Issue History

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Northwoods Shops Planning Proposal Independent Peer Review

1. INTRODUCTION

Bitzios Consulting has been engaged by Lane Cove Council to undertake an independent peer review of the Traffic Impact Assessment of the Planning Proposal of a development located at 274 - 274A Longueville Road and 4-18 Northwood Road, Lane Cove. The Traffic Impact Assessment included an analysis of the existing, permissible and the proposed developments. The permissible development includes two mixed-use buildings within the site boundary and the proposed development includes an aged care facility, a veterinary clinic and retail space.

The independent review assessed the Traffic Impact Assessment report and other relevant documents, including the assumptions made and the level of detail provided. The main focus of the review is the report, *Traffic Impact Assessment Planning Proposal 274 & 274A Longueville Road, Lane Cove, 4-18 Northwood Road, Lane Cove,* prepared by Traffix and supplied to Bitzios Consulting by Lane Cove Council.

2. REVIEW

2.1 TRAFFIC GENERATION

The study used the Roads and Maritime Services *Guide to Traffic Generating Developments* to determine the trip generation of each existing property within the site boundary. Existing properties included low density residential dwellings, neighbourhood retail and a veterinary hospital. Given the conservative estimates of the guide, this is an adequate method to determine the trip generation of the existing site. However, it would be useful to have survey data of existing traffic entering and exiting the site in the peak hours to compare with the assumptions made for traffic generation.

Similarly, the traffic generation of the permissible development was determined by the Roads and Maritime Services guide. Zones included medium density residential, neighbourhood retail and medical centre. As with the existing site, the use of the guide to for traffic generation rates of each property was acceptable.

For the proposed site trip generation, the study used traffic survey data from Pathways Sailors Bay, a similar sized aged care facility located in Northbridge within the Willoughby Local Government Area (LGA), which is located next to the Lane Cove LGA. Since the size, proximity, and employment schedule of the Pathways Sailors Bay facility is similar to the proposed development, it serves as an acceptable model to determine the trip generation rates for the potential development. Like the existing and permissible developments, the study uses the guide to determine the traffic generation rates of the veterinary hospital and retail zones in the proposed development and created a combined traffic generation to the proposed site.

The traffic generation of the proposed development was compared to the permissible development, whereas it should have been compared to the existing site traffic generation to give a clearer comparison.

Though the traffic split assumptions during the morning and evening peaks appear reasonable, the study did not provide a justification for those assumptions. Again, it would be useful to have survey data of existing traffic entering and exiting the site in the peak hours to compare with the assumptions made for traffic generation.

2.2 TRAFFIC DISTRIBUTION

Traffic distribution was estimated based on road hierarchy to determine split of traffic volumes. Trip distributions were assumed for the intersection of Longueville Road, Northwood Road, Kenneth Street, River Road and River Road West. The assumptions seem reasonable, although some sensitivity testing could have been undertaken to check whether a different distribution would have caused a significantly different impact on the road network.

2.3 SURROUNDING INTERSECTION IMPACTS

The study did not provide any detail on the impact of the permissible development on surrounding intersections. For the proposed development, the study mentioned the assumed redirection of northbound and southbound traffic through the unsignalised intersection south of the site, Arabella Street and Woodford Street and returning to Northwood Road via Kenneth Street where a no-right turn would be enforced from Northwood Road into the site. Though the study provided an assumed route, it did not provide any detail of the impact on these routes on the intersections and roads.

Furthermore, the study does not indicate whether the assumed route was determined from site observations of the directions from which vehicles enter the site. Site observations would reinforce the assumptions made on the diversion route.

2.4 DRIVEWAY LOCATIONS

Existing driveway locations were mentioned very briefly in Section 4 regarding the number of driveways and the allowable turn movements permissible. A more detailed figure of the driveways from a street view and zoomed in map will assist in illustrating the proximity and turn movements of the driveways.

Future driveways are proposed to include one access driveway and exit driveway. The access driveway is proposed as another exit from the Northwood Road/Kenneth Street intersection, while the exit driveway is proposed to be located towards the southern boundary and involve a left turn only arrangement.

2.5 ACCESS TO PUBLIC TRANSPORT

The study adequately described the location of bus stops and corresponding bus routes available near the site. It did not mention of the nearest train station; however, this is not directly relevant. The nearest station to the site is St Leonards Station approximately 3 kilometres from the site on bus route 254.

2.6 PEDESTRIAN DESIRE LINES

There is no mention of pedestrian desire lines surrounding the site in the study.

2.7 SITE SERVICING

The study mentioned the servicing of the existing properties on site and the need for on-street parking for waste and service vehicles. For the future proposals, the access and exit of service vehicles will need to comply with the DCP and adhere to the specified measurements to allow the entry and exit of service vehicles on site.

The proposed development indicates a ground floor height of 4.5 metres to allow Council's waste collection vehicle and other service vehicles to access the site. However, the basement would also require a height of 4.5 metres to allow service and waste vehicles to enter and exit the site through the basement.

According to the permissible development proposal, separate on-site service and waste provisions may be required due to the split nature of the site into two mixed used developments. For this proposal, a single access point and exit point for the entire site is not guaranteed. Therefore, the proposed development provides more consolidated waste collection and service vehicle routes, being more convenient and beneficial for residents, service vehicles, and waste collection.

3. COUNCIL CONCERNS

3.1.1 River Road West/Longueville Road & Northwood Road/Kenneth Street Intersections

1. *Existing trip generation to the site should be based on the traffic surveys at the existing driveways.*

   Existing trip generation to the site was based on the estimates for each property from the Roads and Maritime Services Guide to Traffic Generating Developments, rather than based on traffic surveys. The use of this guide is adequate in estimating the trip generation given the conservative values in the guide has mentions in Section 2.1. However, traffic survey data would confirm the values determined from the guide.

2. *The proposed entry and exit driveway must accommodate service vehicle access (8.8m MRV). Waste collection must occur on site.*

   The Planning Proposal only suggests what type of development is proposed at the site. The details of the development are not required at this stage.

3. *The subject two intersections have been analysed separately. The intersection should be analysed combined and coordinated.*

   The two intersections were analysed together as 'Network N101' as shown in the top right-hand corner of the movement summaries in Appendix D. The study only provides individual intersection layouts and no network layout.

   To determine whether the two intersections were coordinated, signal and phase data is required. As this data is not provided in the study or appendix, we are unable to determine whether the intersections were coordinated in the model.

4. *The intersection analysis should be undertaken on Saturdays as the highest trip generation at the proposed aged care facility is likely to occur on Saturday mornings, say at 11am.*

   While the highest trip generation to the aged care facility will be on a Saturday, the Northwood Road, River Road and River Road West are all RMS regional roads and will be utilised more on weekdays than on weekends. Therefore, the intersection analysis is better to be undertaken on a weekday to determine the worst-case scenario and provide more conservative results.

5. *The traffic report needs to demonstrate how illegal right turning vehicular entry from Northwood Road (from the west) will be enforced.*

   A "No right turn" sign is sufficient to prevent illegal right turning, assuming the location of the driveway is at the traffic lights opposite Kenneth Street.

6. *As stated in the RMS letter (dated 7 September 2012), the design and geometry of the intersection should be provided and a road safety audit should be undertaken for Council & RMS consideration.*

   We agree, a safety audit should be undertaken.

3.1.2 Other concerns:

7. *The inbound trip assignment diagram (Figure 8) should be upgraded by showing the detailed 40% trip from the east.*

   The purpose of Figure 8 is not clear. It is labelled as a "Public Transport" Map; however, it indicates inbound and outbound trips with unclear values labelled.

   As there is no right turn from Northwood Road, we can assume there is no traffic from the east. However, the study mentions an alternative route through Arabella Street and Kenneth Street, though it is unclear whether the effect of these trips was considered in the values shown in Figure 8.

8. *An outbound trip assignment diagram should be included showing the detailed route to the west or north.*

   As stated in Statement 7, Figure 8 is an unclear map where both inbound and outbound trips were indicated. We agree that information on the outbound route from the proposed site should be explained in more detail due to the left-out nature of the exit from the site.

9. *The potential traffic increase in local roads such as Arabella or Woodford Street should be undertaken. The analysis should demonstrate that the estimated traffic increase in local roads will not exceed the RMS maximum environmental capacity for Local Roads.*

   Given that the study mentioned a redirection of traffic though Arabella Street and Woodford Street, and analysis on the impact on these streets should have been undertaken and included in the study.

10. *RMS crash data analysis and safety assessment will be required at River Road West/Northwood Road & Northwood Road/Arabella Street.*

    We agree, this should be include in the safety audit as suggested in point 6.

11. *The applicant should contribute signalisation of River Road West/ Northwood Road intersection (internal discussion at this stage).*

    To be confirmed with Council that this an ongoing discussion.