# Lyle Marshall & Partners Pty Ltd

Consulting Engineers, Transportation, Environmental Planners & Architects ABN 84 095 235 957

Our Ref: FW1176-23

Monday, 20 February 2023

Attn: James Matthews Pacific Planning Pty Ltd

Email: jmatthews@pacificplanning.com.au

Dear James,

# Re: 677 - 681, 687 Canterbury Road, 44 and 48 Drummond Street and 35, 37 and 39 Anderson Street Belmore. Site Compatibility Certificate – Traffic Impact Statement.

# Background

A site compatibility certificate was issued for the site located at 677 Canterbury Road Belmore on 15/7/2014.

A **Traffic Report No. 21-15** by this firm in support of rezoning application was prepared for 677 – 681 and 687 Canterbury Road and 48 Drummond Street Belmore that sought to rezone to facilitate a residential mixed use development. The report prepared in 2015 was for a development which consisted of 300 residential units and 863m<sup>2</sup> of business/commercial use on the ground floor and parking for 311 car spaces. This report prepared detailed SIDRA modelling for 2 intersections and assignment to the road network consisting of 17 intersections. Subsequent reports prepared by this firm including **Report No. 06-16** for 548 Canterbury Road Campsie included detailed SIDRA modelling for 17 intersections and included the development volumes from the site at 677 - 687, 687 Canterbury Road and 48 Drummond Street Belmore.

The traffic generation from **Report 21-15** for the site was 113.6 (114) vehicles in the AM Peak Hour and 92.2 (92) vehicles in the PM Peak Hour. The intersections of Canterbury Road/ Drummond Street and Canterbury Road/ Anderson Street were modelled using development volumes and were shown to have Level of Service A with plenty of spare capacity.

Proposed Development SCC Site

The proposed development site is shown in Figure 1 – Locality Plan and Figure 2 – Cadastral Plan in Appendix A.

The proposed development areas are stated in **Table 1.0** below.

	Units	Area
Commercial	3	6720
Residential		
Building A		
Building B	226 Residential	18640
Building C	Units	10040
Building D		

A detailed summary of residential use is explained in Table 2.0.

Building	Level	Studio	1 Bed	2 Bed	3 Bed	Total
A	2	2	4 + (2*)	3		
	3	2	4	3		
	4	2 2	4	3 + (2*)		
	5	2	4	3		
Subtotal		8	18	14		40
В	2	1	5 + (2*)	3		
	3 4	1	5	3		
	4	1	5	3 + (2*)		
	5	1	5	3		
Subtotal		4	22	14		40
С	2		3 + (2*)	8	2	
	3 4		3	8	2	
	4		3 + (2*)	8	2	
	5 6		3	8	2	
	6	1	2	5 5	2 2 2 2 2	
	7	1	2	5	2	
Subtotal		2	20	42	12	76
D	2		5	8		
	2 3 4		5	8		
	4		5	8		
	5 6		5 2	8 8 7		
	6		2			
	7		2	7		
Subtotal			24	46		70
						226

# Table 2.0 Residential Unit Mix Survey

**Note (\*2)** 2 Units are double storey. 12 x 2 storey units.

The car parking requirements for this site are calculated in **Table 3.0**.

Table 5.0 Required No. of Call Farking Spaces				
Unit Type	Parking Rate	Unit No.	No. of Spaces	
1 Bed/ Studio	1 space/unit	98	98	
2 Bed	1.2 spaces/unit	116	139.2 (139)	
3 Bed	2 spaces/unit	12	24	
Visitor	1 space/5 units	223	45.2 (45)	
Total for Residential			306	
Business Premises	1 sp/33m <sup>2</sup>	Area GFA 6720	203.6	
Total Commercial Car Parking			204	
1 Loading space			1 MRV (medium rigid vehicle)	

The car parking provided is shown in the architectural plans provided by Jakaan Architects and shows provision for 619 spaces which includes shared zone spaces for disabled car parking. The required number of car parking spaces is 510 spaces.

The traffic generation for the site is calculated in **Table 4.0** below.

Use	Peak Hour	Generation Rate/Unit	No. of Units	Traffic Generation		
				IN	OUT	TOTAL
Residential Units	8.00-9.00am	0.32 trips/hr	226	18.08	54.24	72.32
	4.00-5.00pm	0.23trips/hr		34.31	17.67	51.98
Business Premises	8.00-9.00am	2.46/100m <sup>2*</sup>	6720	16.5	16.5	33
	4.00-5.00pm		GFA m <sup>2</sup>	82.5	82.5	165
Employees	134			101	0	101
	8.00-9.00am			101	0	101
	Total AM Peak		135.58	70.74	206.32 (206)	
		Total PM Peak		116.81	100.17	216.98 (217)

# Table 4.0 Peak Hour Traffic Generation by Proposed Mixed Use Development

#### Notes:

AM Peak Hour trips for the Business Premises is 10% IN and 10% OUT. PM Peak Hour assumes 50% IN and 50% OUT.

The number of employees is calculated as:

 $6720/50m^2 \times 0.75 = 101$  (75% is the mode split for car driver for Belmore).

\* Generation rates for Bulky Goods Stores from TDT 04a/2013 App G2 weekdays.

The total traffic generation is 206.32 (206) vehicles in the AM Peak Hour and 216.98 (217) vehicles in the PM Peak Hour.

Further detailed analysis will be required at Development Application Stage including assignment to the road network and detailed SIDRA network modelling.

# **Development Vehicular Access Arrangement**

The proposed site plan arrangement shown in **Drawing No JA2270-SC-150 Level 1** (Ground Floor Plan) prepared by Jakaan Architects is provided in Appendix A.

The laneway provides one-way vehicular access in from Drummond Avenue and exit to Anderson Avenue. This layout provides good connectivity to the local street network away from Canterbury Road and provides a safe ingress and egress system.

A separate loading space for small rigid vehicles or medium rigid vehicles for garbage and service deliveries is provided. Further detailed analysis of swept paths and geometric layout will be provided at Developmental Application Stage.

# Network Impacts

The volumes when distributed to the road network will not significantly affect the level of service at the key intersections in the surrounding road network.

The distributed volumes from the calculated development traffic generation are shown in **Figures 5A** and **5B** in **Appendix A**. Full SIDRA network modelling and accumulative traffic growth will be modelled at Design Development Stage.

We support the SCC on traffic and parking grounds.

Yours faithfully,

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**Erica Marshall-Evans** <u>LYLE MARSHALL & PARTNERS PTY LTD</u> B.Sc. Arch, B. Arch Hons1, M. Eng. Sc. Transport, RAIA Reg No 6513

Attachments: Appendix A Cc: Matthew Daniel (email: mdaniel@pacificplanning.com.au)