



Tel: 03 5215 1080
www.solution1traffic.com.au
info@solution1traffic.com.au
ABN 18 162 361 042

TRAFFIC IMPACT ASSESSMENT

163 O'KANES ROAD, NUMURKAH VIC 3636

Proposed Subdivision Development

Prepared for:	Onleys
Date Prepared:	July 2021
Revision:	1.0
Moira Shire Development Application #:	TBA

CONTENTS

INTRODUCTION	3
BACKGROUND AND EXISTING CONDITIONS	3
SUBJECT SITE LOCATION.....	3
PLANNING ZONES & OVERLAY	4
EXISTING ROAD NETWORK	5
NUMURKAH ROAD.....	5
NARING ROAD	5
PUBLIC TRANSPORT	6
PROPOSED DEVELOPMENT	7
INTERNAL ROAD NETWORK	7
PRINCIPAL PUBLIC TRANSPORT NETWORK (PPTN).....	8
TRAFFIC IMPACT ASSESSMENT.....	9
SURROUNDING ROADS TRAFFIC COUNTS	9
<i>Goulburn Valley Highway Traffic Counts (2020)</i>	9
CONCLUSIONS	10
APPENDIX A: PROPOSED SUBDIVISION PLANS.....	11

TABLES

TABLE 1 PUBLIC TRANSPORT PROVISION	6
--	---

FIGURES

FIGURE 1 SUBJECT SITE LOCATION.....	3
FIGURE 2 SURROUNDING SUBURBS	4
FIGURE 3 SUBJECT SITE PLANNING ZONES & OVERLAY	4
FIGURE 4 NUMURKAH ROAD/TOCUMWAL ROAD/NARING ROAD INTERSECTION FACING NORTH	5
FIGURE 5 NUMURKAH ROAD/TOCUMWAL ROAD/NARING ROAD INTERSECTION FACING EAST	5
FIGURE 6 NUMURKAH STRATEGY PLAN MAP	7

INTRODUCTION

Solution 1 Traffic Engineers was engaged by Onleys to prepare a Traffic Impact Assessment at 163 O’Kanes Road, Numurkah VIC 3636. This report will assess the implications of the proposed development changes on existing traffic conditions surrounding the site. The following items have been included in the subsequent sections of this report:

- ◆ public and active transport accessibility at the site;
- ◆ proposed development summary;
- ◆ expected traffic generation and impact; and
- ◆ conclusions of the above findings.

During the course of preparing this assessment, the subject site and its environment have been inspected, and all relevant traffic and parking data collected and analysed.

BACKGROUND AND EXISTING CONDITIONS

Subject Site Location

The proposed subject site is located on O’Kanes Road in the suburb of Numurkah, which is approximately 37km north of Shepparton and falls within the Shire of Moira. The proposed subdivision is bounded by O’Kanes Road to the east, Numurkah Road to the west and Naring Road to the south, as shown in Figure 1 below. The subject site is addressed as 163 O’Kanes Road, Numurkah VIC 3636.

The use of land surrounding the site is currently vacant with no developments available.



Figure 1 Subject Site Location

EXISTING ROAD NETWORK

Numurkah Road

Numurkah Road is a local road travelling northbound and southbound, connecting the subject site to Numurkah Town Centre. Numurkah Road provides one lane in each direction to the west of the proposed subdivision. Assessing the road network, no pedestrian footpaths or on-street parking are available in either direction. A 100km/hr posted speed limit applies to this road.



Figure 4 Numurkah Road/Tocumwal Road/Naring Road Intersection facing north

Naring Road

Naring Road is a local road travelling eastbound and westbound, located on the southern border of the proposed development. Naring Road provides one lane in each direction with no pedestrian footpaths or on-street parking available on either boundary. A 80km/hr posted speed limit applies to this road.

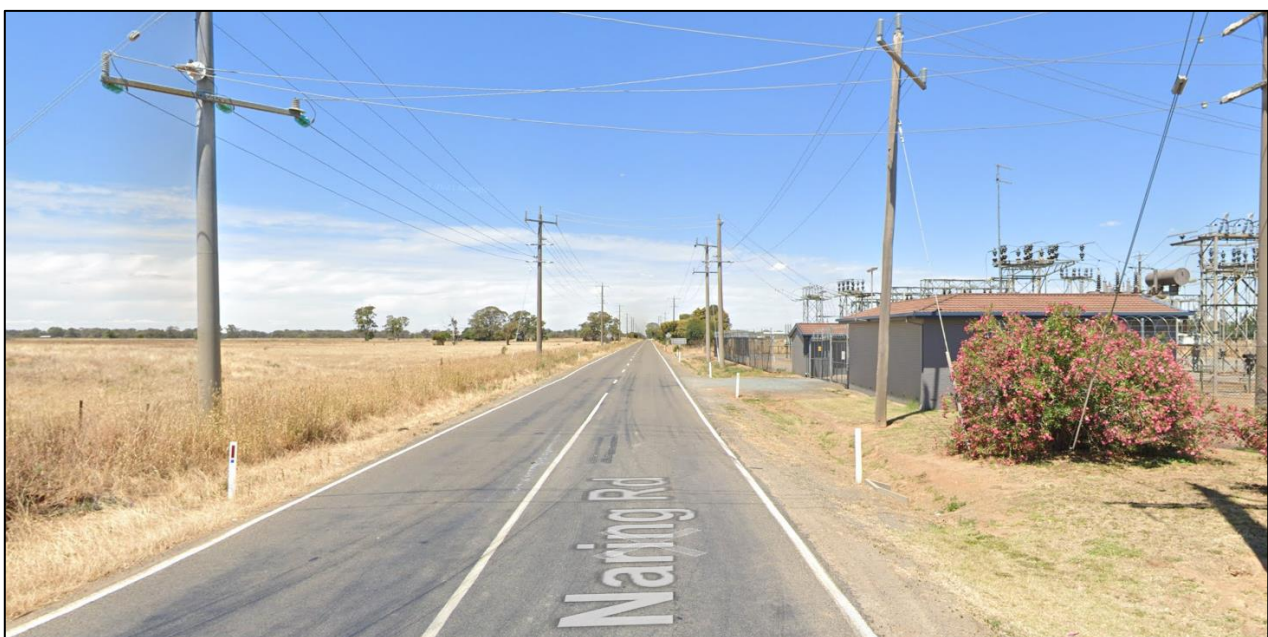


Figure 5 Numurkah Road/Tocumwal Road/Naring Road Intersection facing east

PUBLIC TRANSPORT

The subject site is in an area that has limited access to public transport services that is within walking distance to the site. The closest public transport stop to the site, Quinn Street bus stop, is approximately 2600m away which is a 32-minute walk. This stop provides 2 bus routes with limited services available throughout the day.

Table 1 below display the bus services available within Numurkah.

Service	Location	Distance from subject site [m]	Walking time [min]	Origin	Destination	Route Description	Number of Service		
							AM Peak (7-9 am)	PM Peak (4-6 pm)	Off peak
BUS SERVICES									
Griffith - Melbourne	Quinn St bus stop	2600	32	Griffith	Melbourne	Via Shepparton	4 services per day		
				Melbourne	Griffith		4 services per day		
Mildura - Albury	Quinn St bus stop	2600	32	Mildura	Albury	Via Kerang & Shepparton	1 service per day		
				Albury	Mildura		1 service per day		

Table 1 Public Transport Provision

Assessing the table above, the site has limited access to public transport services with only 2 public transport options available. However, considering the number of services provided and distance to the site, it is unlikely for residents and visitors will be using these services.

PROPOSED DEVELOPMENT

The proposed development for the subject site located at 163 O’Kanes Road, Numurkah is for the purpose of a residential subdivision. As shown in the site plans in Appendix A, the development will comprise of 67 lots with 3 proposed roads to be implemented throughout the subdivision.

With accordance to the Numurkah Strategy Plan Map (dated 30th April 2010), the proposed subdivision is depicted as Area I and is to be developed for both long term low density residential and short term low density residential developments, as shown below.

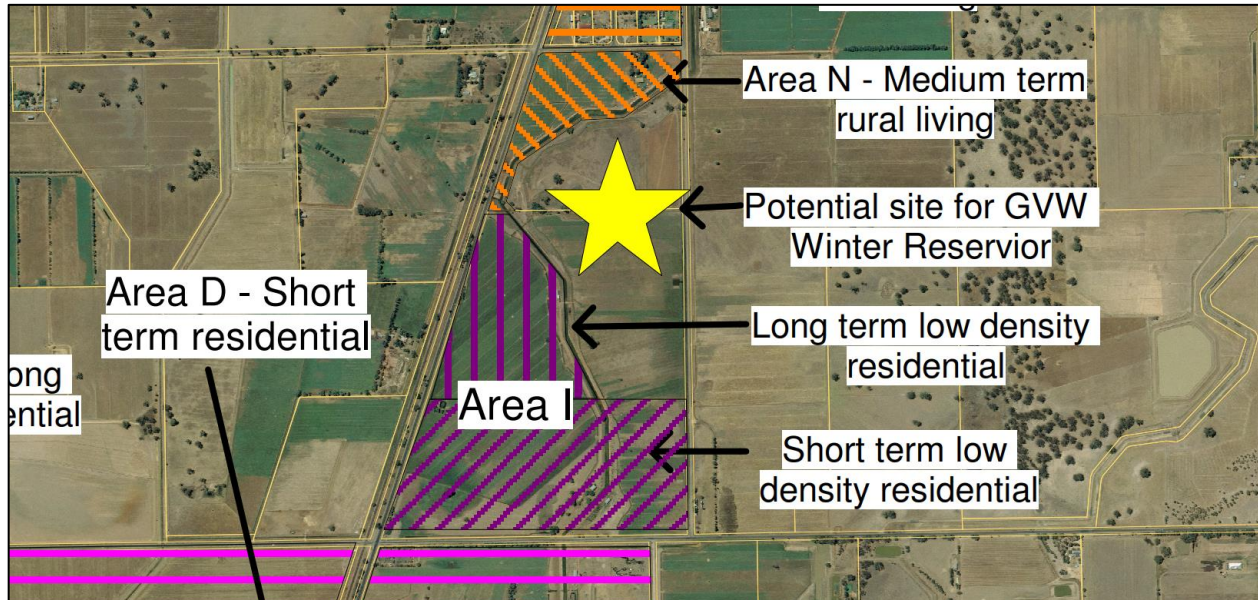


Figure 6 Numurkah Strategy Plan Map

Internal Road Network

As shown in Appendix A, 3 roads are proposed to be developed to connect dwellings to major access routes. The proposed subdivision will have 4 major access points comprising of 3 accesses via Naring Road to the south and 2 access points via Numurkah Road to the west.

PRINCIPAL PUBLIC TRANSPORT NETWORK (PPTN)

The Principal Public Transport Network (PPTN) is a collection of maps that highlights areas where a reduced parking rate will apply. If a site falls within the highlighted area, even if it covers part of the land, the reduced parking rates which are specified in Column B of Table 1 in Clause 52.06 of the respective Council Planning Scheme will be used to determine the parking space required for the development's land use. In the case where the site does not fall within the highlighted PPTN area, the rates under Column A of Table 1 in Clause 52.06 will be utilised.

As the site at 163 O'Kanes Road, Numurkah VIC 3636 and falls outside of Victoria's PPTN Map, the site is not classified as a PPTN area. As a result of this, Column A in Clause 52.06 will be used to determine the number of parking spaces required for the development. In the case where the land-use is not specified within the Council's Planning Scheme, the rates found in the RMS Guide to Traffic Generating Development (2002) document will be utilised.

TRAFFIC IMPACT ASSESSMENT

As the proposed subdivision is expected to contain dwelling developments in the future, there is to be increased residential traffic onto Naring Road and Numurkah Road.

Through observation of the RMS Guide to Traffic Generation Developments (2002), the traffic generation rates for dwellings are outlined. For the purpose of determining the maximum traffic generated from the dwellings, the rate for larger unit dwellings and townhouses that contain 3 or more bedrooms is utilised and is as follows;

Daily Vehicle Trips = 4 - 5 per dwelling
Weekday peak hour vehicle trips = 0.4 - 0.5 per dwelling

As it is likely that there will be a total of 67 dwellings on-site (1 dwelling per lot), the expected daily vehicle trips will range from 268 – 335 trips and the weekday peak hour vehicle trips will range from 27 – 34 trips. These rates are likely to vary depending on the vehicle ownership of each resident however, the trips generated from the site are expected to be quite low. It is expected that the proposed development will cause little to no congestion issues for vehicles that are travelling along Numurkah Road and Naring Road. With an anticipated increase of 335 daily trips on the surrounding road network, no upgrade works to roads and intersections are required.

Considering the location of the subdivision, a directional split of 75% of trips to the south and 25% of trips to the north is expected as the majority of residents will be travelling towards the Numurkah Town Centre for recreational and commercial purposes.

Surrounding Roads Traffic Counts

To determine the traffic impact the proposed development will have on the existing road network, the latest traffic counts for the roads that surround the site is obtained via VicRoads Traffic Volume Open Data Hub. Assessing the traffic data for Numurkah, the only available traffic counts available is for the Goulburn Valley Highway and is as follows;

Goulburn Valley Highway Traffic Counts (2020)

The latest traffic counts for the Goulburn Valley Highway records an Annual Average Daily Traffic (AADT) count of 5200 vehicles in both southbound and northbound direction with 800 of these vehicles being heavy vehicles. Considering that the AADT count for Goulburn Valley Highway was calculated during the COVID-19 pandemic, the daily traffic count of this road is expected to be much higher.

CONCLUSIONS

Based on the assessment presented in this report, it is considered that:

- ✦ The proposed development 163 O'Kanes Road, Numurkah VIC 3636 is for a subdivision.
- ✦ The site has limited access to the local area through public transport.
- ✦ The site has walkability score of 8, which indicates that "almost all errands require a car". This score provides a lower ranking to the average Melbourne metropolitan score of 57 out of 100.
- ✦ When considering the land use and location of the site, it is likely for trips to and from the site to be direct.
- ✦ The proposed development will generate additional, but lower levels of trips throughout the day. It is expected that these trips can be accommodated at the nearby intersections without affecting intersection performance or increasing delays and queues.

In conclusion, this study indicates that the proposed development is not envisaged to have adverse impacts on the surrounding traffic conditions. Therefore, the proposed development should be supported on traffic grounds.

APPENDIX A: PROPOSED SUBDIVISION PLANS

