



14 September 2020

Mr Tyson Ek-Moller
Creative Planning Solutions
PO Box 1074
Broadway NSW 2007

Dear Tyson,

**Residential subdivision and development in coastal wetlands area
43, 45 and 49 Warriewood Road, Warriewood (Lot 2 DP 972209, Lots 1 and 2 DP 349085)
Planning Secretary's Environmental Assessment Requirements (SEAR) 1457**

I refer to your request for a review of and advice on the SEAR and TfNSW requirements related to the traffic and parking. My advice is as follows.

SEAR

- **SEAR requirement 1.**
 - details of road transport routes and access to the site
 - road traffic predictions for the development during construction and operation, including the impact on the nearby intersection of Warriewood and Pittwater roads

- **TEF advice 1**
 - During operation, vehicular trips by residents will occur in all directions, as needed for their travel to and from work, shopping and leisure destinations.
 - Most common road transport routes, as determined using Google maps travel guidance feature, are shown in Figure 1 attached to this letter.
 - Traffic predictions during operation were detailed in the Traffic and Parking Impacts Assessment (TPIA) report. The number of trips for morning and afternoon commuter peak hours were calculated as 18 and 11 trips per hour respectively (in and out combined), using TfNSW (RMS) Guide trips rates. It was concluded in the TPIA that the estimated additional number of vehicular trips was too low to have any effect on the operation of the road network generally and on the critical intersections specifically.
 - Figure 2 demonstrates distribution of additional vehicular trips on the road network for the morning commuter peak hour. It is evident from Figure 2 that the number of additional turning movements at the intersection of Warriewood and Pittwater Roads will be microscopic and would not have any noticeable effect on its operation whatsoever.
 - It must also be noted that the proposed development is subject to the Warriewood Valley Section 94 Contributions Plan which provides for collection of necessary funds for the road network upgrades identified in Warriewood Valley Roads Masterplan. These documents already identified necessary road upgrades due to new developments in Warriewood Valley.
 - Road transport routes and road traffic predictions during construction will be detailed in a Construction Pedestrian and Traffic Management Plan (CPTMP).

- **SEAR requirement 2.**
 - swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site
 - details of the proposed site access and the parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards

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RESEARCH AND DEVELOPMENT

EXPERT WITNESSES



- **TEF advice 2**
 - This information was provided in the TPIA.
- **SEAR requirement 3.**
 - an assessment of impacts to the safety and function of the road network and the details of any road upgrades required for the development.
- **TEF advice 3**
 - There will be no discernible impacts on the road network and hence no requirements for any road upgrades as a result of the proposed development specifically. The road upgrades will be required for the whole of Warriewood Valley as detailed in the Roads Masterplan and the site is subject to its S94 Contributions Plan.

TfNSW requirements (Reference: SYD20/00478/01

- **TfNSW requirement 1**
 1. Traffic modelling and analysis for the application should consider the daily and peak traffic movements likely to be generated by the proposed development including the impact on the nearby intersection of Warriewood and Pittwater roads.

The cumulative traffic impact of the development on the surrounding roads and intersections in the context of any other approved planning proposals and developments in the precinct and surrounds, should be considered. Including the impact on nearby intersections and the need/associated funding for upgrading or road improvement works (if required).
- **TEF advice 4**
 - Please refer to the information provided in “TEF advice 1” of this letter. Both the TPIA report and further analysis presented herewith demonstrate that the peak traffic movements likely to be generated by the proposed development will be minimal and indeed indiscernible at the intersection of Warriewood and Pittwater Roads.
 - In view of the above, traffic modelling is not required. Traffic modelling (and turning volume intersection counts required for the model) would require a significant yet unjustifiable expense from the applicant.
 - The cumulative traffic impacts and necessary road upgrades due to new developments for the whole of Warriewood Valley were identified in Warriewood Valley Roads Masterplan. The proposed development is subject to the Warriewood Valley Section 94 Contributions Plan which provides for collection of necessary funds for the road network upgrades. No further analysis is required in this regard.
- **TfNSW requirement 2**
 2. Details of the proposed site access and the parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (ie: turn paths, sight distance requirements, aisle widths, etc).
 3. Detailing vehicle circulation, proposed number of car parking spaces and compliance with the appropriate parking codes.
 4. Details of light and heavy vehicle movements (including vehicle type and likely arrival and departure times).
- **TEF advice 5**
 - This information was provided in the TPIA, except the likely arrival and departure times of heavy vehicles. Heavy vehicle movements will comprise garbage collection and residential furniture deliveries/removals. It is not possible to know at this time on what days the garbage collection will occur. The garbage collection will be part of the Council's routine arrangement and is likely to occur in the mornings two-three times per week (one vehicle). Furniture removals will be ad hoc and are not expected to generate more than one or two vehicles per week. This is typical and minor number of movements, not likely to have any impact on the road network.

- **TfNSW requirement 3**
 5. Details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan and specific Workplace travel plan) and the provision of facilities to increase the non-car mode share for travel to and from the site;

- **TEF advice 6**
 - Non-car travel modes
 - Details of parking provision for bicycles (which exceeds DCP requirements) were provided in the TPIA.
 - Also TPIA reported on public transport provision near the site.
 - The proposed development is residential only and thus the requirement for a site specific Workplace Travel Plan is irrelevant.
 - Green Travel Plans for residential developments are usually prepared for large scale developments with potentially high number of car trips. The proposed development is estimated to generate only about 11 to 18 trips per hour in commuter peak hours. Half of this trip generation is due to stand-alone single residential dwellings – Green Travel Plans are not normally prepared for such developments.
 - Provision of a Green Travel Plan for the remaining multi-unit development which is likely to produce 7 vehicular trips per hour is excessive and is not worth the effort if it reduces the trip generation by say one (1) trip per hour.
 - It is my considered professional opinion that a Green Travel Plan is not required for this proposed development.

- **TfNSW requirement 4**
 6. The proposed walking and cycling access arrangements and connections to public transport services;

- **TEF advice 7**
 - This information was provided on the architectural drawings and in the TPIA.

- **TfNSW requirement 5**
 7. The adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development;
 8. Measures to integrate the development with the existing/future public transport network;

- **TEF advice 8**
 - This information was provided in the TPIA.

- **TfNSW requirement 6**
 9. The preparation of a preliminary Construction Pedestrian and Traffic Management Plan (CPTMP) to demonstrate the proposed management of the impact in relation to construction traffic addressing the following:
 - i. Assessment of cumulative impacts associated with other construction activities (if any);
 - ii. An assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity;
 - iii. Details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process;
 - iv. Details of anticipated peak hour and daily construction vehicle movements to and from the site;
 - v. Details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle;
 - vi. Details of temporary cycling and pedestrian access during construction.

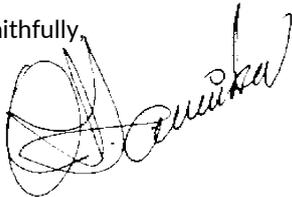
- **TEF advice 8**

- Typically, Councils and TfNSW require a CPTMP after the DA has been approved, because if the DA is not approved then no CPTMP would be required. It would be illogical to prepare a CPTMP prior to the DA approval as it would put an unfair financial burden on the applicant if the DA is not approved.
- Furthermore, a builder has not yet been appointed for this DA. A CPTMP is normally prepared when the builder has been appointed as it requires interaction between the traffic engineer and the builder to work out exact details for the proposed construction activities in terms of vehicle types, material quantities and frequency of truck movements. This information will be available at the Construction Certification (CC) stage and once the DA has been approved, a CPTMP will be provided as per the Council's request.
- Specifically, Item 9 i. of the TfNSW request cannot be addressed at this stage as the time of construction is not yet known and therefore other construction activities "at the same time" cannot possibly be known at present.
- Similarly, Items 9 iii. and iv. require information regarding the proposed method of construction from a builder and this information will only be known after the development is approved.
- For the purposes of this advice it must be emphasised that the proposed development is on a large parcel of land and most of the construction activities, loading and unloading of vehicles and parking of workers will be contained within the site. Access to the site is possible and will be arranged from a side road rather than directly from Warriewood Road.
- In view of this and considering the moderate scale of the development, there are absolutely no reasons to expect any issues with regard to traffic impacts which could not be mitigated by operational measures. Therefore there is no need for a preliminary CPTMP.

My general comment with regard to TfNSW requirements is that they appear to be general template requirements for large developments and have been prepared without consideration of the development specifics and of the information provided in the TPIA.

Please do not hesitate to contact the undersigned should you require further information.

Yours faithfully,



Oleg I. Sannikov
Director
MEngSc (Traffic Engineering)
MIEAust PEng
FAITPM

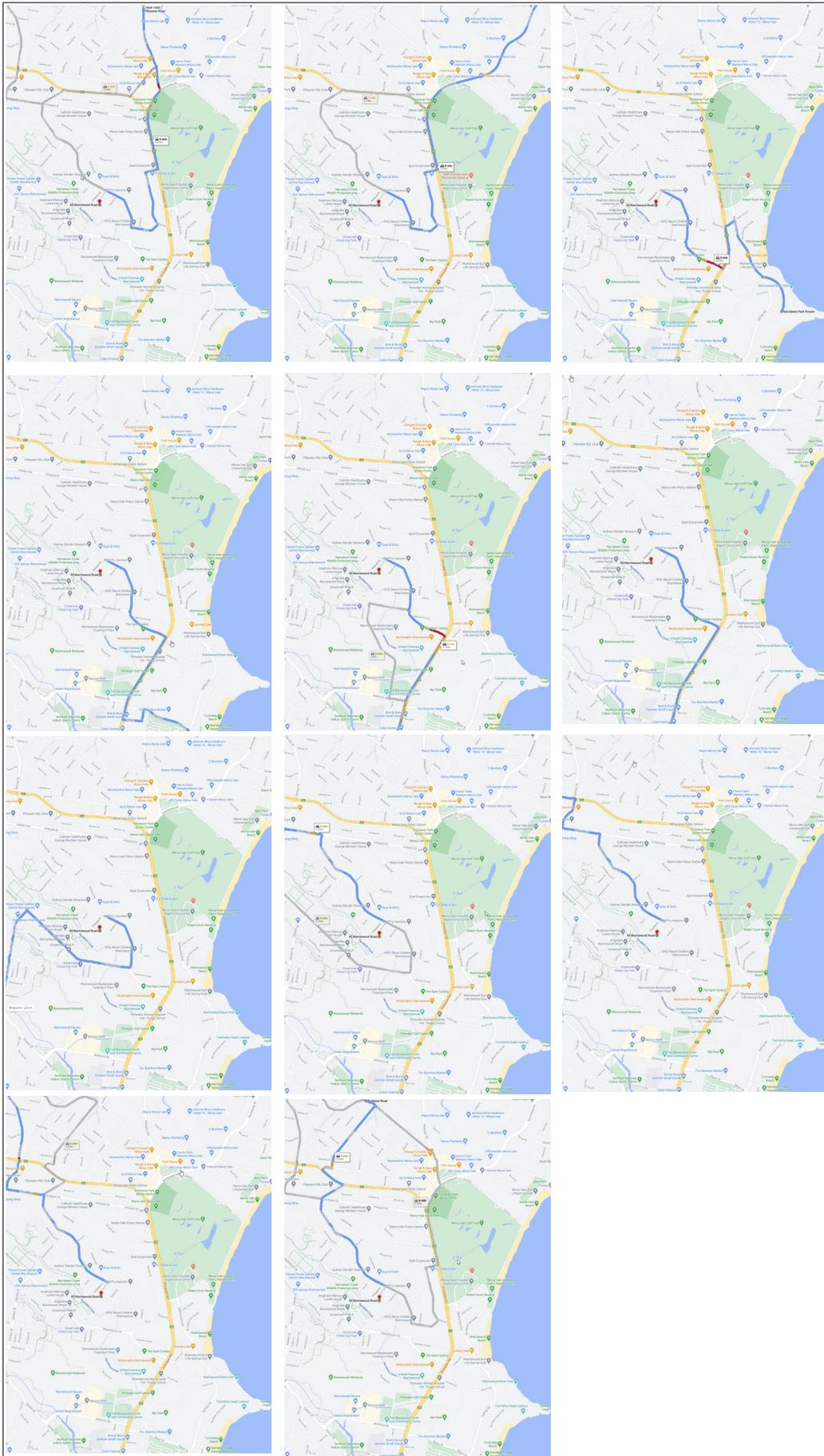


Figure 1. Common routes for road transport from the site in all directions (source: Google maps).

