27 September 2019

Paul Apostoles
Precinct 75
75 Mary Street
St Peters
NSW 2044

Dear Paul

1. ptc. Peer Review - Precinct 75 - Traffic Impact Assessment

This letter has been prepared to present our peer review of the Traffic and Parking Impact Assessment (TPIA) prepared by McLaren Traffic Engineering in relation to the proposed Mixed-Use development at 75 Mary Street in St Peters.

The TPIA was prepared to assess and accompany a Planning Proposal to Inner West Council for the development of 180 residential units and 5,662m^2 of commercial office space in addition to the existing light industrial floor area, which is to be partially retained.

This peer review is presented to address the following topics:

- Traffic Generation and impacts on the road network,
- Proposed Parking Provision,
- Proposed Vehicle Access Arrangements.

2. Traffic Generation and impacts on the road network

2.1.1 Existing Traffic Activity

The TPIA states that there is an existing GFA of 12,854m^2 Existing Light Industrial. While there is an existing operation within a site, it is preferable to undertake traffic surveys at the driveways to record the exact traffic activity associated with the existing land uses. This activity can then be pro-rata down according to the reduction in the existing land-use.

In this case, the TPIA calculates the theoretical existing activity by application of the RMS rates for Factories, at 1 trip per 100m^2 GFA during the peak hours. The use of this rate is not justified other than a comment that the site accommodates various commercial / industrial / warehouse uses. It is also noted that the RMS rates apply to developments with unconstrained parking provision.

Application of this rate to the existing floor area of 12,854m^2 indicates an existing traffic generation of 129 trips (I believe there is a typo, as the report refers to 139 trips). The TPIA goes on to reduce this activity to 20% (28 trips) based on an assumption that the land-uses would generate peak activity prior to the morning and afternoon road network peaks, however no evidence of this is presented and no justification of the 20% assumption is provided. The RMS Guide presents 'peak hour' traffic generation rates, being the rate that land uses generate traffic during the road network peak hours.

That said, I consider that the level of activity resulting from an application of the RMS rate for factories (129 trips) appears high and that 1 per 100m^2 may be an over estimation when applied to the existing land-use, particularly in the context that the existing on-site parking provision is approximately 100 spaces. In this regard, the maximum traffic activity that could be generated is 100 trips, but more realistically, 0.75 trips per space based on

a 1 ½ hour arrival and departure period. This would suggest a traffic generation of 75 existing trips during the peak hours, or 0.6 trips per 100m^2. This is perhaps a better representation of the RMS rates, with a decrease due to the effects of constrained parking.

2.1.2 Development Yield

The Planning Proposal states that the development includes the following yields:

- 180 Apartments
- 5,662m^2 Commercial Office
- 9,676m^2 Light Industrial (existing GFA to be retained)

2.1.3 Residential

With regard to the trip generation rates for residential, the TPIA refers to the RMS Guide to Traffic Generating Developments (2002). At the time of preparation in 2015, updated traffic generation data was available in the form of Technical Direction 13-4a, which presents a trip generation rate of 0.19 peak hour trips per unit, or 0.15 peak hour trips per parking space (the PM peak rates are slightly lower). This is acknowledged within the report; however, the rates are not used.

Application of the updated rates to the residential component of the development indicates a peak traffic activity of 34 trips based on 180 apartments or 29 trips based on 190 residential parking spaces.

2.1.4 Commercial Office

With regard to the commercial office area, within the TPIA a rate of 2 trips per 100m^2 has been adopted from the RMS Guide, whereas TD3-14a updates these rates to 1.6 per 100m^2 (AM peak) and 1.2 per 100m^2 (PM peak). The resulting traffic activity based on 2 per 100m^2 generates more peak hour trips than commercial parking spaces proposed within the development.

Application of the updated rates to the office area of 5,662m^2 indicates a traffic generation of 91 AM trips and 68 PM trips. Data that we have collected at office buildings indicates a rate closer to 0.4 trips per parking space, therefore the application of the TD3-14a rates represents a robust estimate, particularly given the proposed parking provision.

2.1.5 Light Industrial

A large proportion of the Light Industrial use within the site is proposed to be retained therefore the related proportion of the existing traffic activity will continue.

The existing floor area of 12,854m^2 is to be reduced to 9,676m^2 (75.3%), being a reduction of 3,178m^2. Adopting the rate of 0.6 trips per 100m^2 (based on the constrained parking) this indicates a reduction of 19 trips, leaving 56 trips as continued activity.

2.1.6 Traffic Generation Summary

The total traffic associated with the Planning Proposal will be:

Residential = 34 trips

Commercial Office = 91 AM and 68 PM trips

Existing Light Industrial = 56 trips (see Section 2.1.5)

Total Traffic Generation = 181 trips.

Having regard for the existing activity (refer to Section 2.1.1), the net increase in traffic will be 106 trips during the morning peak hour according to my assessment.

This is somewhat less than the projected traffic activity presented in the TPIA, which is mainly a product of the updated RMS rates and the proposed parking provision, which will act to constrain traffic activity. In this regard, the projected traffic activity and follow-on intersection analysis in the TPIA presents a robust analysis.

The Department has raised a concern with the traffic impacts on the local road network, particularly along Edith Street, and in this regard, I would make two points /recommendations.

1) The net increase in traffic activity has been calculated as 106 trips during the peak periods, which will be accommodated within the arterial and regional roads of the Princes Highway, Canal Road and Unwins Bridge Road. Edith Street and Mary Street are the only local road providing access to the site. Mary Street has a slightly elevated function (as reflected by the recorded traffic volumes) in that it provides an extension to Canal Road to access Unwins Bridge Road.

2) The proposed driveway on Mary Street has been designed to cater for two-way traffic flow (in that service vehicles will access via this driveway) and the car park design is suitable for two-way movements, therefore I would recommend that access to the car park from Mary Street be permitted. The traffic distribution presented in the TPIA is based on all access from Edith Street, which results in movements along Edith Street to/from the Princes Highway (approx. 22% of inbound traffic). While I have no issue with the regional distribution of vehicles based on the Census data available at the time, I would anticipate that allowing vehicles to enter from Mary Street would result in a higher use of the Princes Highway rather than Unwins Bridge Road for traffic approaching from the south-west (i.e. Arncliffe and beyond). This will in turn remove the majority of movements (if not all) from Edith Street to the east of the driveway, and reduce the traffic entering from Unwins Bridge Road.

The SIDRA analysis presented in the TPIA indicates only minor impacts on the operation of the key intersections, and confirms that the primary intersection of the Princes Highway and Canal Road is operating at capacity, which is a function of the regional traffic passing through the area rather than a direct result of local residential / commercial development. It is important to recognise the traffic conditions on the Highway, as they likely drive some of the traffic activity along Unwins Bridge Road as an alternative route, however the projected traffic activity associated with the development represents a low percentage.

Furthermore, the traffic conditions within the area are subject to change following the planned opening of Westconnex (Stage 2) in 2021, which will carry a proportion of the Princes Highway traffic within the tunnels through to Euston Road. It is expected that the traffic volumes on the Highway and Canal Road will reduce due to the new eastern connection over the canal, linking directly with Gardeners Road. As such, the future operation and performance of the Princes Highway / Canal Road intersection will alter significantly.

The impacts on Edith Street should also be considered in the context of the existing parking location and associated entry/exit driveways on Edith Street. The majority of the existing parking is located within a part of the site adjacent to Edith Street, with a driveway access. This means that it is likely most of the traffic activity associated with the existing use is occurring via Edith Street. The provision of a basement car park with egress only via Mary street and my recommendation to permit access from Mary Street will most likely retain a similar level of traffic on Edith Street, despite the overall increase in the traffic activity associated with the site.

3. Proposed Parking Provision

The parking provision was assessed in the TPIA with reference to the Marrickville Development Control Plan 2011 Part 2.10 – Parking and concludes that based on the yields, the DCP requires 351 parking spaces and that 340 spaces can be accommodated within the car park, leading to a technical shortfall of 11 spaces.

It is confirmed that this DCP is still applicable to the development following the Council amalgamation. A review of the main objectives indicates the following aim with regard to parking provisions:

To balance the need to meet car parking demand on-site to avoid excessive spill over on to streets, with the need to constrain parking to maintain the Marrickville LGA's compact urban form and promote sustainable transport.

In this regard, there is the ability to limit the traffic activity through a restriction on the number of parking spaces provided within developments where alternative transport options are available (e.g. Sydenham Station is located within 800m of the site, bus services along the Princes Highway, Carshare spaces within the development).

It is recommended that an assessment of the likely parking demand be undertaken based on car ownership in the area and Journey to Work data from the most recent census. It should be noted that carshare schemes have been found to reduce car ownership by approximately 10 private vehicles for each car share vehicle.

4. Proposed Vehicle Access Arrangements

The proposal includes two driveways on Edith Street and one driveway on Mary Street, which essentially retains/replaces existing driveways. In this regard, there is no loss or gain in on-street parking spaces as a direct result of the driveways.

The TPIA recommends the removal of on-street parking spaces adjacent to the driveways in order to provide passing opportunities along Edith Street. I would recommend that these recommendations be considered by the Local Traffic committee in the context of on-street parking demand and whether there is a sufficient issue under the current conditions. Given that the development will result in a limited increase in entry-only traffic, I would not propose these changes as a result of the development and assess on an as needs basis.

5. Recommendations

Following the opening of Westconnex in 2021, the traffic volumes on the Princess Highway and Canal road are predicted to reduce, which will likely lead to an improved performance of the of the Princess Highway / Canal road intersection. As such, we recommend that the existing two-way traffic flow at the Mary Street driveway be retained for all vehicles associated with the proposed car park. This will result in a more balanced distribution of traffic from Edith Street to Mary Street. In that context, the recommendations of the Traffic and Parking Assessment to remove on-street parking on Edith Street will not be not required.

Furthermore, the traffic activity associated with the development would be limited through a more restrained parking provision, which would be supported by the proximity of the site to public transport and more specifically the opening of the Sydenham metro station.

Yours faithfully

Andrew Morse
Partner

Document Control: Prepared by *AM* on *19 September 2019*. Reviewed by *AM* on *19 September 2019*.