as Trustee for C & B Unit Trust ABN 27 623 918 759

Our Ref: TR/10800/jj

11 September 2019

Transport Planning
Traffic Studies
Parking Studies

Snowside Pty Limited 100B Woolwich Road WOOLWICH NSW 2110

**Attention: Tony Maurici** 

Email: tony@maurici.com.au

Dear Sir,

# RE: SMITHFIELD PLANNING PROPOSAL INITIAL TRAFFIC REVIEW

- I. As requested, we have undertaken an initial review of the traffic effects of the planning proposal to allow retail and commercial development on the southern portion of the subject site (south of the proposed access to Cumberland Highway). Other traffic matters such as parking provision, internal layouts/circulation and service arrangements will be addressed at later stages in the assessment process.
- 2. Our initial traffic review is set out through the following sections:
  - site location:
  - site history;
  - proposed development;
  - parking;
  - traffic effects; and
  - summary

#### Site Location

3. The site is located on the south western corner of the Cumberland Highway/Woodpark Road intersection at Smithfield. It is bounded by industrial type development to the north, south and west. It is occupied by a number of buildings used/previously used for employment uses with access to Woodpark Road. Surrounding land use is predominantly industrial style development, with some residential land use on the eastern side of Cumberland Highway.

Suite 1801/Tower A, Zenith Centre, 821 Pacific Highway, Chatswood NSW 2067 P.O. Box 5186 West Chatswood NSW 1515 Tel: (02) 9411 2411 Fax: (02) 9411 2422

Directors - Geoff Budd - Stan Kafes - Tim Rogers - Joshua Hollis ACN 002 334 296

EMAIL: cbhk@cbhk.com.au

#### **Site History**

4. In October 2015, as part of the Concept Plan DA, RMS provided its concurrence for the proposed traffic signal controlled access onto the Cumberland Highway. In addition to the new traffic signal controlled access on the Cumberland Highway, the RMS required additional road network improvements as set out below:

Works required to be constructed prior to activation of the proposed traffic lights at the access:

- 1. Woodpark Road west to be widened to provide 3 lanes on approach to Cumberland Highway for a distance of 120 metres and 2 lanes departure from Cumberland Highway for a distance of 140 metres.
- 2. The northbound right turn lane on Cumberland Highway into Woodpark Road east is to be duplicated to provide 2 right turn lanes 150 metres and 130 metres long. Diamond turn clearance is to be maintained.
- 3. A variable message sign is currently located in the vicinity of the proposed traffic lights. This infrastructure must be relocated. A new structure and sign may be required to suit the new location identified by Roads and Maritime.
- 4. The installation of new traffic lights will increase noise caused by vehicles stopping and starting at the new traffic lights impacting adjoining residential properties located on the eastern side of Cumberland Highway. Treatments to mitigate noise impacts may be required and a study should be undertaken to identify any works that would be required.

The proposed traffic lights at the intersection of Cumberland Highway and the access to the development and the proposed changes to the traffic lights at Woodpark Road and Cumberland Highway shall be designed to meet Roads and Maritime requirements. The traffic control signal (TCS) plans shall be drawn by a suitably qualified person and endorsed by a suitably qualified practitioner

- 5. RMS approval for these works was based on the following scale of development on the site:
  - home improvement centre (13,600m²);
  - medical centre (2,600m²);
  - childcare centre (120 children);
  - tavern (900m<sup>2</sup>),
  - fast food restaurant (McDonalds);
  - commercial (800m²); and
  - bulky goods (25,520m<sup>2</sup>)

- 6. The home improvement centre was located on the southern part of the site with the balance of development on the northern part of the site.
- 7. Estimates of traffic generated by this scale of development were based on RMS guidelines with allowance for linked trips. Using these rates the development would generate some 850 vehicles per hour (two way) in the weekday afternoon peak hour. Passing trade would reduce these flows by some 20%.
- 8. In September 2018 a Stage 2 was submitted to Council for development on the northern part of the site (north of the proposed site access to Cumberland Highway). The scale of development for the Stage 2 DA is set out below:
  - 20,004m<sup>2</sup> bulky goods;
  - 805m<sup>2</sup> restaurants;
  - 3 x fast food restaurants with drive throughs (509m²);
  - 1,330m<sup>2</sup> medical centre;
  - Child care centre (1,502m<sup>2</sup>, assumed to cater for 130 children);
  - parking for 594 cars; and
  - access from Cumberland Highway (via new traffic signal controlled access) and Woodpark Road.

#### Proposed Development

- 9. The planning proposal would replace the originally envisaged home improvement centre on the southern part of the site with retail, commercial and bulky goods uses. The likely scale of development is set out below:
  - 3,641 m<sup>2</sup> supermarket;
  - 4,792m<sup>2</sup> specialty retail;
  - 8,964m² bulky goods;
  - 6,994m<sup>2</sup> office tower;
  - fast food restaurant;
  - provision of additional basement parking for the above uses;
  - modifications to the approved internal layout to provide connections to the new parking areas;
  - proposed access to the T-Way via a pedestrian bridge located along the southern boundary and
  - access to Woodpark Road and Cumberland Highway as per the approved development.

#### **Parking**

10. Holroyd DCP 2013 sets out different parking requirements for retail and commercial development with the B2 and B5 zones. Provision of parking for the retail and commercial components of the planning proposal should satisfy the minimum B2 rates as these are representative of demand. Provision of parking at the minimum B5 rates would result in a short fall of parking for retail and commercial components. An assessment of parking requirements using the minimum B2 rates for the retail and commercial components is set out below in Table 1. Parking requirements using RMS rates is also included in Table 1.

Table I	Summary of Parking Requirements				
Component	Size	DCP	Spaces	RMS	Spaces
Bulky Goods	8,964m <sup>2</sup>	I/50m <sup>2</sup>	179	1/50m <sup>2</sup>	179
Fast Food*	418m <sup>2</sup>	I/8m²	52	I/2 seats	50
Specialty Retail	4,792m <sup>2</sup>	I/20m <sup>2</sup>	240	4.5/100m <sup>2</sup>	216
Supermarket	3,641m <sup>2</sup>	I/20m <sup>2</sup>	182	4.2/100m <sup>2</sup>	153
Commercial	6,994m <sup>2</sup>	I/40m <sup>2</sup>	175	1/40m <sup>2</sup>	175
Total	24,809m <sup>2</sup>		828		773

<sup>\*100</sup> seats

11. Table I reveals that based on the minimum B2 rates for retail and commercial, the planning proposal would require 828 spaces. By way of comparison, using RMS rates the planning proposal would require 773 spaces. The indicative provision of 888 spaces satisfies both requirements and is less than the maximum DCP 2013 provision.

#### Traffic Effects

- 12. As noted above, the traffic effects of the development of the whole site have been assessed in detail as part of the previous traffic studies for the Concept Plan DA. The findings of these traffic assessments are summarised below:
  - the previous traffic modelling identified the weekday afternoon peak hour as the critical period for assessing the traffic effects of the proposed development;
  - the SIDRA Network modelling found that provision of traffic signal controlled access to the Cumberland Highway from the proposed development is practical, provides a better outcome than left in/left out access, and along with the other identified road network upgrades, improves the operation of the Cumberland Highway/Woodpark Road intersection, reduces delays along the highway compared to the existing situation, and has minimal impact to vehicle speeds along the highway;

- secondary access to Woodpark Road (all movements permitted) priority controlled access would operate with average delays of less than 25 seconds per vehicle in the peak periods. This represents level of service B, a satisfactory level of intersection operation; and
- the intersection of Woodpark Road and Percival Street would continue to operate with average delays of less than 20 seconds per vehicle. This represents level of service B, a satisfactory level of intersection operation.
- 13. Based on surveys of similar uses and RMS rates (and allowance for linked trips as per the previous assessments) the scale of development on the site (Stage 2 development on the northern part of the site and as set out in the planning proposal for the southern part of the site) would generate some 1,250 vehicles per hour (two way) in the weekday afternoon peak hours. This is an increase of some 400 vehicles per hour compared to the 2015 traffic assessment. Passing trade would reduce these flows by some 20%.
- 14. The SIDRA network model developed in 2015 has been updated and rerun with the additional traffic from the planning proposal in place. The SIDRA modelling found that in addition to the RMS required roadworks, an additional left turn lane (some 40 metres long) on the site access approach to the Cumberland Highway would be appropriate.
- 15. With this measure in place the SIDRA analysis found the following:
  - the intersection of Cumberland Highway and Woodpark Road would operate with average delays of less than 50 seconds per vehicle in the weekday afternoon peak hour. This represents level of service D, a satisfactory level of intersection operation;
  - the intersections of Cumberland Highway with the site access, Sturt Street and Percival Street would operate with average delays of less than 20 seconds per vehicle in the weekday afternoon peak hour. This represents level of service B a good level of intersection operation with spare capacity;
  - the intersections of Woodpark Road with the site access and Percival Street would operate with average delays of less than 30 seconds per vehicle in the weekday afternoon peak hour. This represents level of service B/C, a satisfactory level of intersection operation

#### **Summary**

- 16. In summary our initial traffic review has found that:
  - parking provision is appropriate; and

- with the road works previously required by RMS for the Concept DA and the additional left turn lane on the Cumberland Highway site access, the adjacent road network could accommodate the additional traffic generated by the planning proposal.
- 17. We trust the above provides the information you require. Finally, if you should have any queries, please do not hesitate to contact us.

Yours faithfully,

COLSTON BUDD HUNT & KAFES PTY LTD

T. Rogers

Director