



RedSquare Traffic

Creativity in Transport Engineering

68 Phoenix Park Road, Phoenix Park Traffic and Parking Assessment



Prepared for Cindy Modderman

02 April 2024

Reference J426535/0324

REVISION HISTORY

REVISION NO.	DATE	PREPARED BY	REVIEWED BY	APPROVED FOR ISSUE BY
1.0	02/04/2024	Sachini H.	Dane W.	Dane W.

REDSQUARE TRAFFIC

PLATFORM	CONTACT DETAILS
Website	http://www.redsquaretraffic.com.au
Telephone	03 7036 6734 0415 698 880
Email	mail@redsquaretraffic.com.au
LinkedIn	https://www.linkedin.com/company/redsquare-traffic
Facebook	http://www.facebook.com/RedSquareTraffic
Instagram	http://www.instagram.com/redsquaretraffic
Twitter	http://www.twitter.com/redsquaretraffic
Blog	https://www.redsquaretraffic.com.au/traffic-engineering-blog
ABN	70 656 924 757
ACN	656 924 757

DISTRIBUTION LIST

CLIENT	DATE ISSUED
Cindy Modderman	02 April 2024

The information presented in this document shall remain the property of: **Cindy Modderman** only.



IMPORTANT NOTICE

Unless explicitly stated otherwise in writing, RedSquare Traffic does not accept a duty of care or any other legal responsibility whatsoever in relation to this report, or any related enquiries, advice, or other work, nor does RedSquare Traffic make any representation in connection with this report, to any person other than **Cindy Modderman**. Any other person who receives a draft or a copy of this report (or any part of it) or discusses it (or any part of it) or any related matter with RedSquare Traffic, does so on the basis that he or she acknowledges and accepts that he or she may not rely on this report nor on any related information or advice given by RedSquare Traffic for any purpose whatsoever.

REDSQUARE TRAFFIC

mail@redsquaretraffic.com.au

03 7036 6734 | Suite 36/11 Wilson Street, South Yarra

www.redsquaretraffic.com.au



TABLE OF CONTENTS

1	INTRODUCTION.....	5
1.1	REFERENCES.....	5
2	EXISTING CONDITIONS.....	6
2.1	SUBJECT SITE.....	6
2.2	ZONES & OVERLAYS.....	6
2.3	ROAD NETWORK.....	7
3	PROPOSAL.....	8
4	TRAFFIC & PARKING.....	9
4.1	STATUTORY REQUIREMENTS.....	9
4.2	CAR PARK DESIGN.....	10
4.3	TRAFFIC GENERATION.....	11
5	SUMMARY & CONCLUSION.....	12



LIST OF FIGURES

FIGURE 1: SUBJECT SITE (SOURCE: METROMAP)..... 6

FIGURE 2: PLANNING ZONES (SOURCE: NSW PLANNING PORTAL)..... 7

FIGURE 3: TYPICAL CONFIGURATION OF PHOENIX PARK ROAD 7

FIGURE 4: EXISTING CAR PARKING ARRANGEMENTS 8

FIGURE 5: USE OF CAR PARK MARKING DOTS10



1 INTRODUCTION

RedSquare Traffic has been engaged by [Cindy Modderman](#) ('Client') to prepare a Traffic and Parking Assessment to accompany the Development Application of the proposed Temporary Function Centre (Place of Assembly) at 68 Phoenix Park Road, Phoenix Park ('Subject Site', 'Site').

This package of work includes the preparation of a Transport Impact Assessment report to investigate traffic, parking, and road safety related implications, to consider parking layouts, access, loading and waste collection arrangements, to analyse car/bicycle parking demands together with the adequacy of proposed provisions and to provide transport engineering solutions to mitigate any adverse outcomes on the surrounding road network.

This document has been prepared in accordance with the requirements specified in Austroads Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments and applicable Department of Transport Guidelines.

1.1 REFERENCES

The following documents have been reviewed and referred to in this report:

- Austroads Guide to Traffic Management (AGTM) Part 3: Transport Studies and Analysis Methods.
- Austroads Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments.
- NSW Roads and Traffic Authority Guide to Traffic Generating Developments.
- Maitland Development Control Plan 2011.
- Traffic Engineering and Management, K W Ogden and S Y Taylor, 2017, Section 34.6.
- Australian Standard Parking Facilities Part 1: Off-Street Parking Facilities AS2890.1-2004.
- Australian Standard Parking Facilities Part 3: Bicycle Parking AS2890.3-2015.
- Australian Standard Parking Facilities Part 5: On-Street Parking AS2890.5-2020.
- Australian Standard Parking Facilities Part 6: Off-street Parking for People with Disabilities AS2890.6-2009.



2 EXISTING CONDITIONS

2.1 SUBJECT SITE

Subject Site is located at 68 Phoenix Park Road, Phoenix Park; east of the intersection of Phoenix Park Road and McFadyens Road as indicated via Figure 1. Found within an area under the jurisdiction of Maitland City Council, the land is comprised of 6.1 hectares with an existing building (farm shed) currently attaining access from Phoenix Park Road.

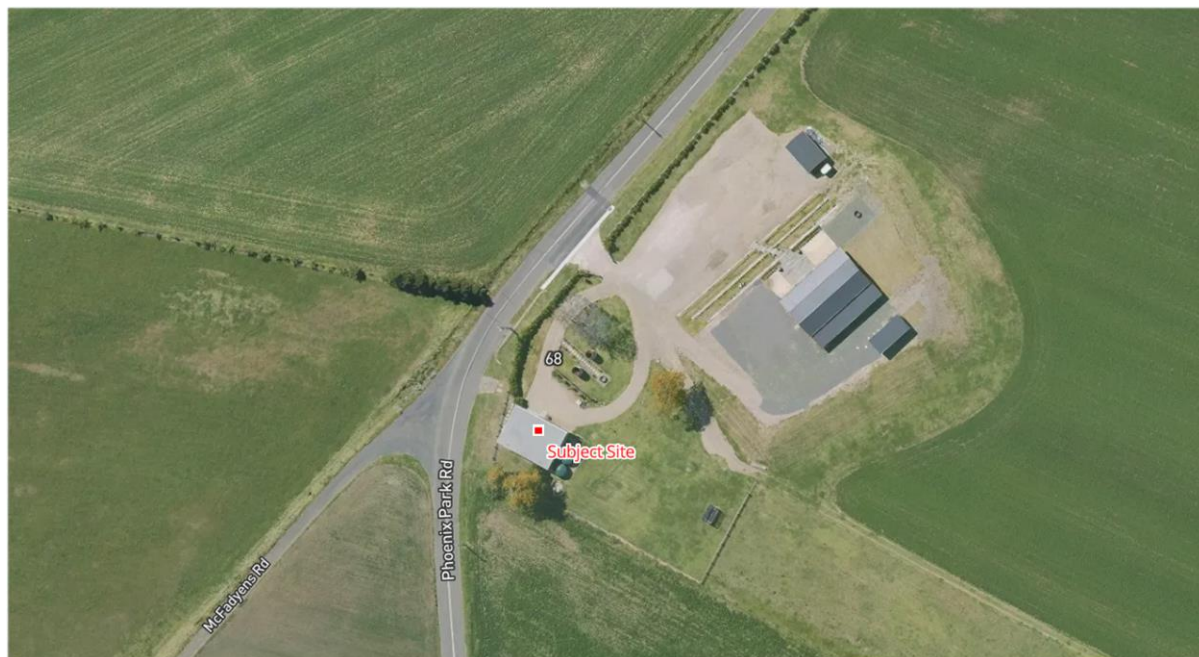


FIGURE 1: SUBJECT SITE (SOURCE: METROMAP)

Refer to the Development Application for further information regarding existing conditions.

2.2 ZONES & OVERLAYS

Property is positioned within a RU1 – Primary Production Zone and falls part of Maitland DCP 2011 (as amended 21 July 2016).





FIGURE 2: PLANNING ZONES (SOURCE: NSW PLANNING PORTAL)

2.3 ROAD NETWORK

Phoenix Park Road offers bi-directional vehicular movements in a single carriageway configuration while offering a trafficable width of approximately 6.2m. The road contains a dual centreline treatment in the immediate vicinity of Subject Site which indicates a prohibition to overtake. Shoulders are unsealed in this road which operates with an 80km/h posted speed limit. Intermittent street light poles are found in the area.



FIGURE 3: TYPICAL CONFIGURATION OF PHOENIX PARK ROAD



3 PROPOSAL

The project aims to develop a function centre within its large existing building (farm shed) and intends to host a range of functions up to 52 times per year for a maximum patron capacity of 80. Opening hours of the facility are expected to be between 9am to 10pm Sunday-Thursday, 9am to 11pm (Friday and Saturday).

Car parking is envisioned to be located on the existing compacted gravel area fronting Phoenix Park Road while additional parking can be facilitated in the paddock area if required. Linemarking treatments are not proposed for the parking area considering the function centre will operate as a temporary land use. Refer to recommendations provided via Section 4 pertaining to the proposed car parking facilities. Presented below is the manner in which car parking has been operating in the past.

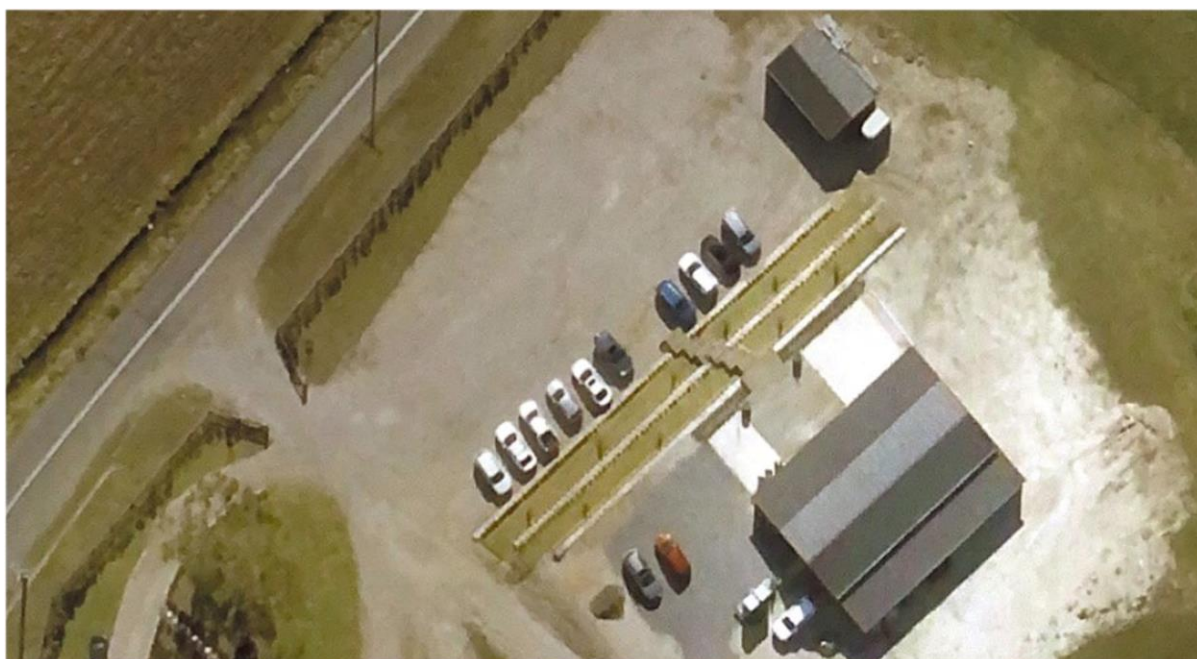


FIGURE 4: EXISTING CAR PARKING ARRANGEMENTS



4 TRAFFIC & PARKING

4.1 STATUTORY REQUIREMENTS

Statutory Car Parking Requirements for this development proposal are outlined under Section C.11 – Vehicular Access & Car Parking of Maitland Development Control 2011.

Maitland DCP 2011 sets out the following as the objectives pertaining to parking.

- To ensure adequate provision of off-street parking to maintain the existing levels of service and safety on the road network;
- To detail requirements for the provision of parking and loading/unloading facilities in association with development in the City of Maitland;
- To provide a consistent and equitable basis for the assessment of parking provisions;
- To facilitate design of parking areas, loading bays and access driveways which function efficiently;
- To ensure that parking areas are visually attractive and constructed, designed and situated so as to encourage their safe use; and
- To acknowledge the traditional lack of parking spaces within areas of historical or architectural significance (Central Maitland, Morpeth) and balance this with the need to facilitate development in order to maintain vitality and vibrancy in such centres.

Based on the rates specified under Appendix A – Car Parking Requirements for Specific Land Uses, the most relevant category is identified as “Places of Public Entertainment” which is allocated with a rate of *1 space per 10 seats*. Given that most patrons of a function centre are likely to arrive together as a group, this rate is considered suitable. This is also considered appropriate due to the regional location of this site in Phoenix Park. Accordingly, a car parking requirement of approximately 8 spaces is triggered.

NSW RTA Guide to Traffic Generating Developments do not offer comparable rates for such land uses. However, the Victorian Planning Scheme provides a rate of 0.3 car parking spaces per patron for Places of Assembly. Applying this rate would trigger a car parking requirement of 27 spaces.

Nonetheless, the demand that is likely to fall between 8 and 27 spaces can be comfortably accommodated by the gravel car parking area shown via Figure 4. RedSquare Traffic understands that providing a sealed car parking area is unnecessary as the function centre is proposed as a temporary land use. However, it is recommended that car park marking dots (Figure 5) are provided in order to formalise the car parking spaces and to assist with the traffic and pedestrian flows.





FIGURE 5: USE OF CAR PARK MARKING DOTS

4.2 CAR PARK DESIGN

With reference to Section 2.3 of the DCP, it is unlikely that the development would generate any queues particularly when vehicles are entering the site. If queues are to be formed during exit, there is ample space within the site to accommodate queues without impacting the external road network. As less than 50 cars are expected at the site, separate entrance and exit driveways are not required.

It is further recommended that if installing marking dots, all car spaces must be dimensioned as 5.5m x 2.6m with an aisle width of 6.7m to comply with the Maitland DCP requirements.



Whilst Section 2.6 of the DCP recommends car parking areas to be constructed with a base course of adequate depth and a sealed surface with bitumen, asphaltic concrete, concrete or interlocking pavers, RedSquare Traffic considers the existing compacted gravel surface suitable for this proposed *temporary* land use.

Given that the area is likely to be dark albeit for the street light pole located close to the site, RedSquare Traffic recommends installing a sign indicating the entry/exit point of the Subject Site facing Phoenix Park Road (both directions). This will assist unfamiliar patrons in observing the location from far and also reduces sudden braking movements along a road with an operating speed of 80km/h.

It is further advised that all car parking areas are appropriately lit in compliance with AS2890.1. Additionally, the aforementioned entry/exit signs should also be illuminated.

4.3 TRAFFIC GENERATION

NSW RTA Guide to Traffic Generating Developments does not offer a directly applicable traffic generation rate for function centres.

Based on the car parking calculations undertaken in Section 4.1, it is likely that up to 27 vehicles will arrive at this location prior to the start of an event. Typically, function centres of this sort observes the arrival of vehicles approximately 1 hour prior to the commencement of the event. This translates to approximately 1 vehicle arriving every 2-3 minutes. This level of traffic generation is understood to be minor in the regional context where the land use is proposed.

Exiting traffic movements will have far lesser impacts as queues (if any) are likely to be formed within the site. The access point is sufficiently wide and contains splays allowing storage of multiple vehicles, if needed. The existing street light pole grants further favourable conditions at this access point.



5 SUMMARY & CONCLUSION

Considering all factors presented via this assessment, it is concluded the site contains ample vacant areas to accommodate the projected car parking demands. It is suggested that the car parking areas are formalised via the use of car park marking dots to support this temporary land use. This measure will assist patrons when parking while also assisting with internal traffic management as well as the safety of those who walk through parking areas, particularly at night. Access point is sufficiently wide and appropriate in its current form to accommodate the projected level of traffic generation. A sign is recommended at the entry/exit point to assist with wayfinding and to improve conditions with respect to road safety.

RedSquare Traffic Pty Ltd



Dinith (Dane) Wanninayake

Principal Traffic Engineer

DTP/TMR Accredited Senior Road Safety Auditor

DTP Recommended Safe System Assessor

02 April 2024

