Perception Planning

Two Rivers Winery

TRAFFIC IMPACT ASSESSMENT

WGA231659

WGA231659-RP-TT-0001_B

28 November 2023

Revision History

REV	DATE	ISSUE	ORIGINATOR	CHECKER	APPROVER
A	24/11/2023	DRAFT	NB	JM	MV
B	28/11/2023	FINAL	NB	JM	MV

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1 INTRODUCTION

1.1 General

WGA has been engaged by Perception Planning on behalf of the applicant to prepare a Traffic Impact Assessment (TIA) report for the proposed development located at Two Rivers Winery. The subject site is addressed as 2 Yarrawa Road Denman, New South Wales.

1.2 Documentation Referenced

Whilst preparing this TIA report, the following information and documentation has been referenced:

- Architectural drawings prepared by CAD Design & Draft Pty Ltd dated September 2023.
- Nearmap aerial imagery and Google Streetview imagery as required.
- Muswellbrook Shire Development Control Plan 2009.
- Australian Standard Parking Facilities Part 1: Off-Street Car Parking (AS2890.1 – 2004).
- Australian Standard Parking Facilities Part 2: Off-Street Commercial Vehicle Facilities (AS2890.2 – 2018).

2 DEVELOPMENT PROPOSAL

2.1 General

The proposal seeks to permit the construction of an expanded cellar door and marquee (function room) representing an extension of the existing use operating as 'Two Rivers Winery', located at 2 Yarrawa Road, Denman.

Plans of the proposal prepared by CAD Design & Draft Pty Ltd dated September 2023 indicate that the proposal comprises the following:

- Redevelopment of the existing cellar door building to provide a function room and bar area.
- Construction of a marquee building.
- Increased pallet storage area.

Once complete, it is understood that the site would be expected to accommodate up to 200 patrons across its various components.

A comparison between the primary uses of the existing and proposed development relevant to the proposal have been outlined within Table 2.1, with an overview of the proposal illustrated in Figure 2.1.

Table 2.1: Summary of Existing vs Proposed Development

COMPONENT	EXISTING	PROPOSED	CHANGE
Cellar Door	68 sqm	90 sqm[1]	+ 22 sqm
Pallet Storage	38 sqm	72 sqm	+ 34 sqm
Function Room / Marquee	-	503 sqm	+ 503 sqm

[1] Includes wine tasting room

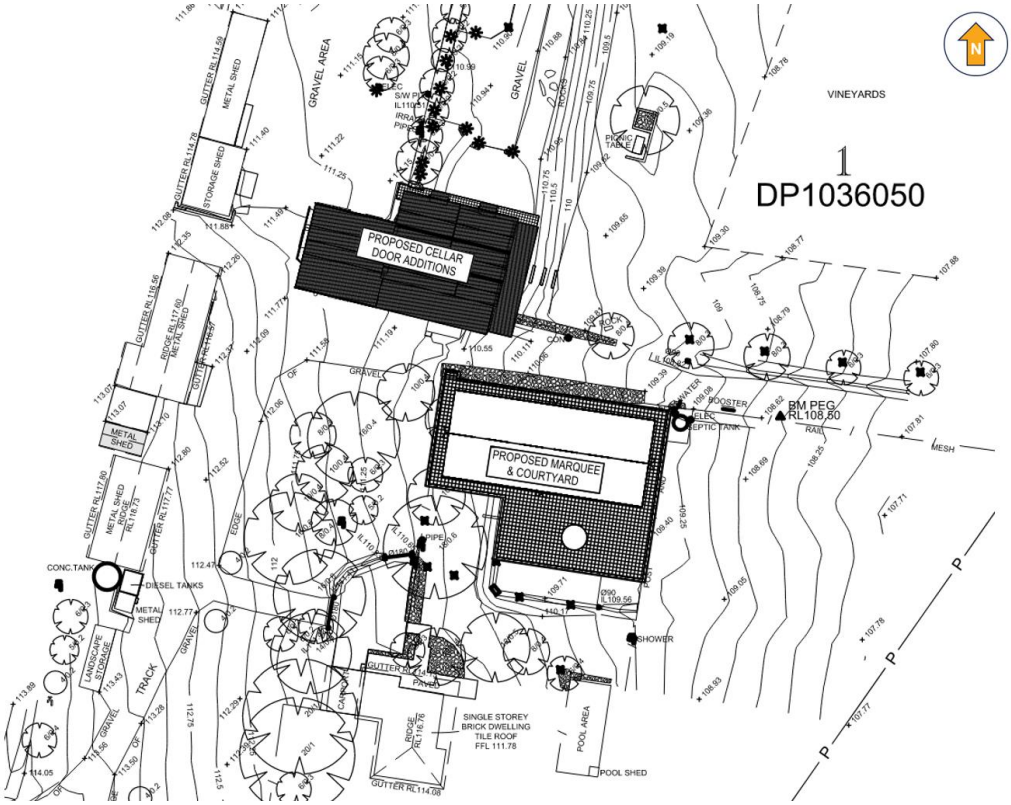

Figure 2.1: Extract – Proposed Site Layout

2.2 Proposed Operations

The applicant has advised that under this application, up to 200 patrons are anticipated on-site at any one time, with up to 20 staff members on site during peak demand periods.

The existing operating hours are proposed to be retained, with the site operational during the following periods, being seven (7) days across a typical week:

- **Cellar Door:** 9.00am to 5.00pm.
- **Functions / Events:** 9.00am to 12.00am.

The site currently comprises a cellar door and accommodates weddings, wine paring dinners and seasonal events such as Christmas parties and Christmas carols. Peak visitation is generally expected to occur between midday and 5.00pm.

It is noted that the proposal largely represents amenity improvements to the existing operations of the site, rather than an intensification of use. The site is therefore anticipated to operate largely consistent with current conditions (outside of planned out-of-cycle events).

2.3 Car Parking & Vehicle Access

Site access and parking will remain consistent with existing conditions, with the site accessed via an unsealed service road to Yarrawa Road / Virginia Street as illustrated below in Figure 2.2.

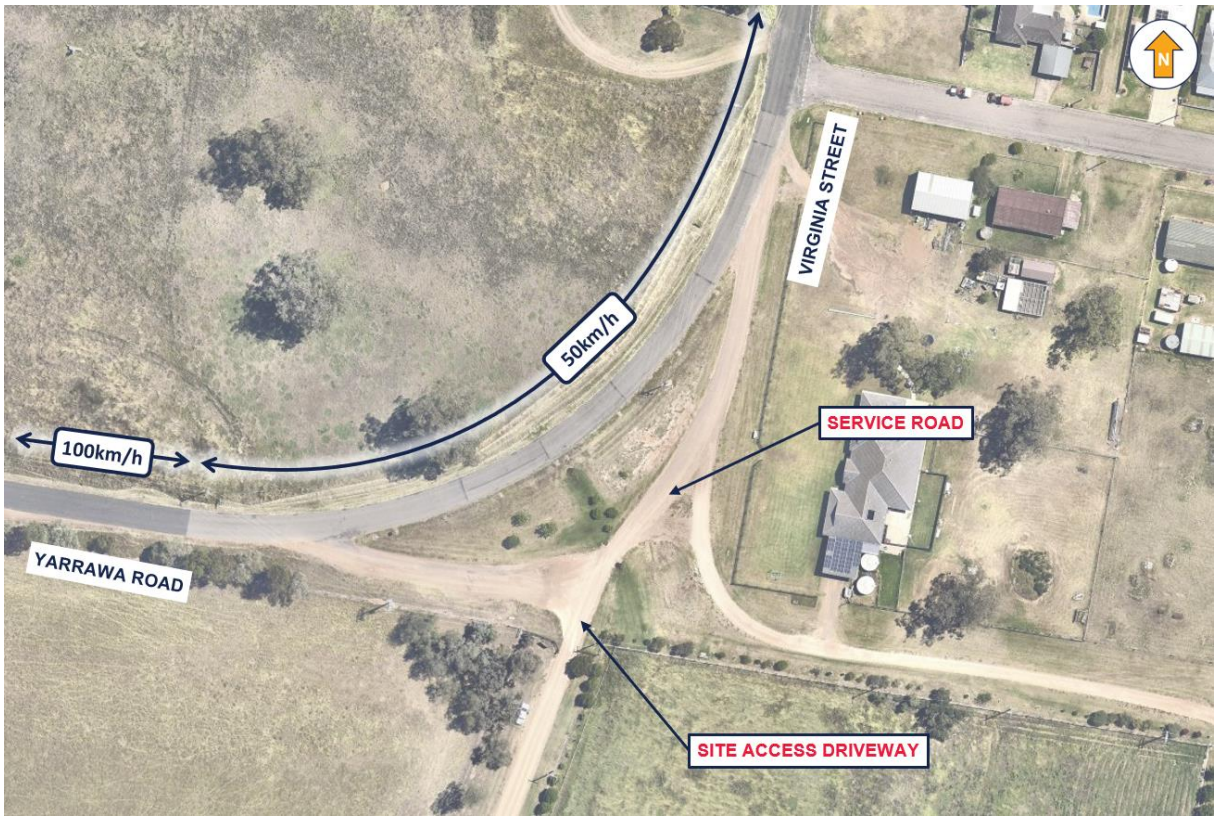

Figure 2.2: Summary of Site Access Arrangements

Access to the site will be continued to be provided via an unsealed driveway from Yarrawa Road, which measures approximately 1.9km in length. The site access driveway is capable of accommodating two-way movements whilst providing overflow parking within the grassed verges during peak periods.

A review of available aerial imagery suggests that the existing development currently provides two (2) informal gravel car parking areas that have the combined capacity to provide approximately 30 car parking spaces, with any additional car parking demands able to be accommodated along the sides of the driveway.

Under the proposal, it is proposed to provide an accessible car parking space including shared zone adjacent the cellar door building. It is expected that staff will continue to park undercover at the rear of the store, kitchen and office areas.

2.4 Loading and Waste Collection

No changes are proposed to the existing loading and / or waste collection arrangements under this application.

3 SITE CONTEXT

3.1 Subject site

The subject site is located approximately 2km south of the township of Denman at 2 Yarrawa Road, Denman New South Wales. Land uses within the vicinity of the site are generally rural in nature.

The location of the subject site in the context of the surrounding environs is shown in Figure 3.1.

Figure 3.1: Existing Site and Access

3.2 Existing Land Use

The site is currently occupied by 'Two Rivers Winery' and primarily comprises vineyards in addition to a cellar door, shed and storage facilities associated with the winery and guest accommodation.

A review of the on-site car parking provision indicates that up to approximately 30 cars are able to be accommodated within the existing unsealed car parking areas to the immediate north of the existing cellar door building.

Based on the provided information, it is noted that during typical weekend operations, the cellar door use normally generates a parking demand in the order of six (6) to eight (8) vehicles at any one time.

However, during peak periods patrons are able to park within the grassed verges along the driveway before accessing the cellar door on foot. It is understood that the driveway overflow parking is utilised approximately only three (3) to four (4) times per year.

Staff parking is accommodated within a dedicated undercover staff parking area located at the rear of the store, bathroom and kitchen areas.

3.3 Existing Operations

The site comprises three (3) distinct components, including the following:

- Winery.
- Cellar Door.
- Guest Accommodation.

The applicant has advised that the site is currently staffed by up to 15 employees and currently accommodates weddings, wine paring dinners, and seasonal events such as Christmas parties and Christmas carols, with peak visitation generally between midday and 5.00pm.

As outlined in Section 2.2 the existing operating hours are proposed to be retained with the site operational during the following periods, being seven (7) days across a typical week:

- **Cellar Door:** 9.00am to 5.00pm.
- **Functions / Events:** 9.00am to 11.00pm.

The existing unsealed area to the north of the cellar door is utilised as the primary car parking area for visitors to the site, with the driveway access providing overflow parking along its length during peak periods.

3.4 Planning Zone

The subject site is located within a Primary Production (RU1) Zone and is generally bordered by an Environmental Management (C3) Zone to the west and Large Lot Residential (R5) Zone to the north.

The location of the subject site in the context of the surrounding planning zones is shown in Figure 3.2.

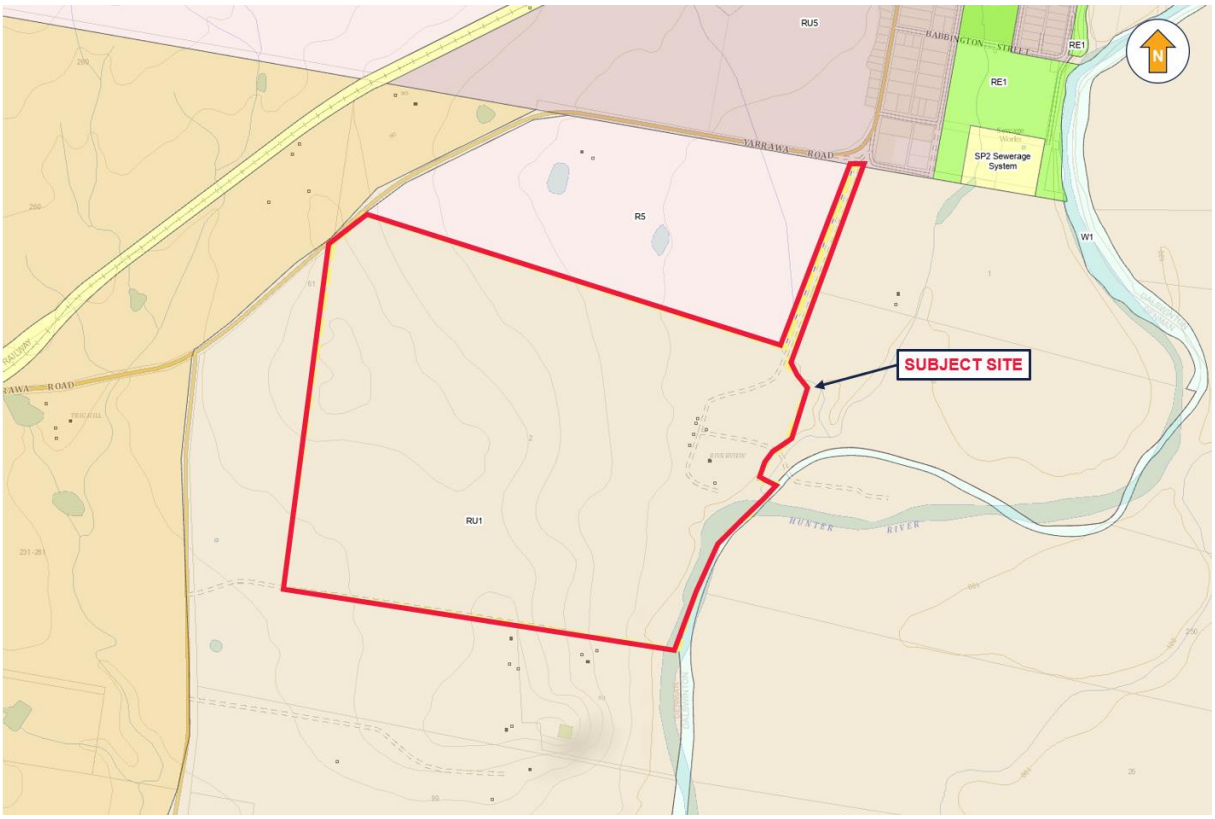

Figure 3.2: Extract of Land Zoning Map

3.5 Road Network

3.5.1 Yarrawa Road

Yarrawa Road is a local road managed by Muswellbrook Shire Council. Yarrawa Road is generally aligned in an east-west direction across the site frontage, commencing at Virginia Street in the east and terminating at Bylong Valley Way in the west.

Yarrawa Road is a sealed road and accommodates two-way traffic across its approximate 6.8m pavement width, with a posted speed limit of 100km/h to the west of the site and 50km/h to the north. In the vicinity of the site, Yarrawa Road provides unsealed shoulders.

Views of Yarrawa Road shown in Figure 3.3 and Figure 3.4.

Figure 3.3: Yarrawa Road Looking South Towards Virginia Street

Figure 3.4: Yarrawa Road Looking East Towards Driveway Access

3.5.2 Virginia Street

Virginia Street is a local road managed by Muswellbrook Shire Council and generally aligned in a north-south direction through the Denman township, before continuing west as Yarrawa Road past the site frontage.

At the site frontage, Virginia Street provides an unsealed service road which provides access to the subject site and South Street to the immediate east. At the site frontage the service road has a default speed limit of 50km/h.

A view of the Virginia Street service road at the site frontage is shown in Figure 3.5.

Figure 3.5: Virginia Street Facing East Towards Site Access

4 CAR PARKING CONSIDERATIONS

4.1 Statutory Requirements

The car parking requirements for the proposed development are specified within the Muswellbrook Shire Council Development Control Plan (MSCDCP).

Section 16.6 of MSCDCP specifies car parking rates for the specific land uses specified as in Table 4.1.

Table 4.1: Statutory Car Parking Requirements - MSCDCP

COMPONENT	SIZE / NO.	STATUTORY PARKING RATE	STATUTORY CAR PARKING REQUIREMENT
Cellar Door Premises	+ 22 sqm	1 space per 7 sqm of gross floor area accessible to the public.	4 spaces
Function Centre	+ 503 sqm 200 patrons	1 space per 10 fixed seats, OR 1 space per 10 m2 of gross floor area if seats not affixed, whichever is the greater.	51 spaces
		TOTAL	**55 spaces**

As shown in Table 4.1, application of the rates outlined within Section 16.6 of MSCDCP results in a requirement to provide an additional 55 car parking spaces in support of the proposal.

4.2 Adequacy of On-Site Car Parking Supply

As outlined in Section 3.2 previously, the site currently experiences a typical peak parking demand of six (6) to eight (8) vehicles at any one time, with the existing unsealed car parking areas capable of accommodating approximately 30 vehicles. Therefore the typical parking demands are able to be wholly accommodated within the provided car parking areas.

During peak periods (weddings, Christmas carols, etc.), the site access driveway provides overflow parking along each side of the carriageway. For the purposes of this assessment, approximately 115m of overflow parking has been considered along each side of the carriageway as illustrated within Figure 4.1

The Australian Standard for Parking Facilities Part 1: Off-street Car Parking (AS2890.1) states that a car parking space width of 2.5m is required for User Class 2. Therefore, adopting by adopting the specified width outlined within AS2890.1, it is expected that approximately 46 vehicles are able to be accommodated on each side of the driveway, resulting in an overflow capacity of approximately 92 vehicles within convenient walking distance of the site.

The overflow parking area used during major events is shown in Figure 4.2

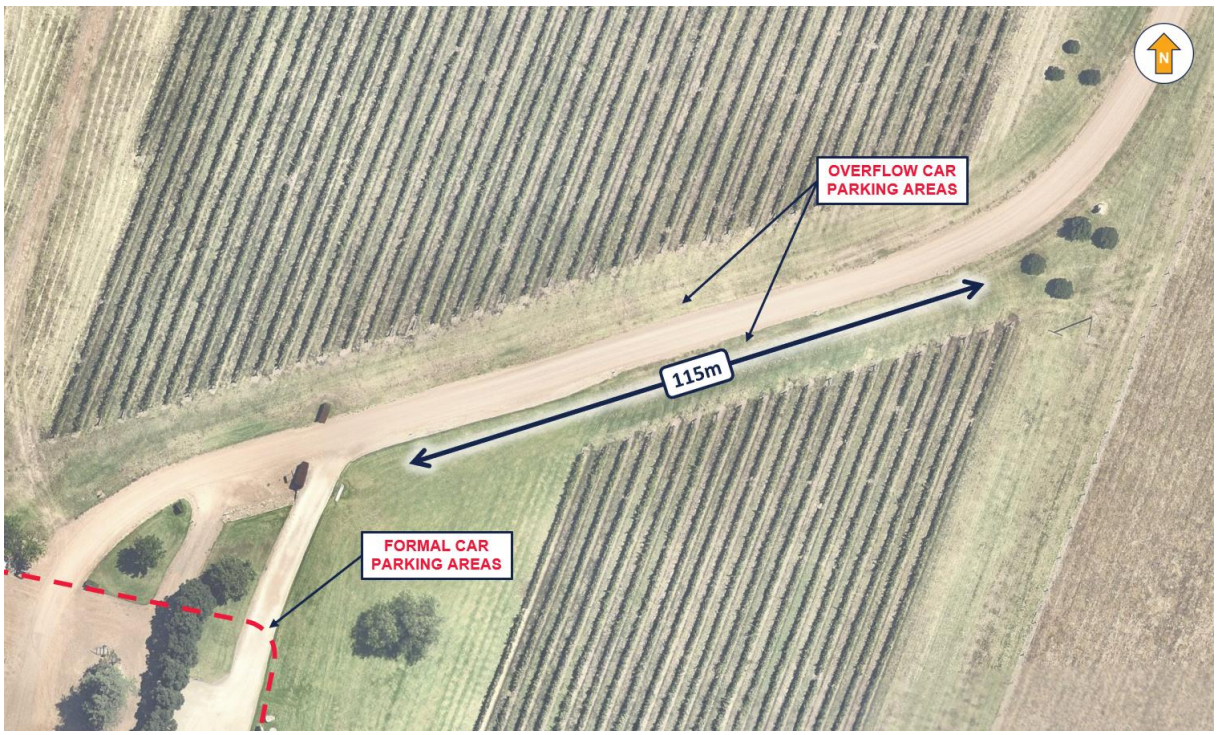

Figure 4.1: Extent of On-Site Overflow Car Parking

Figure 4.2: Overflow Parking Area Along Site Access Driveway

Based on the preceding commentary, the existing provision of on-site parking is considered appropriate noting the following considerations:

- The proposal represents amenity improvements and is not intended to represent an intensification of use outside of major events (e.g. weddings).
- In instances where the capacity of the unsealed car parking areas is exceeded during peak periods, patrons are able to continue to park along the driveway. It is noted that 92 spaces are located within close proximity to the site, with considerable capacity to absorb any additional overflow car parking demands over the remaining length of the driveway.
- Staff parking demands are able to continue to be accommodated undercover at the rear of the store, kitchen and office areas.

4.3 Car Park Design & Layout

No formal linemarked car parking spaces are proposed to be provided on-site, with the existing car parking arrangements intended to be retained.

Given the ample availability of parking on site, it is expected that the on-site car parking arrangements will continue to operate effectively, with satisfactory aisle widths and accessways enabling efficient circulation through the site's internal car parking areas.

4.4 Additional Considerations

4.4.1 Bus Parking and Circulation

It is understood that during major events such as weddings, buses may be organised to transport guests to and from the venue. In instances where buses are required to access the site, they are able to freely turnaround using the existing car parking areas and accessways as indicatively shown in Figure 4.3.

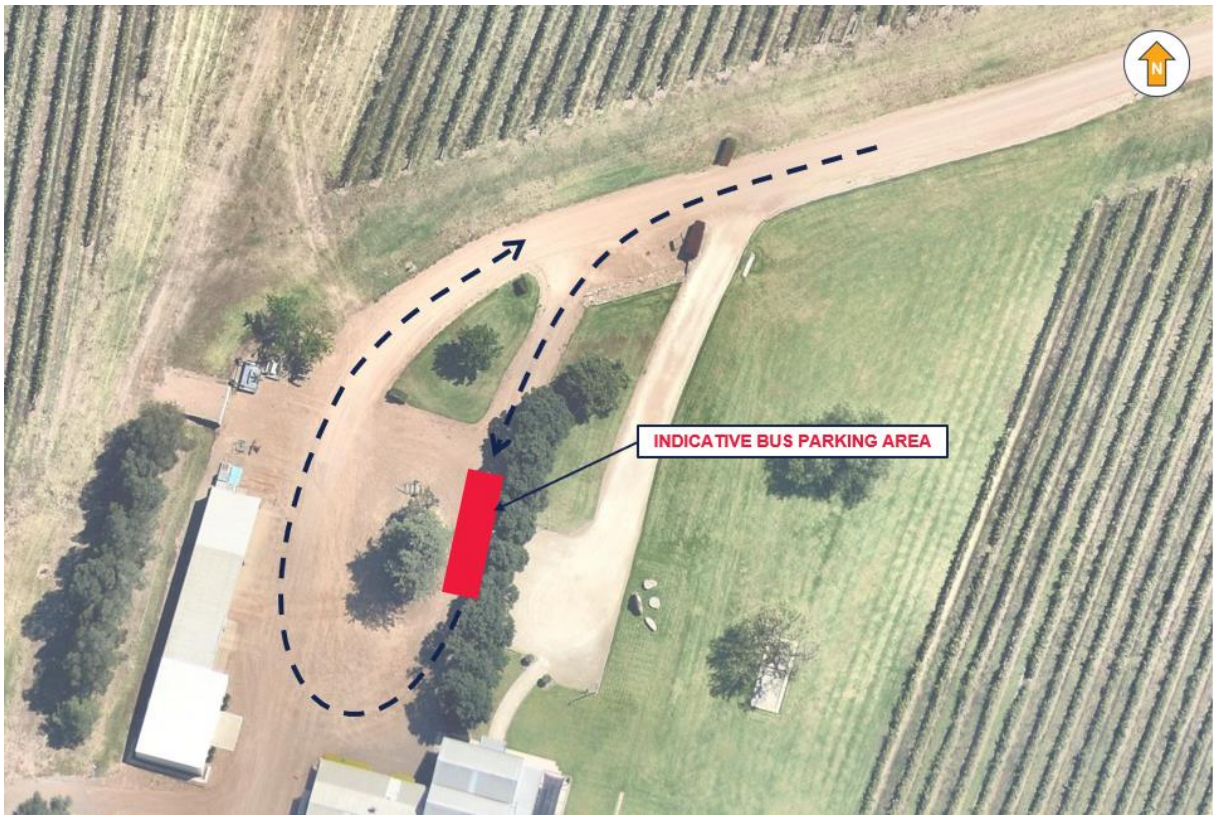

Figure 4.3: Indicative Bus Parking Position and Turnaround Movement

Buses accessing the site are able to enter and exit in a forward direction without the need for reversing manoeuvres or corrective manoeuvres and are therefore considered appropriate.

It is also noted the during major events where guests are transported to site via bus, the overall car parking demand will be greatly reduced resulting in a reduced reliance on the driveway car parking.

4.5 Summary

Based on the preceding discussions and analysis, the existing car parking arrangements are considered acceptable and appropriate owing to the following key considerations:

- During typical operations the cellar door is expected to operate a parking demand in the order of six (6) to eight (8) vehicles at any one time.
- There is ample on-site parking provided for the typical cellar door operations.
- On occasions where there is expected to be up to 200 patrons on site at any given time, the availability of overflow parking is considered adequate to accommodate all peak parking demands.

5 TRAFFIC CONSIDERATIONS

5.1 Traffic Generation

5.1.1 Cellar Door

As outlined in Section 2.2 the proposed expansion of the existing cellar door component is anticipated to result in amenity improvements rather than an intensification of the existing use.

Therefore it is expected that the cellar door will continue to generate traffic to / from the site consistent with existing conditions and is not expected to result in an increase in traffic movements associated with the site.

5.1.2 Marquee / Function Centre

It is noted that the *Roads and Maritime (RMS) Guide to Traffic Generating Developments 2002 (Version 2.2)* and *updated traffic surveys (TDT 2013/04a)* do not specify trip generate rates for a function centre.

Therefore, to gain an understanding of the number of traffic movements anticipated to be generated by the proposal, the following assumptions have been made to determine the likely number of peak hour movements:

- Maximum number of patrons on site at any given time: 200 people.
- All patrons assumed travel to site via private vehicle (i.e. no buses).
- The average occupancy is assumed to be three (3) persons per private vehicle.
- 65% of total car trips would arrive and depart in the same hour.
- Staff movements to / from the site would occur outside of peak periods.

Application of the above factors suggests that the proposed development will generate up to an additional 43 vehicle movements within any one (1) peak hour period, on average.

5.2 Post Development Traffic Volumes

With consideration of the increase in traffic volumes anticipated to be generated by the site as a result of the proposal, it is estimated that the site would generate either one (1) additional entry or exit movement approximately every 1 and a half minutes on average.

5.3 Anticipated Traffic Impacts

The traffic generation estimates outlined within Section 5.1 are considered to be conservative in nature given the existing traffic generation attributable to the site and the simultaneous operation of the cellar door and marquee.

Notwithstanding, the additional traffic anticipated to be generated by the subject site post-development is expected to be readily absorbed by the surrounding road network, with negligible impacts on safety and performance as expected.

6 OTHER CONSIDERATIONS

6.1 Loading Arrangements

As noted previously, the existing loading and waste collection activities associated with the site are proposed to be retained, with the site continuing to be serviced by commercial and waste collection vehicles in line with existing conditions.

6.2 Bicycle Parking

Section 16.6 of the Muswellbrook Shire Council DCP does not specify any statutory bicycle parking requirements for Cellar Door Premises or Function Centre uses, therefore the proposal does not attract a requirement to provide any on-site bicycle parking.

It is expected that any bicycle parking demands would be able to be accommodated within under croft areas on-site, as required.

7 SUMMARY & CONCLUSIONS

This Traffic & Transport Impact Assessment report has been prepared for the proposed development located at the existing 'Two Rivers Winery' premises at 2 Yarrawa Road, Denman.

Based on the discussions and analysis outlined within this report the following key conclusions are derived:

- Only the proposed increased / new land uses have been assessed from a traffic and parking perspective. All existing components not modified as a result of the proposal have been excluded from the foregoing assessment.
- The proposed increase to the cellar door component results in a statutory car parking requirement of 4 spaces. The proposed marquee / function room has been assessed as a 'function centre' under the Muswellbrook DCP and attracts a statutory car parking requirement of 51 spaces. Therefore, the proposal attracts a total requirement to provide an additional 55 spaces.
- The typical car parking demand associated with the cellar door operations peak at approximately six (6) to eight (8) vehicles at any one time, outside of major events.
- The existing unsealed car parking areas are considered to be able to accommodate 30 vehicles, with the grassed verges along the site access driveway able to accommodate overflow car parking demands during peak periods (i.e. weddings, Christmas carols, etc.)
- Upon realisation of the proposal, it is expected that the site would accommodate up to 200 patrons at any given time across the various components of the site.
- In instances where multiple uses / components are operating simultaneously, it is expected that overflow car parking demands would be able to be readily accommodated along the site access driveway, with all parking demands able to be accommodated on-site and away from the Yarrawa Road frontage.
- The proposal is anticipated to generate an additional 43 movements during the site generated peak hour periods. This level of traffic is expected to have a negligible impact on the operation of the surrounding road network.
- The existing loading and waste collection arrangements are to be retained and are not proposed to be modified or altered as part of this development.
- The proposal does not attract any requirement to provide on-site bicycle parking under the Muswellbrook Shire Council DCP.

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