking spaces do not exceed 5% (1 in 20)
- The maximum gradient of the main access ramp for the first 6.0m into the site from Somerville Place does not exceed 5% (1 in 20)
- Maximum ramp grades do not exceed 25% (1 in 4)
- Ramp transitions do not exceed 12.5% (1 in 8) over a distance of 2.0m
- The two-way access driveways are 6.1m wide wall to wall comprising a 5.5m roadway and 2 x 300mm wide kerbs
- A minimum headroom clearance of 2.2m has been provided throughout the basement carpark
- Motorcycle spaces are 2.5m long and 1.2m wide

The disabled parking spaces have also been designed in accordance with the Australian Standard AS/NZS2890.6:2009 – *"Off-street parking for people with disabilities"* as follows:

- A 5.4m long x 2.4m wide dedicated *(non-shared)* parking space
- An adjacent *shared* area that is also 5.4m long x 2.4m wide
- A minimum headroom of 2.5m above the disabled spaces
- Pavement cross-falls in disabled spaces do not exceed 2.5% (1 in 40) in any direction

In the circumstances, it can be concluded that the proposed development has no unacceptable parking, loading or safety implications.

3. TRAFFIC ASSESSMENT

Existing Road Network

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services is illustrated on Figure 3 and comprises the following:

State Roads
Burnt Bridge Creek Deviation – Condamine Street

Regional Roads
Kenneth Road (east of Condamine Street)
Condamine Street (between Burnt Bridge Creek Deviation and Sydney Road)

Condamine Street is a classified *State Road* performing an arterial road function. It forms part of the Metroad 10 system that links the northern suburbs to the lower north shore and ultimately the Sydney CBD. Condamine Street carries 6 lanes of traffic with the kerbside lanes reserved as Bus Lanes during peak periods.

King Street is an unclassified Local Road performing a collector road function. The intersection of Condamine Street and King Street is traffic signal controlled with all turns permitted at the intersection. It has a pavement width of approximately 13m and is restricted to a speed limit of 50km/h.

Sunshine Street is an unclassified Local Road with a primary function of providing access to properties to the west of Condamine Street. It has a pavement width of approximately 13m and is restricted to a speed limit of 50km/h. Due to the median island on Condamine Street, all traffic accessing Sunshine Street is restricted to left-in/left-out only.

Somerville Place is a local laneway with a primary function of providing vehicular access to properties fronting Condamine Street. On the 5th March 2019, Northern Beaches Council's Local Traffic Committee approved the introduction of ONE WAY southbound traffic flow on Somerville Place between King Street and Sunshine Street. Council however is in the process of widening Somerville Place to 6.0m by requiring land dedications when sites develop along

its length. It is anticipated that traffic flows will revert back to TWO WAY once all land dedications are complete and the roadway constructed to accommodate these flows.

The existing traffic and parking controls on the road network serving the site are illustrated on Figure 4 and include:

- The TRAFFIC SIGNALS at the intersection of Condamine Street and King Street
- The MEDIAN ISLAND on Condamine Street
- The BUS ZONES and peak period BUS LANES on Condamine Street
- The 1 HOUR PARKING zone along the Condamine Street frontage of the site

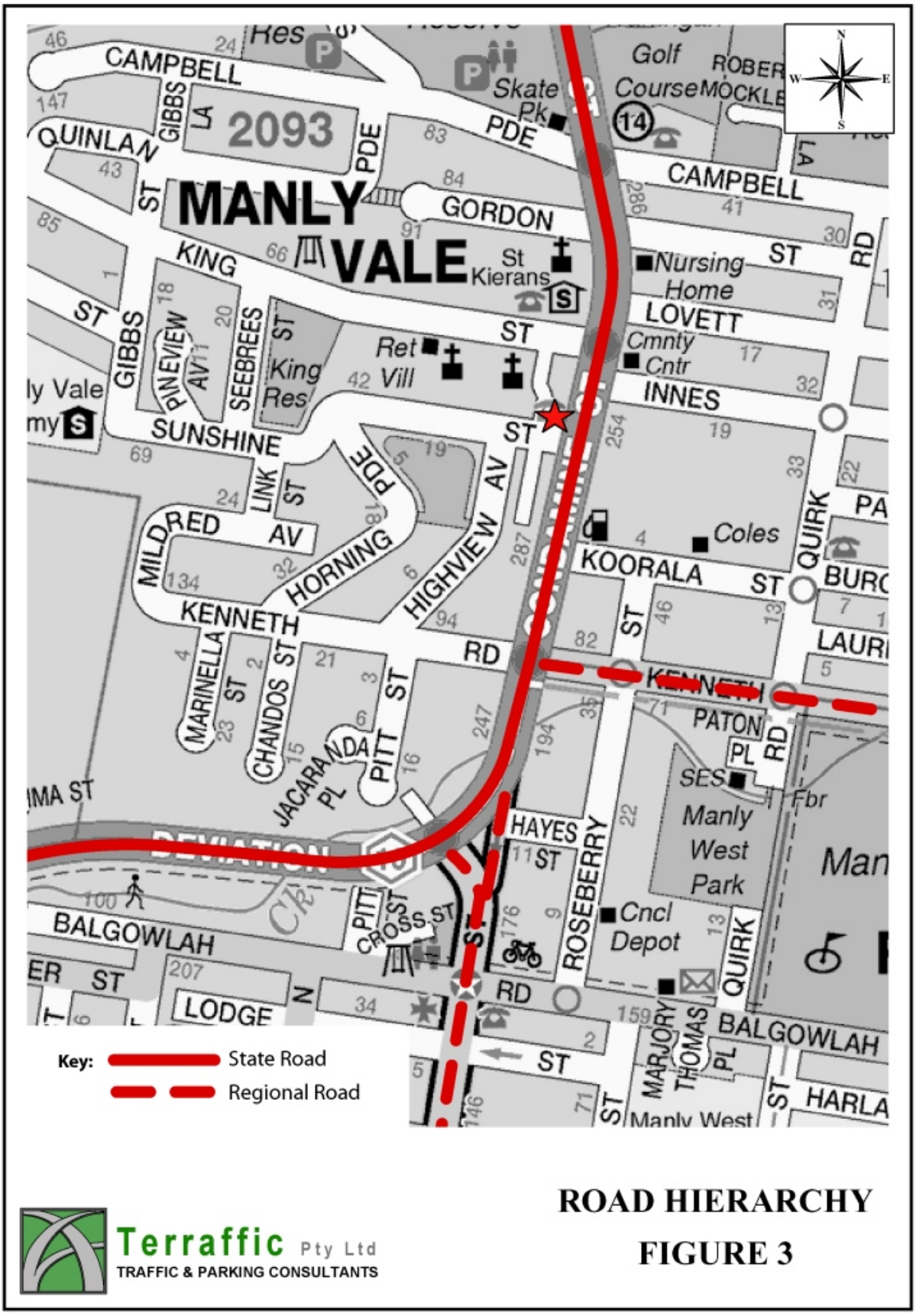
Existing Traffic Conditions

An indication of existing traffic conditions on the road network serving the site is provided from a count of traffic activity at the King Street/Somerville Place and Sunshine Street/Somerville Place intersections conducted between 7.00am - 9.00am and 4.00pm - 6.00pm on Monday 17th February 2020. The results of these counts of traffic activity are reproduced in Appendix A revealing that:

- the AM peak period occurred between 8.00 – 9.00am. At that time, 25 vehicles per hour (vph) entered Somerville Road from King Street and 18vph exited onto Sunshine Street.

- the PM peak period occurred between 4.30 – 5.30pm. At that time, 29vph entered Somerville Road from King Street and 31vph exited onto Sunshine Street.

It should be noted that the majority of vehicles entering Somerville Place turn left from King Street while the majority of vehicles exiting onto Sunshine Street turn right. These predominant flows indicate that Somerville Place is used as a “rat-run” for traffic heading south on Condamine Street with a destination to the west of the site off Sunshine Street.


MANLY VALE
2093
CAMPBELL
QUINLAN
GIBBS
PDE
GORDON
KING
ST
SUNSHINE
LINK
MILDRED AV
HORNING
KENNETH
RD
HIGHVIEW AV
MARINELLA ST
CHANDOS ST
JACARANDA PL
PITT ST
DEVIATION
BALGOWLAH
LODGE
HAYES
ROSEBERRY
PATON
PL
KOORALA
LOVETT
INNES
QUIRK
CAMPBELL
Golf Course
Skate Pk
St Kierans
Nursing Home
Cmnty Cntr
Ret Vill
King Res
Coles
SES
Manly West Park
Cncl Depot
MARJORY THOMAS PL
Key:
State Road
Regional Road
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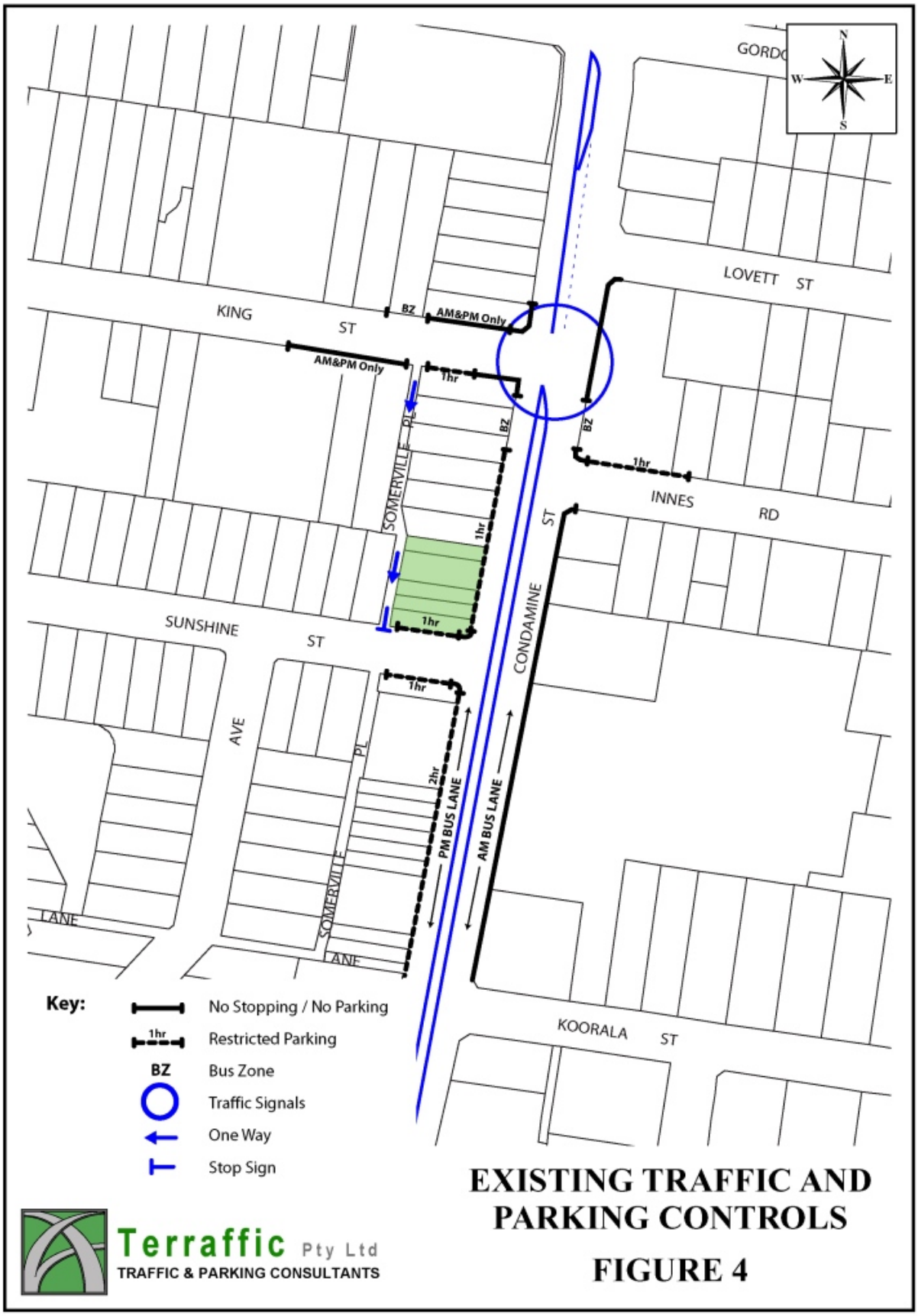
ROAD HIERARCHY
FIGURE 3


GORDO
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KING ST
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AM&PM Only
AM&PM Only
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CONDAMINE
1hr
SUNSHINE ST
1hr
AVE
PL
2hr
PM BUS LANE
AM BUS LANE
SOMERVILLE
LANE
LANE
KOORALA ST
Key:
No Stopping / No Parking
1hr
Restricted Parking
BZ
Bus Zone
Traffic Signals
One Way
Stop Sign
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EXISTING TRAFFIC AND PARKING CONTROLS
FIGURE 4

Projected Traffic Generation Potential

An indication of the traffic generation potential of the existing and proposed development is provided by reference to the Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002)* and the Technical Direction TDT 2013-04a (August 2013). The RMS *Guidelines* are based on extensive surveys of a wide range of land uses and nominates the following traffic generation rates which are applicable to the existing and proposed development:

Specialty Shops / Secondary Retail	5.6 peak hour trips per 100m^2 GLFA (2002 Guidelines)
Residential Flat Buildings (2013 Guidelines)	
AM Peak	0.19 vehicle trips per unit
PM Peak	0.15 vehicle trips per unit

Traffic Generation of <u>EXISTING SITE</u> Development

Application of the RMS's traffic generation rates to the existing retail floor space yields a traffic generation potential in the order of 34vtph during the weekday peak periods as follows:

600m^2 retail @ 5.6vtph per 100m^2	34vtph

Traffic Generation of <u>PROPOSED</u> Development

Application of the RMS's traffic generation rates to the proposed development yields a traffic generation potential in the order of 25-26vtph during the weekday peak periods calculated as follows:

Morning Peak Period

340m^2 retail @ 5.6vtph per 100m^2	20vtph
30 units @ 0.19vtph per unit	6vtph
Total	***26vtph***

Afternoon Peak Period

340m^2 retail @ 5.6vtph per 100m^2	20vtph
30 units @ 0.15vtph per unit	5vtph
Total	***25vtph***

Therefore based on the RMS Guidelines, the proposed development will generate 8-9 less vehicle movement during peak periods as follows:

Morning Peak Period

Existing Development	34vtph
Proposed Development	26vtph
Reduction in Traffic	***8vph***

Afternoon Peak Period

Existing Development	34vtph
Proposed Development	25vtph
Reduction in Traffic	***9vph***

In circumstances where an existing development generates more traffic than a proposed development, it can be readily appreciated that the proposal will not have any noticeable or unacceptable effect on the road network serving the site in terms of road network capacity or traffic-related environmental effect.

Furthermore, the development site has almost direct vehicular access to the higher order road network which alleviates the need to travel on local residential streets.

In the circumstances, the proposed development will not have any unacceptable traffic implications.

APPENDIX A

TRAFFIC COUNT DATA

R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.88196847, Mob.0418-239019

Client : Terraffic Pty. Ltd.

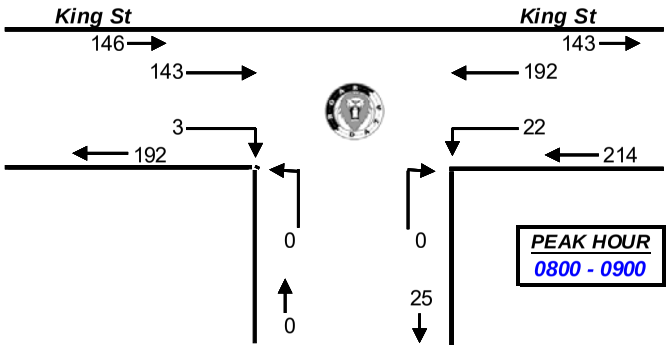
Job No/Name : 7282 MANLY VALE Somerville Pl

Day/Date : Monday 17th February 2020

All Vehicles

	WEST		SOUTH		EAST		
	King St		*Somerville*		*King St*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOTAL**
0700 - 0715	14	1	0	0	2	20	**37**
0715 - 0730	11	0	0	0	3	19	**33**
0730 - 0745	12	1	0	0	2	16	**31**
0745 - 0800	19	0	0	0	2	21	**42**
0800 - 0815	17	1	0	0	7	22	**47**
0815 - 0830	28	2	0	0	2	40	**72**
0830 - 0845	40	0	0	0	3	64	**107**
0845 - 0900	58	0	0	0	10	66	**134**
Period End	**199**	**5**	**0**	**0**	**31**	**268**	**503**

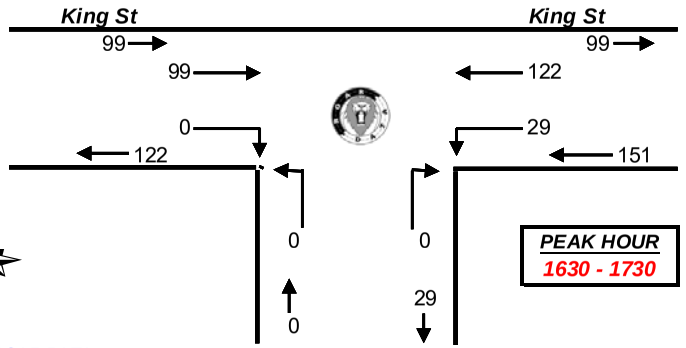
	WEST		SOUTH		EAST		
	King St		*Somerville*		*King St*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOTAL**
0700 - 0800	56	2	0	0	9	76	**143**
0715 - 0815	59	2	0	0	14	78	**153**
0730 - 0830	76	4	0	0	13	99	**192**
0745 - 0845	104	3	0	0	14	147	**268**
0800 - 0900	143	3	0	0	22	192	**360**
PEAK HR	**143**	**3**	**0**	**0**	**22**	**192**	**360**



All Vehicles

	WEST		SOUTH		EAST		
	King St		*Somerville*		*King St*		
Time Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOTAL**
1600 - 1615	20	2	0	0	5	18	**45**
1615 - 1630	20	0	0	0	5	24	**49**
1630 - 1645	29	0	0	0	11	29	**69**
1645 - 1700	27	0	0	0	6	34	**67**
1700 - 1715	21	0	0	0	5	23	**49**
1715 - 1730	22	0	0	0	7	36	**65**
1730 - 1745	24	0	0	0	7	27	**58**
1745 - 1800	26	1	0	0	12	24	**63**
Period End	**189**	**3**	**0**	**0**	**58**	**215**	**465**

	WEST		SOUTH		EAST		
	King St		*Somerville*		*King St*		
Peak Per	**T**	**R**	**L**	**R**	**L**	**T**	**TOTAL**
1600 - 1700	96	2	0	0	27	105	**230**
1615 - 1715	97	0	0	0	27	110	**234**
1630 - 1730	99	0	0	0	29	122	**250**
1645 - 1745	94	0	0	0	25	120	**239**
1700 - 1800	93	1	0	0	31	110	**235**
PEAK HR	**99**	**0**	**0**	**0**	**29**	**122**	**250**



TERRAFFIC PTY LTD

R.O.A.R. DATA

Reliable, Original & Authentic Results

Ph.88196847, Mob.0418-239019

Client : Terraffic Pty. Ltd.

Job No/Name : 7282 MANLY VALE Somerville Pl

Day/Date : Monday 17th February 202

All Vehicles	NORTH Somerville Pl			WEST Sunshine St			SOUTH Somerville Pl			EAST Sunshine St			
Time Per	L	T	R	L	T	R	L	T	R	L	T	R	TOT
0700 - 0715	0	1	2	0	3	0	0	0	2	0	13	0	**21**
0715 - 0730	0	1	2	0	5	0	0	0	2	1	5	0	**16**
0730 - 0745	0	0	0	0	3	0	0	0	2	0	10	0	**15**
0745 - 0800	0	1	1	0	0	0	2	0	1	0	6	0	**11**
0800 - 0815	1	1	2	0	5	0	0	0	1	0	5	0	**15**
0815 - 0830	1	1	0	0	12	2	0	0	0	1	7	0	**24**
0830 - 0845	0	0	5	0	10	0	2	0	2	1	6	0	**26**
0845 - 0900	3	0	4	0	11	0	1	0	0	0	13	0	**32**
Period End	**5**	**5**	**16**	**0**	**49**	**2**	**5**	**0**	**10**	**3**	**65**	**0**	**160**

All Vehicles	NORTH Somerville Pl			WEST Sunshine St			SOUTH Somerville Pl			EAST Sunshine St			
Time Per	L	T	R	L	T	R	L	T	R	L	T	R	TOT
1600 - 1615	2	0	4	0	13	0	0	0	0	0	6	0	**25**
1615 - 1630	2	1	5	0	9	1	0	0	1	0	11	0	**30**
1630 - 1645	2	1	5	0	9	1	1	0	0	1	10	0	**30**
1645 - 1700	2	0	8	0	7	1	1	0	1	0	13	0	**33**
1700 - 1715	0	1	4	0	9	0	1	0	0	1	10	0	**26**
1715 - 1730	3	0	5	0	12	3	0	0	1	3	7	0	**34**
1730 - 1745	0	1	7	0	6	1	2	0	2	0	9	0	**28**
1745 - 1800	4	2	6	0	7	0	1	0	0	2	14	0	**36**
Period End	**15**	**6**	**44**	**0**	**72**	**7**	**6**	**0**	**5**	**7**	**80**	**0**	**242**

	NORTH Somerville Pl			WEST Sunshine St			SOUTH Somerville Pl			EAST Sunshine St			
Peak Time	L	T	R	L	T	R	L	T	R	L	T	R	TOT
0700 - 0800	0	3	5	0	11	0	2	0	7	1	34	0	**63**
0715 - 0815	1	3	5	0	13	0	2	0	6	1	26	0	**57**
0730 - 0830	2	3	3	0	20	2	2	0	4	1	28	0	**65**
0745 - 0845	2	3	8	0	27	2	4	0	4	2	24	0	**76**
0800 - 0900	5	2	11	0	38	2	3	0	3	2	31	0	**97**
PEAK HOUR	**5**	**2**	**11**	**0**	**38**	**2**	**3**	**0**	**3**	**2**	**31**	**0**	**97**

	NORTH Somerville Pl			WEST Sunshine St			SOUTH Somerville Pl			EAST Sunshine St			
Peak Time	L	T	R	L	T	R	L	T	R	L	T	R	TOT
1600 - 1700	8	2	22	0	38	3	2	0	2	1	40	0	**118**
1615 - 1715	6	3	22	0	34	3	3	0	2	2	44	0	**119**
1630 - 1730	7	2	22	0	37	5	3	0	2	5	40	0	**123**
1645 - 1745	5	2	24	0	34	5	4	0	4	4	39	0	**121**
1700 - 1800	7	4	22	0	34	4	4	0	3	6	40	0	**124**
PEAK HOUR	**7**	**4**	**22**	**0**	**34**	**4**	**4**	**0**	**3**	**6**	**40**	**0**	**124**