trafflx
traffic & transport planners

po box 1061
potts point nsw 1335
t: +61 2 8324 8700
f: +61 2 9380 4481
w: www.traffix.com.au
abn: 66065132961

Reference: 10 043

7 April 2010

MEMO TO: Gary Jenkins, Manager, Design and Traffic
FROM: Graham Pindar, TRAFFIX
SUBJECT Part 3A Concept Plan Application: 60 Charlotte Street, Clemton Park

---

The conditions relating to the subject development consent include the following traffic management works:

> *(1) The road and lane configuration in Alfred Street between Harp Street Jarrett Street is to be assessed for its capacity to accommodate the proposed traffic flow and parking requirements. The Proponent is to demonstrate that the existing road and footpath widths comply with the requirements of AMCORD, AUSTROADS, RTA Guidelines and the NSW Manual for the Design of Safer Streets (The Streets Where We Live)."*

If this is unachievable with the current road and lane configuration, the Proponent is to prepare a report investigating the closure of Alfred Street at Harp Street. The purpose of this memo is to set out the Proponent's position concerning the above, prior to further work being undertaken as required under the conditions. The following matters are noteworthy:

- We installed an automatic traffic counter on Alfred Street for three days prior to Easter. This road carried a daily volume of 4,465 veh/day on Wednesday 31 March and with a peak hourly flow of slightly over 400 veh/hr during peak periods. This is a significant volume that is high for a local road and indicative of a local collector road. It is however expected to be less than has historically occurred due to the removal of the right turn from Jenkins Street into Bexley Road. The results of these surveys are provided in **attachment 2**. We have previously undertaken a preliminary assessment of the impacts of closing this road during the evening peak period (the retail peak) as advised previously to the RTA and the analysis resulted in the following impacts:

  - The intersection of Bexley Road with Canterbury Road changes from level of service C to level of service F which is unsatisfactory;
  - The intersection of Harp Street with Kingsgrove Road changes level of service from C to level of service D, although the southern approach of Kingsgrove Road changes to level of service E with extensive queues (418 metres); and
  - The intersection of Kingsgrove Road with Canterbury Road changes from level of service C to level of service D;

  On this basis, it is likely in our view that these impacts will not be sustainable and a more appropriate solution is to investigate alternate means of preserving the amenity of residents along Alfred Street. This is the basis of the following discussion;

- We have undertaken a parking survey of all on-street parking within the subject section of Alfred Street. This was undertaken on Friday 12 March 2010 and on Saturday 13 March 2010 from 4pm to 9pm on both days, which covers peak resident demands as well as peak demands associated with the bowling club. In the section of Alfred Street between Jarrett Street and Harp Street there are a total of 30 on-street spaces. The survey results are provided in **attachment 3** and demonstrate that there was a peak demand for only 5 spaces

on the Friday and 6 spaces on the Saturday. This is due to the fact that all residents have off-street parking. Hence, there is an opportunity to implement alternative arrangements in Alfred Street without compromising the amenity of residents, as follows:

- Option 1 is shown in Figure 1 in **attachment 1**. It relates to parking on the western side of Alfred Street only;

- Option 2 is shown in Figure 2 in **attachment 1**. It relates to parking on the eastern side of Alfred Street only; and

- Option 3 is shown in Figure 3 in **attachment 1**. It relates to parking on both sides of Alfred Street. This is the preferred option for the following reasons:

  - It does not require pedestrians to cross the street;
  - It provides a 'traffic calmed' curvilinear alignment of Alfred Street;
  - It complies with all relevant guidelines and standards;
  - It enables landscaping elements to be introduced; and
  - The treatment is conducive to slow speeds.

  It is also possible to implement additional traffic calming measures should council consider this necessary, including thresholds and chicanes.

- The above should be seen in the context where the amended scheme involves a significant reduction in traffic generation due to the elimination of the bulky goods component of the development (refer **attachment 4**). Specifically, there is a reduction of 26% in traffic generation during both weekday peak periods, with a reduction of 40% on Saturdays. These reductions are substantial in both relative and absolute terms and this reflects the low traffic generating nature of residential uses compared with bulky goods uses. In so far as the overall development is concerned, the site will generate only 490 veh/hr on a weekday AM peak (from 663 veh/hr); 800 veh/hr in the PM peak (from 1095 veh/hr); and 640 veh/hr on a Saturday morning (from 1,060 veh/hr);

- In so far as Alfred Street itself is concerned, the additional traffic generation will be only 15% of this overall traffic, with an additional 75 veh/hr on a weekday morning; 120veh/hr on a weekday afternoon and 115 veh/hr on a Saturday **in the absence of any measures to reduce these volumes** such as those proposed in Option 1 which can be further reduced if necessary.

- Alfred Street presently has a road width of 8400mm with unrestricted parking on both sides, which reduces the through carriageway to a maximum of 4200mm which is insufficient for two-way flow (assuming the minimum 2100mm parking lanes). The street operates satisfactorily only by virtue of the minimal parking demands, which provides safe passing opportunities. It is noted that it is currently non-compliant with respect to AMCORD as with over 3,000 veh/day it is classified as a major collector road (unless the arrangements proposed under either Options 1, 2 or 3 are implemented which overcomes this non-compliance). It is noted that The Streets Where We Live (Section 21) does not contemplate volumes of greater than 300 veh/hr on any residential street. Finally, the RTA's Guideline embraces AMCORD in relation to residential street design (Section 7). It does however adopt a maximum volume of 500 veh/hr as the environmental capacity of a residential collector street (Section 4) so that this would not be exceeded by the proposed development, especially is a more 'aggressive' traffic calming arrangement were to be implemented based on Option 3 above.

The above is referred for discussion purposes and Option 3 is recommended as the preferred outcome.

TRAFFIX

Graham Pindar
Director

Encl: Attachments 1 to 4

attachment 1

attachment 2

attachment 3

attachment 4

table 3R: traffic generation for amended concept plan

Use	GFA or NFA (m^2)	Weekday AM Peak		Weekday PM Peak		Saturday AM Peak	
		Rate (Trips/100m^2)	Trips (veh/hr)	Rate (Trips/100m^2)	Trips (veh/hr)	Rate (Trips/100m^2)	Trips (veh/hr)
Lot 1							
Residential	206 units	0.36	74	0.36	74	0.2	42
Supermarket/Grocery	4,000	2.0	80	6.8	272	6.8	272
Specialty Retail	4,250	2.0	84	4.5	190	4.5	190
Commercial	2,000	1.5	30	1.5	30	nil	nil
TOTAL			**268**		**566**		**504**
Lot 3							
Childcare	75 places	0.36/child	26	0.32/child	24	nil	nil
Units	58 units	0.36/unit	22	0.36/unit	22	0.2/unit	12
TOTAL			**48**		**46**		**12**
Lot 2							
Units	336	0.36/unit	120	0.36/unit	120	0.2/unit	68
Shops	600	2.0	12	4.5	28	4.5	28
TOTAL			**132**		**148**		**96**
Lot 5							
High care	50 units	0.1/unit	5	0.1/unit	5	0.1/unit	5
Normal Care	59 units	0.2/unit	12	0.2/unit	12	0.2/unit	12
TOTAL			**17**		**17**		**17**

Lot 4							
Units	64 units	0.36/unit	24	0.36/unit	24	0.2/unit	12
TOTAL			**24**		**24**		**12**

TOTAL ALL LOTS			**489 (-26%)**		**801 (-26%)**		**641 (-40%)**
PREVIOUS GENERATION			**663**		**1093**		**1059**