Proposed Mixed-Use Development

29-33 Market Street, Merimbula

TRAFFIC AND PARKING ASSESSMENT REPORT

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Ref 20712



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1. INTRODUCTION

This report has been prepared to accompany a concept development application which has been submitted to Bega Valley Shire Council as part of a planning proposal for a mixed-use development proposal to be located at 29-33 Market Street, Merimbula (Figures 1 and 2).

It is understood a planning proposal has been lodged with Council to amend the building height controls applicable to the site from 13 metres to 18 metres, and its approval is imminent.

The concept development application envisages the approval of the aforementioned planning proposal to facilitate demolition of existing structures on the site and construction of a new mixed-use building with a ground floor retail component.

Off-street parking is to be provided in a three-level above ground car parking area in accordance with Council requirements.

The purpose of this report is to assess the traffic and parking implications of the development proposal and to that end this report:

- describes the site and provides details of the concept development proposal
- reviews the road network in the vicinity of the site
- estimates the traffic generation potential of the development proposal and assesses the traffic implications of the development proposal in terms of road network capacity
- reviews the geometric design features of the proposed car parking facilities for compliance with the relevant codes and standards
- assesses the adequacy and suitability of the quantum of off-street car parking provided on the site.





2. PROPOSED DEVELOPMENT

Site

The subject site is located at the northern corner of Market Street / Monaro Street / Palmer Lane intersection, situated within the Merimbula Town Centre. It has site frontages approximately 84 metres in length to Market Street, approximately 75 metres in length to the rear laneway, and occupies a site area of approximately 4,014m².

The site is zoned B2 – Local Centre, and is surrounded by B4 – Mixed Use and R3 – Medium Density Residential zones.

The site is currently occupied by multiple commercial and retail premises with a cumulative floor area of approximately 3,600m². There is no car parking provided on the site at present.

A recent aerial image of the site and its surroundings is reproduced below.



Courtesy of Nearmap Imagery

Existing Planning Controls

The existing planning controls applicable to the site is governed by *BVLEP 2013* which specifies a maximum building height of 13 metres.

That existing planning control would allow a commercial building comprising up to $10,500m^2$ of commercial / retail floor space.

Proposed Development

The concept development application envisages the approval of the uplift in permissible building height to facilitate demolition of existing structures on the site and construction of a new mixed-use building with a ground floor retail component.

A total of 52 residential apartments is envisaged with the following mix:

1 bedroom apartments:	3
2 bedroom apartments:	27
3 bedroom apartments:	22
Total Apartments:	52

A retail component is also envisaged on the ground floor level comprising a cumulative floor area in the order of $1,190m^2$.

Discussions with Council Officers have confirmed that under Council's current DCP 2013 when a site is redeveloped the car parking requirements are calculated based on the floor area of the existing commercial space are deemed to have been provided, and additional parking requirements are calculated based on any additional commercial floor space. Parking for any residential development needs to be provided on site as per the DCP.

Accordingly, off-street parking is envisaged for a total of 114 cars for the residential component only in a three-level above ground car parking area in accordance with Council requirements.

Vehicular access to the car parking facilities is to be provided via a new combined entry and exit driveway off the rear service lane.

Loading / servicing for the proposed development is expected to be undertaken by a variety of commercial vehicles up to and including 8.8m long Medium Rigid Vehicles (MRV trucks). A dedicated service bay and turntable is to be provided on the ground floor level separate from the car parking area, which is also to be accessed via a separated entry / exit driveway off the rear service lane.

Plans of the proposed development have been prepared by *Squillace Architects Pty Ltd* and are reproduced in the following pages.







3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services is illustrated on Figure 3.

Merimbula Drive is classified by the RMS as a *Regional Road* and provides the key east-west road link in the area, it comes off Princes Highway and links to Merimbula Town Centre. It typically carries one traffic lane in each direction in the vicinity of the site.

Sapphire Coast Drive is also classified by the RMS as a *Regional Road* and provides the key north-south road link in the area, stretching from Merimbula to Tathra. It typically carries one traffic lane in each direction in the vicinity of the site.

Market Street is another *Regional Road* in the local area linking Merimbula Drive / Sapphire Coast Drive to Arthur Kaine Drive on the other side of Boggy Creek. It typically carries one traffic lane in each direction with additional lanes provided on approach and departure of key intersections. Kerbside parking is generally prohibited in the immediate vicinity the site, including along the entire site frontage.

Park Street and Palmer Lane are local, unclassified roads that is primarily used to provide vehicular and pedestrian access frontage properties. Kerbside parking is generally permitted on either side of these roads subject to sign-posted parking restrictions.

Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

 a default 50km/h SPEED LIMIT which applies to market Street and all other local roads in the area





- TRAFFIC SIGNALS in Market Street where it intersects with Park Street and Moraro Street
- SIGNALISED PEDESTRIAN CROSSING in Market Street immediately north of the site.

Projected Traffic Generation

An indication of the traffic generation potential of the development proposal is provided by reference to the Roads and Maritime Services publication *Guide to Traffic Generating Developments, Section 3 - Landuse Traffic Generation (October 2002)* and the updated traffic generation rates in the RMS *Technical Direction (TDT 2013/04a)* document.

The RMS *Guidelines* and the updated *TDT 2013/04a* are based on extensive surveys of a wide range of land uses and nominate the following traffic generation rates which are applicable to the development proposal:

High Density Residential Flat Dwellings (Regional Average)

- AM: 0.53 peak hour vehicle trips per unit
- PM: 0.32 peak hour vehicle trips per unit

However, neither the RMS Guidelines nor the Technical Direction nominate a traffic generation rate for small, local shops, referring only to major regional shopping centres incorporating supermarkets and department stores. For the purpose of this assessment therefore, the traffic generation rate of "2 peak hour vehicle trips per 100m² GFA" for commercial premises has been adopted in respect of the retail component of the development proposal as follows.

Application of the above traffic generation rates and assumptions to the various components of the development proposal yields a traffic generation potential of approximately 51.4 vehicle trips per hour (vph) during the AM peak hour and 40.4 vph during the PM peak hour, as set out below:

	AM	PM
Residential (52 apartments):	27.6 vph	16.6 vph
Retail (1,190m ²):	23.8 vph	23.8 vph
TOTAL TRAFFIC GENERATION POTENTIAL:	51.4 vph	40.4 vph

Projected Future Traffic Generation Potential

That projected future level of traffic generation potential should however, be offset or *discounted* by the volume of traffic which could reasonably be expected to be generated by the existing uses of the site, as well as the permissible uses of the site, in order to determine the *nett increase (or decrease)* in traffic generation potential expected to occur as a consequence of the concept development proposal.

Application of the same commercial traffic generation rates to the existing $3,600m^2$ of commercial / retail floor spaces yields a traffic generation potential of 72 vph during both the AM and PM peak hour.

Application of the same commercial traffic generations rates to the permissible use of the site which can allow the development of up to $10,500m^2$ of commercial / retail floor spaces yields a traffic generation potential of 210 vph during both the AM and PM peak hour.

Accordingly, it is likely that the proposed development will result in a *nett decrease* in the traffic generation potential of the site of approximately 21 to 32 vph during commuter peak hours when compared with the existing development on the site, and approximately 159 to 170 vph during commuter peak hours when compared with a permissible commercial / retail development on the site, as set out below:

	-			
	Existing	Permissible	Concept DA	
AM	72 vph	210 vph	51 vph	
PM	72 vph	210 vph	40 vph	

Projected Nett Change in Peak Hour Traffic Generation Potential of the site as a consequence of the development proposal

It is again noted that the concept development will not provide any retail parking on site consistent with the existing commercial / retail premises, indicating a high degree of linked trips in the local town centre, i.e. the proposed retail premises are envisaged to depend on a high degree of passing trade from tourists and local patronage, and is unlikely to contribute any appreciable number *additional* vehicle trips on the local road network.

In any event, that projected traffic generation potential of the concept development is minimal, is consistent with the land zoning objectives of the site, and will clearly not have any unacceptable traffic implications in terms of road network capacity.

4. PARKING IMPLICATIONS

Existing Kerbside Parking Restrictions

Kerbside parking is generally prohibited in Market Street and Palmer Lane along the front and rear site frontages.

Notwithstanding, multiple Council car parking areas at the rear of the site provide 3 HOUR PARKING between 8:30am-6:00pm Monday to Friday, and 8:30am-12:30pm on Saturdays.

Off-Street Parking Provisions

The off-street parking requirements applicable to the development proposal are specified in the *Bega Valley Development Control Plan 2013, Section 5.9 Off-Street Car and Bicycle Parking* document in the following terms:

Dwellings in B2 and B4 zones in Bega, Merimbula, Eden and Bermagui, including shop top housing (for all other dwellings residential car parking requirements apply)

Car spaces: 1 parking space per dwelling

Bicycle parking: 1 space per dwelling

It is noted that there is no car parking provided on-site at present and that the proposed retail component of $1,190m^2$ in the concept DA is *less than* the existing commercial / retail floor area of $3,600m^2$ currently on site. Additional retail car parking spaces are therefore not required in accordance with discussions with Council.

Accordingly, application of the above parking requirements to the development proposal yields a minimum off-street parking requirement of 52 car space and 52 bicycle spaces.

The proposed development makes provision for a total of 114 car spaces and 52 bicycle spaces, thereby satisfying the statutory car and bicycle parking requirements.

The geometric design layout of the proposed car parking facilities has been designed to comply with the relevant requirements specified in the Standards Australia publication Parking Facilities Part 1 - Off-Street Car Parking AS2890.1 and Parking Facilities Part 6 - Off-Street Parking for People with Disabilities AS2890.6 in respect of driveway & aisle widths, ramp grades & grade transitions, parking bay dimensions and height clearances.

Loading/Servicing Provisions

The proposed development is expected to be serviced by a variety of commercial vehicles up to and including 8.8 metres long Medium Rigid Vehicles (MRV trucks).

A dedicated service bay is proposed on the ground floor level with a mechanical turntable, and the manoeuvring areas has been designed to accommodate the swept turning path requirements of these MRV trucks, allowing them to enter and exit the site whilst travelling in a forward direction at all times, as demonstrated in the attached *swept turning path* diagrams.

The geometric design layout of the proposed loading facilities has been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 2 - Off-Street Commercial Vehicle Facilities AS2890.2* in respect of overhead clearances and service area requirements for MRV trucks.

Conclusion

In summary, the proposed parking and loading facilities satisfy the relevant requirements specified in Council's *DCP* as well as relevant Australian Standards, and it is therefore concluded that the proposed development will not have any unacceptable parking or loading implications.







