Your ref
Our ref 257913
File ref

ARUP

Level 5
151 Clarence Street
Sydney NSW 2000
Australia

t +61 2 9320 9320
f +61 2 9320 9021

suan.guo@arup.com
www.arup.com

Matt Ellis
PricewaterhouseCoopers
One International Towers Sydney
Waterman's Quay, Barangaroo NSW 2000

21 December 2018

Dear Matt,

PoW Hospital Redevelopment - Magill St traffic impacts

The purpose of this letter is to summarise the traffic impacts associated with Health Infrastructure's (HI) direction to retain Magill Street as a no-through road for the operation of the Acute Services Building (ASB). This letter will cover the associated traffic impacts and make references to specific sections within the Transport Assessment prepared by Arup (July 2018) supporting the State Significant Development Application (SSDA).

A comparison of forecast daily two-way traffic volumes likely to utilise Magill Street following the opening of the ASB is shown in Table 1. This table shows the key traffic sources and the anticipated quantum of traffic associated with whether Magill Street remains closed or open to Hospital Road.

Table 1: Comparison of forecast daily traffic volumes for Magill Street

Traffic Source*	**Forecast Daily Traffic (vpd)**	
	Magill St Open	**Magill St Closed**
Background	**150**	**150**
ASB Drop Off Traffic	**900**	**-**
Emergency Department (ED) and Ambulance Traffic	**500**	**500**
Staff accessing carpark	**700**	**-**
Patients and visitors accessing car park	**250**	**-**
Total	**2,500**	**650**

* All vehicles accessing the satellite loading dock (located at the corner of Hospital Road and Magill Street) will be directed to utilise Hospital Road. The driveway access to this loading dock is proposed to be located on Hospital Road.

The key points underpinning this comparison are as follows:

- The upper limit for environmental performance capacity for residential streets is 3,000 two-way vehicles per day (vpd) (RMS, 2002)
- Current forecasts (as per the SSDA submission) assume approximately 2,500 daily two-way vehicles using Magill Street if this was opened to Hospital Road.
- However, if Magill Street remains closed, traffic forecasts will reduce by approximately 74% to 650 daily two-way vehicle movements.

- Given the location of the emergency department access points along Magill Street, the additional traffic will only impact half of the residential properties along Magill Street.
- Arup understands that with appropriate installation of road and site signage and given the distance between respective ASB driveways and the Magill Street / Botany Street intersection, vehicle acceleration events are unlikely to increase significantly relative to current occurrences.
- This scenario would trigger an additional 1,400 daily two-way vehicles (ASB Drop Off, ED Drop Off traffic) to re-route via Botany Street and Barker Street to access the car park. This is shown in Figure 1.
- Static traffic modelling indicates the performance of the Botany Street/ Barker Street intersection will likely remain within capacity with this additional traffic.

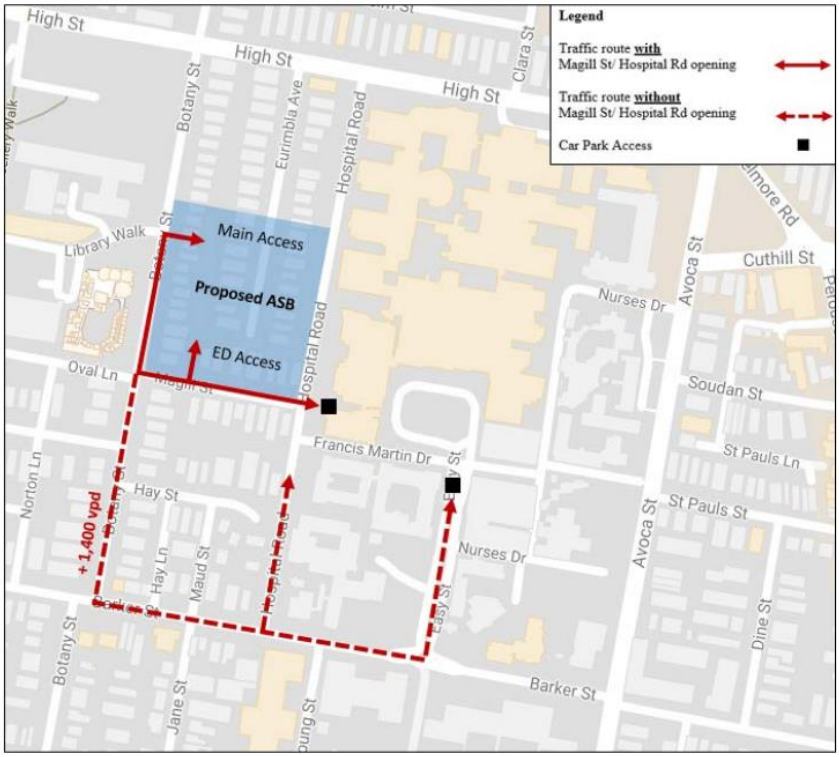

Figure 1: Traffic route between ASB and the hospital car park with and without access via Magill Street/ Hospital Road intersection

For further information, including outputs of traffic modelling and detailed assumptions, please refer to section 5.1.2 of the Transport Assessment: Acute Services Building (Arup, July 2018).

Yours sincerely

Suan Guo
Senior Transport Engineer

cc John Coffey, Robert Power