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City of Canterbury Bankstown
66-72 Rickard Road
Bankstown NSW 2200

Attention: **Priya Uppal**Sent via email: *Priya.Uppal@cbc.city.nsw.gov.au*

Dear Priya

RE: PEER REVIEW – PLANNING PROPOSAL – 445-459 CANTERBURY ROAD, CAMPSIE**1.0 BACKGROUND**

Bitzios Consulting has been engaged by City of Canterbury Bankstown (Council) to undertake a review of the Traffic and Parking Assessment (TPA) report prepared by Varga Traffic Planning for the Planning Proposal for a medical facility at the site of 445-449 Canterbury Road, Campsie (subject site).

The subject site is located around 1km south of Campsie Train Station and is in close proximity to Beamish Street. It is currently occupied by a number of retail and industrial tenancies, including a groceries store, a furniture outlet and an auto repair shop. The site is currently accessed via driveways on Canterbury Road.

The subject site is currently zoned as B6 Enterprise Corridor, which aims to revitalise the Canterbury Road corridor through the promotion of businesses along the main road. The Planning Proposal aims to retain the existing B6 zoning but proposes to increase the Height of Building restriction from 12m to 56m.

Council has advised that the entire B6 block should be considered for redevelopment for a holistic assessment. The applicant has considered an uplift of the B6 block at a FSR of 4.5:1, which would have around 86,400m² floor area.

The proposal seeks to demolish all existing buildings on the site and construct a new multi-storey private hospital with a number of ancillary land uses, as summarised in Table 1.1.

Table 1.1: Proposed Development Use

Land Use	Details	GFA
Private Hospital	8 operating theatres	Not specified
	15 pre-op beds and 24 post-op beds	
	174 ward beds	
Ancillary retail/café	-	650m ²
Allied Health, Ambulatory Care and Medical Retail	-	1,350m ²
Medical Offices	-	3,000m ²

2.0 PEER REVIEW

2.1. Overview

This peer review has been structured based on the following traffic and transport items:

- Item 1: Walking and Cycling
- Item 2: Access and Internal Layout
- Item 3: Car Parking and Service Facilities
- Item 4: Traffic Generation and Distribution
- Item 5: Traffic Impacts.

Key findings from the peer review are summarised below:

2.2. Item 1: Walking and Cycling

The traffic report outlines the following in relation to the pedestrian and cycling network:

- Walking and cycling is to be encouraged through the implementation of a Green Travel Plan
- Improved walking and cycle paths are proposed
- Bicycle routes are readily accessible from the subject site
- 50 Bicycle parking spaces will be provided along with end-of-trip facilities.

Walking:

To ensure that walking is safe, convenient and attractive to development staff and visitors, there needs to be some consideration of the footpath network and pedestrian infrastructure surrounding the subject site. This is essential given that the applicant has stated that the Campsie Railway Station is expected to be heavily utilised by employees of the subject development.

The existing network should be reviewed in detail by the applicant to identify deficiencies and potential upgrades which improve connectivity between the subject site, public transport and Campsie town centre and station.

An indicative map of upgrades is shown in Figure 2.1, with a feasible set of improvements to the surrounding roadside environment, with a particular focus on connections to and from Beamish Street. These include:

- Improvements to the pedestrian footpath on Perry Street, which shows signs of obstructions and vegetation overgrowth
- New kerb ramp pair on Stanley Street, crossing Perry Street
- Upgrade of pedestrian crossing facilities along Canterbury Road at Stanley Street and Una Street. It is noted that Stanley Street currently has a pedestrian refuge.
- New pedestrian crossing facilities at Beamish Street / Unara Street and Unara Street / Stanley Street.



Figure 2.1: Potential Walking Improvements Map

Cycling:

It is noted that the nearest existing cycle routes are 800m from the subject site along Canterbury Road and there are no cycle routes between the site and Campsie town centre. As such, bicycle routes are currently not considered to be readily accessible from the subject site.

Figure 2.2 shows the site location in the context of the surrounding cycling routes.



Figure 2.2: Site Context within Cycling Map

For a significant mode shift to cycling to be considered likely, the development should not only provide end-of-trip facilities, but also contribute to improved cycling accessibility to the site. The most feasible connections would be links to the Charlotte Street cycling route or the Cooks River cycleway. Given the heavy traffic volumes and geometric constraints on Canterbury Road, an off-road cycling facility such as a new Shared User Path would be a good option.

2.3. Item 2: Access and Internal Layout

The traffic report outlines the following in relation to site access and internal layout:

- Vehicular access to the on-site car park, service area and porte cochere is to be provided by a laneway on the northern end of the site parallel to Canterbury Road
- No driveways are proposed on Canterbury Road and access to the laneway will be via Stanley Street
- Left turn only restrictions on Stanley Street and Scahill Street turning onto Canterbury Road
- No Right Turn restrictions for Canterbury Road turning into Stanley Street and Scahill Street.

Driver Access to the Site

It is noted that right turns are restricted from Canterbury Road into Duke Street, Stanley Street and Beamish Street. As a result, visitors travelling westbound on Canterbury Road have limited opportunities to access the site, with only Una Street being a viable access (unless a greater detour is considered).

As a general principle, it is not considered to be acceptable for one of the main site access routes to be an unprotected right turn across Canterbury Road. This is due to the crash history at the Canterbury Road / Una Street intersection showing a trend of 'Right Through' and 'Rear End' crashes, with six (6) such crashes over the last five (5) years. The introduction of development traffic will only exacerbate these safety issues.

The following upgrades (shown in Figure 2.3) can be tabled for consideration:

- Install a new right turn facility from Canterbury Road to Duke Street at the traffic signals.
- Install a No Right Turn ban from Canterbury Road to Una Street, to prevent site visitors from using the unprotected right turn movement
- Install a new signalised site access on Canterbury Road, spaced at sufficient distance from the other signals to meet TfNSW standards
- Install a new right turn facility from Canterbury Road to Beamish Street at the traffic signals.

It is noted that these measures are suggested measures, and alternative options can be considered. There are significant challenges to each of the above, including attractiveness of new right turn facilities for drivers travelling to Campsie town centre, geometric constraints of Canterbury Road, impacts to traffic performance with new signals and potential impacts to residential access.

Regardless, the applicant must demonstrate that their proposed development can be accessed safely, securely and conveniently, without using unintuitive driving routes that require significant detours.



Figure 2.3: Potential Access Improvements Map

Site Access Safety

The laneway will be located on a bend in Stanley Street. It was observed that the existing driveway at this location has poor sight lines to traffic approaching from the south caused by parked vehicles and vegetation as shown in Figure 2.4.

Mitigation measures such as parking restrictions around the laneway entrance may be required to provide adequate sight distances for safe access to and from the site.

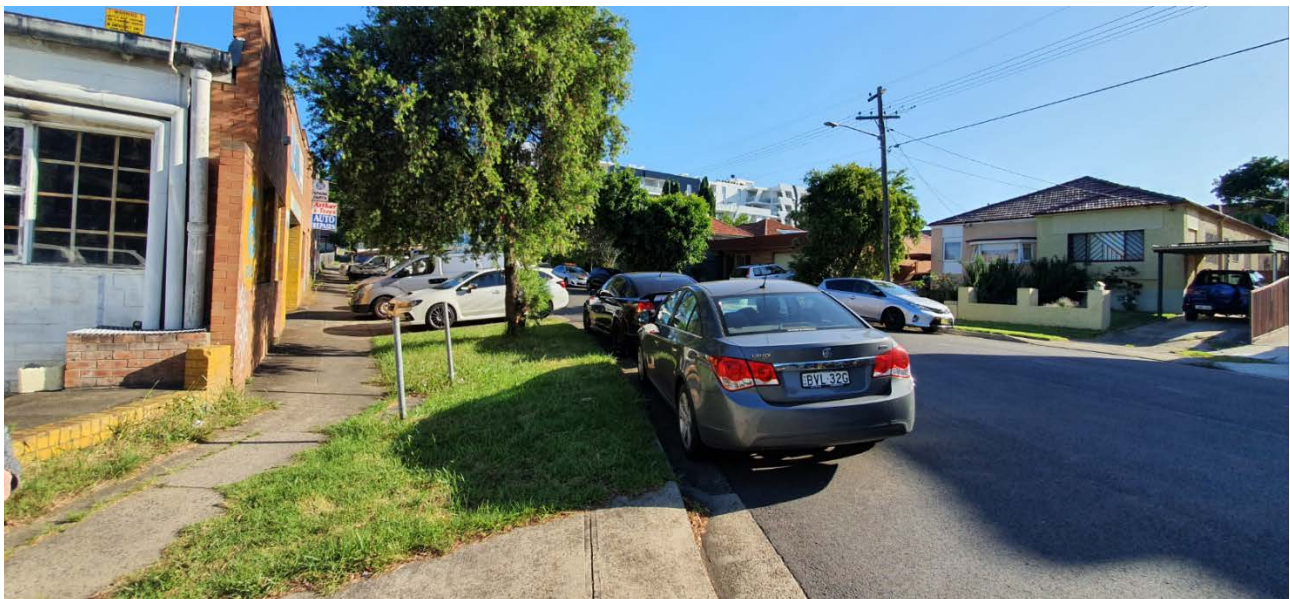


Figure 2.4: Stanley Street looking South – Sight Line Obstructions

2.4. Item 3: Car Parking and Service Facilities

The traffic report outlines the following in relation to car parking and service facilities:

- Kerbside parking is generally unrestricted on the roads surrounding the subject site and No Parking restrictions are in place along the Canterbury Road site frontage
- Car parking is to be provided in an off-street car park with access from the proposed laneway
- Car parking requirements have been calculated based on the Canterbury Development Control Plan 2012 (DCP) and the Roads and Maritime Guide to Traffic Generating Developments, 2002 (GTGD)
- Office rates have been adopted for the allied health, ambulatory care and medical retail instead of the Medical Centre rate
- Office rates have been adopted for the ancillary retail/café land uses instead of the retail rate
- Off-street parking rates have been reduced by 25% to encourage the use of alternative transport
- The development is expected to be serviced by vehicles up to and including 11m long rigid trucks, and the servicing area will be designed to allow forward entry and exit at all times.

Table 2.1: Car Parking Rates

Land Use	Details	Parking Rate	Rate Source	Provided Spaces
Private Hospital	218 beds	$-19.56 + 0.85 \times \text{beds}$	GTGD	231
Ancillary Retail/Café	560m ²	1 space per 40m ²	DCP (office rate)	14
Allied Health, Ambulatory Care and Medical Retail	1,350m ²	1 space per 40m ²	DCP (office rate)	34
Medical Offices	3,000m ²	1 space per 40m ²	DCP	75
		Total		354
		With 25% Discount		266

Key points to note are summarised below:

- The private hospital parking rate stated in the report does not result in the calculated number of parking spaces of 231. The reason for the discrepancy should be clarified.
- It is understood that the Allied Health, Ambulatory Care and Medical Retail land uses are likely to have lower parking requirements than a Medical Centre, which has a relatively high parking demand. However, the use of office rates should be supported by surveys of similar developments
- There is a substantial amount of unrestricted parking in vicinity of the subject site, along Stanley Street and Perry Street. The introduction of reduced parking provision at the development may not be sufficient to discourage driving to the site; as drivers can park on the street instead.
- While the rationale behind the parking constraints is acknowledged, the applicant has not discussed this likelihood of overflow parking onto the surrounding streets, which could have significant impacts to residential amenity.
- As the under-provision of parking at the development could result in an impact on the parking supply, a parking study should be undertaken to determine existing occupancy levels against

projected demand. This can identify whether the development will trigger the need for additional management strategies to control parking in vicinity of the site, including timed parking restrictions or residential parking schemes.

2.5. Item 4: Traffic Generation and Distribution

The traffic report outlines the following in relation to traffic generation and distribution:

- Traffic generation estimates for the planning proposal have been sourced from the GTGD and the Updated Traffic Surveys Technical Direction (TDT 2013/04a)
- Traffic generation for the entire B6 zone has been reduced by 25% as a result of reducing parking supply by 25%

Table 2.2: Trip Generation

Land Use	Details	Trip Generation Rate		Additional Discounts
		AM	PM	
Private Hospital	218 beds	0.57*beds-12.41	0.69*beds-11.96	
Ancillary Retail/Café (office rate)	560m ²	1.6 per 100m ²	1.2 per 100m ²	
Allied Health, Ambulatory Care and Medical Retail (medical centre rate)	1,350m ²	10.4 per 100m ²	8.8 per 100m ²	50%
Medical Offices	3,000m ²	1.6 per 100m ²	1.2 per 100m ²	

Traffic Generation:

- Clarification is required regarding determination of the traffic peak periods at the subject site
- Evidence should be provided to support the assumption that a reduction in parking would result in an equivalent reduction in traffic generation. It is noted that the subject site is surrounded by unrestricted parking so reducing the on-site parking supply will not necessarily reduce numbers of people driving to the site.
- It is acknowledged that the trip generation rate for the Allied Health, Ambulatory Care and Medical Retail land uses are likely to be different to the rate for Medical Centres. Medical Centres are generally a high turnover, high demand type of development, so a 50% discount may result in an appropriate rate. However, the discounted rate should be supported by surveys of similar developments.
- The uplift of the B6 zone has considered development of a similar type to the subject site (medical facilities) across the entirety of the B6 zone. However, this does not consider the potential for other land uses, and may not be a conservative assumption. The applicant should clarify the rationale behind their methodology, or consider a more conservative land use typical for the B6 Enterprise Corridor zoning.

Traffic Distribution:

- No details on the traffic patterns of the development traffic has been provided. It is unclear how incoming / outgoing traffic is distributed onto the surrounding road network, which should consider existing travel patterns and Census Journey to Work Data. Distribution assumptions must be provided to ensure that the traffic analysis undertaken by the applicant can be reviewed.

2.6. Item 5: Traffic Impacts

The traffic report outlines the following in relation to traffic impacts:

- Intersection modelling has been undertaken with SIDRA network 9 for the following intersections:
 - Canterbury Road / Beamish Street / Bexley Road
 - Canterbury Road / Stanley Street / Scahill Street
 - Canterbury Road / Una Street / Northcote Street
 - Canterbury Road / Duke Street.
- The traffic report outlines two modelling scenarios:
 - Existing Traffic Demand
 - Projected Traffic Demand.
- RMS's Annual Average Daily Traffic (AADT) data provided an indication of existing traffic conditions
- The existing modelling scenario was based on traffic surveys undertaken in 2016
- SIDRA results are presented in a summary table.

Key points to note are summarised below.

Modelling Inputs

- The traffic surveys were undertaken in 2016. Use of this is not considered to be appropriate for modelling the impacts of this planning proposal. At minimum, surveys should be scaled up to 2020 levels based on historical data. It is unclear whether any adjustments have been made to the 2016.
- No details are provided on the development, calibration and validation of the existing base SIDRA model. To ensure that the base models are fit-for-purpose for future year development testing, models must reflect existing conditions. A modelling report detailing the calibration, validation and key modelling assumptions is to be provided as an appendix to the traffic report.
- Considerations of cumulative impacts of development traffic have not been identified in the report. Other committed or planned developments in the area may affect the background traffic particularly along the Canterbury Road corridor. Strategic planning should be consulted to determine which future developments should be included in the traffic modelling. Strategic modelling may be available from council or TfNSW to inform the future/project case modelling.

Modelling Scenarios

- The modelled scenarios are inadequate to allow a comprehensive analysis of the development proposal.
- The 'Projected Traffic Demand' scenario does not specify the design year. It should have been undertaken for the expected opening year of the development, with background traffic growth included from strategic modelling outputs or otherwise justified empirically.
- A 10-year and 20-year design horizon scenario should be analysed, to demonstrate that the proposed development can be accommodated by the road network for a reasonable duration of time.

- It is unclear if the projected development scenario includes traffic generated by the entire B6 block or only from the planning proposal. An assessment should be undertaken for the impact of the planning proposal in isolation as well as the entire B6 block.

Modelling Results

- The traffic report does not explain the traffic implications of the modelling results. The results show that the average delay for the Canterbury Road / Duke Street intersection increases from 8.7 seconds in the existing scenario to 169.3 seconds in the projected development scenario for the PM peak, and average delays at the Canterbury Road / Beamish Street / Bexley Road intersections are expected to increase by over 50 seconds in both AM and PM peaks.
- These results are indicative of significant development impacts to the surrounding road network and more details should be provided on the scope of upgrades required for remediation.

Please note that all comments regarding the modelling outcomes are specifically in response to the modelling work and results that have been reported in the reviewed iteration of the report. They are therefore dependent upon the other assumptions and assessments undertaken by the applicant (such as distribution patterns), which require additional clarification or are subject to change.

3.0 CONCLUSIONS

There are a number of items which require further clarification and/or action from the applicant to ensure that there is sufficient information for us to support the planning proposals.

The Applicant should clarify or provide:

- Specifics on the adopted Private Hospital parking rate.
- Foundation for the traffic generation and parking rates adopted for Allied Health, Ambulatory Care and Medical Retail uses, preferably via an equivalent case study.
- How the parking overflow onto the surrounding local streets has been accounted for, and on what basis the traffic generation has been reduced commensurately to the 25% parking reduction.
- The defined peak hours for the subject site.
- Traffic distribution for the development-generated traffic.
- Development methodology for the future traffic demands, including background growth and approved future developments.
- A modelling report that documents calibration, validation and key modelling assumptions for the existing base SIDRA model.
- Whether cumulative impacts have been considered in the modelling analysis.

The Applicant should consider:

- Committing to or funding pedestrian infrastructure upgrades in vicinity of the subject site, to ensure that there is a continuous, safe and convenient pedestrian connection to Beamish Street and Canterbury Road.
- Committing to or funding cycling infrastructure upgrades in vicinity of the subject site, to ensure that the proposed development can integrate into the existing cycling network.
- Facilitating safe access to the site across Canterbury Road, particularly for traffic approaching from Cooks River.

- Facilitating safe access to the site at the laneway access, to ensure sight line issues caused by road geometry are accounted for.
- Undertaking or funding a parking study to determine the parking impacts caused by the under-provision of parking at the site, and to plan for potential amelioration measures.
- Taking into account a more conservative analysis for the B6 zone uplift.
- Preparing additional modelling scenarios, including Opening Year and Design Horizon years, as well development independent of the B6 zone uplift.
- Identifying the road infrastructure upgrades that will be necessary to accommodate development traffic.

Yours faithfully



ShaunPaul Power

Principal Traffic Engineer / Transport Planner, Manager – Sydney

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