

REF: N165200

DATE: 15 March 2019

Inner West Council  
PO Box 14  
PETERSHAM NSW 2049

**Attention: Mr George Tsaprounis (Coordinator Traffic Engineering Services)**

Dear George,

**RE: 728-750 PRINCES HIGHWAY, TEMPE – PEER REVIEW ADDENDUM**

GTA Consultants (GTA) completed a peer review (reference N165200 dated 29/01/19) of the traffic impact assessment completed by Transport and Traffic Planning Associates (TTPA) dated October 2017 in support a Bunnings development at 728-750 Princes Highway, Tempe.

This letter addresses specific additional transport related matters, including:

- loss of on-street parking from the development and a strategy to minimise this impact
- traffic calming measures for the surrounding local road network
- queuing and delay at the Princes Highway/ Smith Street intersection following full site development.

### **Impact to On-Street Parking**

The proposed Bunnings and access arrangements via Smith Street triggers the need for upgrade works at the Princes Highway/ Smith Street signalised intersection. These works would result in the loss of on-street parking on both sides of Smith Street, with the extent of works included as part of the TTPA assessment.

There is an existing capacity for approximately 13 vehicles to park on the northern side of Smith Street adjacent to the site. The proposed widening of Smith Street impacts these spaces, plus informal parking on the southern side, close to Princes Highway. A review of the civil plans for the proposed intersection layout and on-street parking along Smith Street indicates that approximately five spaces could potentially be maintained along the northern side of Smith Street (between Princes Highway and the Bunnings access), with the likely loss of eight spaces, as shown in Figure 1. The plans also include a 35-metre left turn lane on Smith Street on approach to Princes Highway. Based on existing kerbside parking restrictions, this would not technically result in a loss of on-street parking though observations confirm that vehicles have traditionally parked along this section and would hence result in further displacement.

While the formal loss of eight spaces is not excessive, observations confirm that parking on Smith Street is typically in relatively high demand. We note too that some of this demand would have historically catered for parking demand associated with the existing site, in addition to surrounding resident demand.

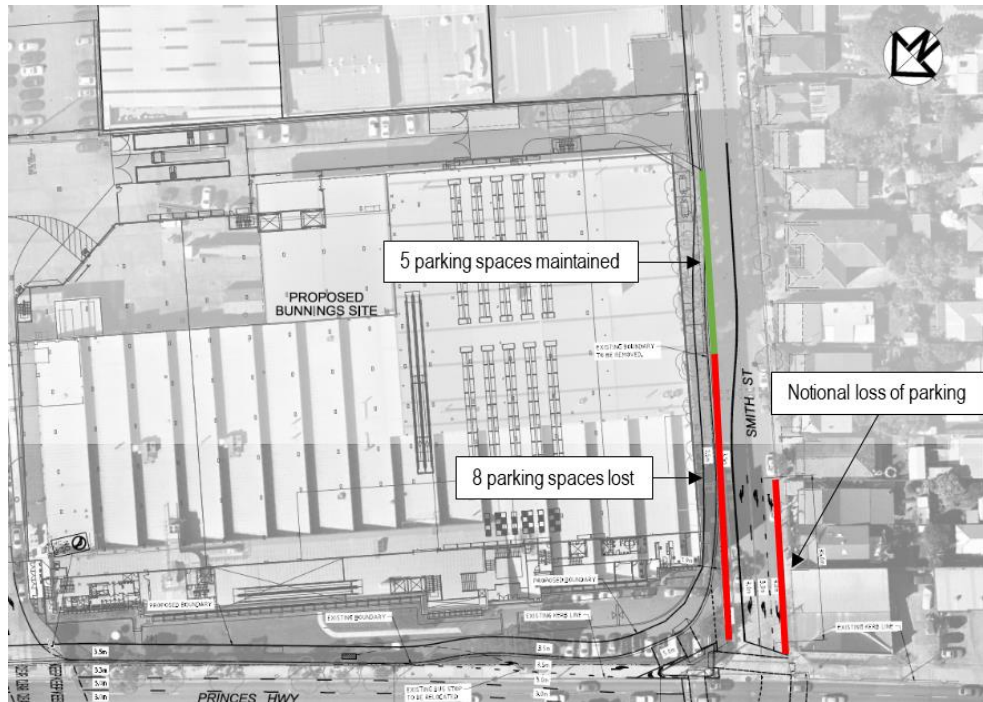
It is not clear if the impacts associated with this loss of parking has been considered as part of the development proposal or if alternative design solutions were considered through due project process. For example, parking demand surveys of Smith Street parking across a typical week would quantify demand and vacancy by area to better understand if the loss of parking as a result of the proposed development can be accommodated without triggering alternative measures.

While it is understood that the existing structure includes heritage items, there may be opportunity to investigate affecting part of the façade and southern structure to facilitate additional road widening in order to maintain parking on the northern side of Smith Street (and provide appropriate pedestrian amenity). It is also recommended that alternative intersection layouts be assessed in SIDRA (or information provided confirming this has been done) to ensure no further

intersection layout and operational efficiencies are possible. An obvious option is to assess two eastbound traffic lanes (rather than three) on Smith Street approach to Princes Highway.

Alternatively, there may be opportunity to investigate options for shared parking arrangements between Bunnings and affected residents. For example, approved residents provided with access to the Bunnings car park (including after-hours access) to off-set the loss of on-street parking. Such arrangements are uncommon and carry some level of risk/liability.

**Figure 1: Likely loss of Smith Street parking**



Base image source: AT&L Project Number 15-274 Drawing Number SKC14 dated 5 September 2017

## Traffic Management

A range of Local Area Traffic Management measures were identified and discussed in Section 4 of the peer review report (GTA, ref. N165200, dated 29/01/19). The existing road cushions on Smith Street and recommended Bunnings access design and signage to enforce right turns only onto Smith Street on exit would appear to be the only realistic measures that can be in place.

Additional measures on Smith Street and South Street east and south of the Bunnings access (in the unlikely event that Bunnings traffic use this section) could be considered though none are likely to prevent vehicles using the road per se. The only other measure that could be considered would be to close Smith Street to eastbound vehicles east of the Bunnings access. This would certainly limit any such risk of Bunnings traffic using Smith Street/ South Street on exit.

On initial review, such a measure would appear to be excessive and potential to introduce more issues than it may ultimately solve. Smith Street (and South Street) provide access to many residential dwellings together with several commercial/ industrial properties in Wood Street east of the proposed Bunnings. Naturally, to investigate such LATM opportunities, a detailed traffic study (including surveys) and public consultation would be required, noting an increase in traffic (including heavy vehicles) needing to use Smith Street and South Street to access Wood Street.

## Princes Highway/ Smith Street Operation

As detailed in the peer review report, post development modelling results at the Princes Highway/ Smith Street intersection indicate that while it has the potential to operate satisfactorily limits in the weekday PM peak, with an overall level of service B (LOS B), 95th percentile queues along Princes Highway are expected to extend to approximately 230 metres for the south approach and 390 metres for the north approach. For comparison, existing conditions observations

and modelling results indicate that 95<sup>th</sup> percentile queues are approximately 30 metres for the north and south approaches. Average delay over the intersection increases from an average of three seconds overall (weighted average heavily biased by heavy traffic volumes along Princes Highway) to around 24 seconds post development.

During the Saturday peak hour, SIDRA modelling results indicate that all approaches will be over capacity (degree of saturation greater than one) resulting in an overall intersection level of service F and Princes Highway queue lengths increasing exponentially to 700 to 800 metres. This is in comparison to an existing intersection level of service A and queues of approximately 30 metres on the Princes Highway. Delay increases from an overall average of three seconds (weighted average heavily biased by Princes Highway traffic) to approximately 146 seconds post development.

It is important to note that once intersection operational capacity is reached in SIDRA, any such increase in traffic volumes causes the intersection operation to deteriorate exponentially. As such, comparison between the existing and post development Saturday scenarios are not directly comparable. As a minimum however, it is recommended that SIDRA modelling be clarified given the clear disparities.

I trust this provides the additional information and further clarification you require. Should you have any questions, please do not hesitate to contact me on (02) 8448 1800.

Yours sincerely

**GTA CONSULTANTS**



**Rhys Hazell**  
**Associate Director**