

TRAFFIC IMPACT STATEMENT

PROPOSED RESIDENTIAL APARTMENT COMPLEX

29 Sheraton Circuit, Bomaderry NSW 2541

Prepared for: Jeff Hodges

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Document Control

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Introduction

Background

MIEngineers have been engaged by Mr Jeff Hodges, (in-conjunction with Jervis Bay Town Planning), to undertake a Traffic Impact Assessment for a proposed 2 lot subdivision development at 29 Sheraton Circuit, Bomaderry. (Refer Jervis Bay Town Planning (JBTP), Scoping Proposal, Ref: JB043 Dated: 1 September 2022).

Objectives

The primary objective of this report is to address and satisfy the relevant sections of the Shoalhaven Development Control Plan (DCP): Chapter G21 – Car Parking and Traffic, and TfNSW's Guide to Traffic Generating Development. In achieving this objective, this report aims to:

1. Provide a description of the development in terms of proposed land use and trips generated.
2. Provide a description of the existing operational conditions of the road network in the immediate vicinity of the development.
3. Undertake an assessment of the operation of the proposed access to the development.
4. Provide details on proposed setbacks, vehicle turning areas , and on-site parking provisions to ensure the proposed development does not cause any unacceptable impacts to the Princes Highway.
5. Identify the appropriate signage installation to demarcate a No Stopping Zone on the Highway, for the site frontage (and beyond at the discretion of TfNSW) to ensure the development won't generate unacceptable parking impacts on the side of the Highway.
6. Include widening of the existing shared user path (SUP) by 1 m (for a minimum distance of 25 m from the boundary of #5 Creston Grove).
7. Show how the existing driveway can remain and will not cause material to spill onto the Highway as a result of increased driveway usage.
8. Show how bin placement and waste collection will be achieved.

Site Description and Locality

Site Locality

The development site, as highlighted in Figure 1 below, is located at 29 Sheraton Circuit, Bomaderry, on the eastern side of the Princes highway and contains one residential dwelling on the lot. The primary access to No.29 is via a right of carriageway leading onto Sheraton Circuit, however, an approved secondary access is available onto the Princes Highway which provides for a left-in/left-out manoeuvre.



Figure 1: Site Locality. The development site is highlighted red. (Nearmap)



Sketch 1 – Proposed Subdivision Sketch

Existing Road Infrastructure

Details of the road network surrounding the subject site are outlined in Table 1.

Road Name	Jurisdiction	No. of lanes	Hierarchy	Divided	Posted Speed
Sheraton Circuit	Council	2	Local Street	No	50km/h
Freesla Crescent	Council	2	Local Street	No	50km/h
Princes Highway	State Government	4	Highway	Yes	70km/h

Table 2: Surrounding Road Network

The surrounding key intersection is as shown in Table 2.

Road Name 1	Road Name 2	Jurisdiction	Type
Sheraton Circuit	Freesla Crescent	Council	Priority-Controlled

Table 2: Key Intersection

Proposed Development

Development Summary

A subdivision report (Prepared by JBTP) seeks to justify an amendment to the minimum lot size from 1Ha to 4,000m² and subdivide the property into 2 Torrens Title lots.

Lot 1, as shown on the sketch above, would contain the existing dwelling and measure 5,028 m². Access would be via the existing access/right of carriageway onto Sheraton Circuit.

Lot 2 would measure 4,947m² and the proposed access would be via the existing concrete driveway and associated layback, which is currently used by No.29, to access the Princes Highway.

State Environmental Planning Policy (Transport and Infrastructure 2021)

The proposed development does not meet the requirements of State Environmental Planning Policy (Transport and Infrastructure 2021) Schedule 3. Therefore, it does not need to be referred to the Traffic Authority of New South Wales (i.e., Transport for NSW, TfNSW).

However, approval of the existing access onto the highway will need concurrence from TfNSW. Noting that the existing driveway was recently constructed by TfNSW as part of the Berry to Bomaderry Highway upgrade. The concrete driveway will require to be extended to the property boundary as part of the subdivision works.

Traffic Generation

The Transport for New South Wales (formerly RMS) *Guide to Traffic Generating Developments* (GTGD) 2002 and the *Technical Direction 2013*, were used to source trip generation rates for the existing and proposed developments.

Classification

The traffic generation for the existing and proposed developments was determined based on the rates for 'low density residential dwellings' from the 2013 Technical Direction.

Traffic Generation Rates

The development proposes to increase occupancy of the lot with 1 additional residential dwelling creating a net increase in traffic generation as follows.

Pre-development

No.29. Total of 7.4 trips per day, assuming 50% via Sheraton Circuit and 50% via the Princes Highway.

Post-development

Lot 1. Total of 7.4 trips per day,

Lot 2. Total of 7.4 trips per day.

Theoretically, there will be a net increase of 3.7 trips per day at each access point. Peak traffic flows will increase from 0.35v/hr to 0.7v/hr.

Development Trip Routes and Distribution

Lot 1 will use the existing Right of Carriageway and Lot 2 will need to use the Highway access for southbound ingress and egress. For Lot 2 vehicles travelling north and wishing to enter the property, they will be required to use the dedicated Highway turning area approximately 500m north of the driveway.

Existing Traffic Volumes

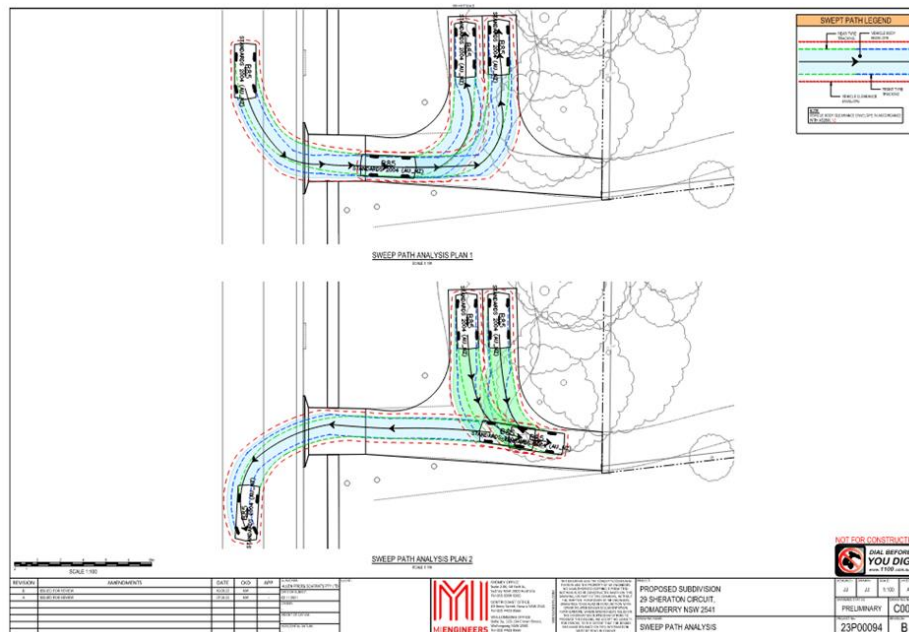
In 2019 TfNSW recorded, 25,300vpd southbound on the Princes Highway, at the Nowra Bridge. In 2021 they recorded 22,500vpd. No traffic data was available for Sheraton Circuit, however, it is estimated that approximately 60 dwellings, (adjacent to and near No.29) would use Sheraton Circuit, as their preferred route into and out of the residential area. Therefore, based on the GTDG this equates to 444vpd. (Say <500vpd).

Development Traffic Impacts

Given the proposed peak number of AM trips is only 0.7vph there will be insignificant increase in traffic at this location. The traffic impacts would be entirely consistent with the environmental capacity and planning of the surrounding road network.

Car Parking

Council's Development Control Plan (DCP, 2014) requires 2 spaces to be provided for car parking on each Lot. There is sufficient area available on the proposed Lot for car parking and the actual location would be subject to DA approval. In addition the sketch below shows indicative visitor parking and/or turning area, compliant with AS2890.1, which could be adopted for Lot 2, while Lot 1 can continue to utilise existing car parking arrangements.



Access Assessment

Vehicular Access

The proposed development's vehicular access-way will be designed in accordance with Shoalhaven City Council's standard drawings for driveways and AS2890.1. The existing concrete driveway will be extended to the property boundary to reduce the potential of loose material being washed into the gutter.

A No Stopping zone will be dedicated on the road frontage adjacent the property, to prevent parking in the breakdown lane of the highway. Signage in accordance with AS1742 and TfNSW requirements will be installed.

Pedestrian Access

As shown in images 1 & 2 below, there is a 2m wide concrete pathway adjacent the kerb, providing pedestrian access along the highway.



Image 1. Existing Driveway Looking North



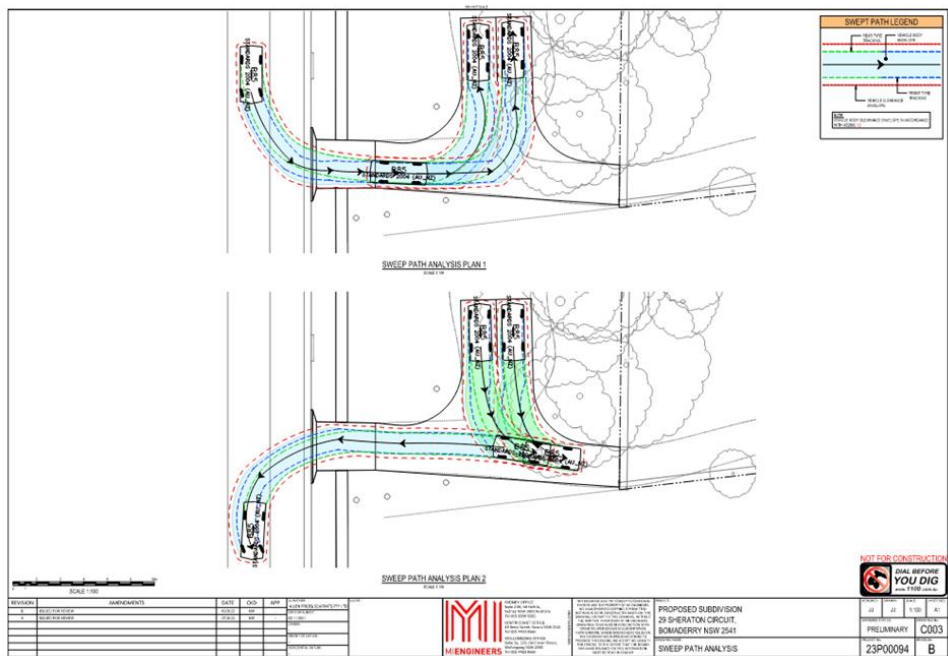
Image 2. Existing Driveway Looking South

Sight distance

The posted speed for the princes Highway is 70kmh. Approach Sight distance (92m) and Safe Intersection Sight Distance (151m) are achieved at the driveway access with SISD exceeding 200m.

Manoeuvrability

A sweep path analysis using *Transoft Solutions ‘Autoturn’* was undertaken



Waste Collection

Any future residential development will utilise Shoalhaven City Council’s standard kerbside collection, by providing 240L waste to landfill (red) bins, and 240L recycling (yellow) bins for collection. These are proposed to be placed adjacent to the kerb in Sheraton Circuit for Lot 1 and adjacent to the kerb on the Princes Highway for Lot 2.

Conclusions and Recommendations

A Traffic Impact Statement has been prepared generally in accordance with Austroads' guidelines to address relevant controls within Shoalhaven Council's DCP.

This report has reviewed the issues relating to traffic generated by the development and includes:

- Daily vehicle generation.
- Impacts on the local road network.
- Off-street car parking and manoeuvrability.
- Waste collection.
- Site distance

It is our opinion that the development:

- Adequately caters for the traffic generated.
- Has little impact on the surrounding streets.
- Provides suitable options for waste collection.
- Provides adequate space for vehicle manoeuvring.
- Provides adequate off-street car parking.