



PROPOSED RESIDENTIAL REZONING 69B HARVEY STREET, ANGLESEA

Transport Impact Assessment Report



efficient safe reliable    

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1 Introduction

1.1 Overview

Planning approvals are being sought for the rezoning of land located at 69B Harvey Street in Anglesea. The Barwon Water asset known as Anglesea Basin occupies much of the site, it has been made redundant by other water service infrastructure and the proposal seeks to reclaim the site and subdivide it into a Reserve and 7 residential lots.

To assist in the consideration of the application, ESR Transport Planning has been engaged to assess the transport implications of the proposal.

1.2 Scope of This Report

This report documents a transport impact assessment which investigates the following:

- Existing transport conditions in the vicinity of the site.
- Statutory transport planning requirements.
- Traffic movements generated by the proposed land use.
- Site access arrangements.
- Anticipated impacts on the surrounding road network.

1.3 Referenced Information

- Plan of Subdivision prepared by TGM Group dated 14/11/16.
- An inspection of the site and surrounds on Friday 24/04/15.
- Surf Coast Planning Scheme.
- Institute of Transportation Engineers (ITE), 2012, 9th Edition, *Trip Generation Manual*.
- Local Government Infrastructure Design Association, 2014, *Infrastructure Design Manual*.
- Public Transport Victoria, maps and timetables (www.ptv.vic.gov.au).
- Roads and Traffic Authority (RTA), 2002, *Guide to Traffic Generating Developments*.
- VicRoads, *Arterial Road Traffic Volumes*, (www.vicroads.vic.gov.au).
- VicRoads, *Crashstats database*, (www.vicroads.vic.gov.au).

1.4 Abbreviations

- Council Surf Coast Shire Council
- kph kilometres per hour
- m metres
- vph vehicles per hour
- vpd vehicles per day

2 Existing Conditions

2.1 Site

The site is irregular in shape and is bound by Parker Street, Harvey Street and Sparrow Avenue. Anglesea Basin occupies most of the site with a shed (previously occupied by the CFA) and a dwelling located within the western part of the site. These buildings have vehicular access from Harvey Street via gravel driveways. The site is zoned Public Use Zone – Service of Utility (PUZ1) while surrounding land is General Residential Zone (GRZ1) with nearby properties predominately residential dwellings.

Figure 2.1 Subject Site and Surrounds



Image Source: Nearmap

2.2 Road Network

Roadways in the vicinity of the site are classified as local access roads and subject to default 50kph speed limits.

Harvey Street has a 20m road reserve with a 5.5m wide pavement, narrow gravel shoulders and vegetated nature strips¹.

Parker Street has a 15m road reserve with a kerbed 6m wide pavement and vegetated nature strips¹.

Sparrow Avenue has a 20m road reserve with a 6m wide gravel carriageway and vegetated nature strips¹.

¹ Dimensions approximate.

Figure 2.2 Harvey Street (facing west, site on right)



Figure 2.3 Parker Street (facing west from Sparrow Avenue, site on left)



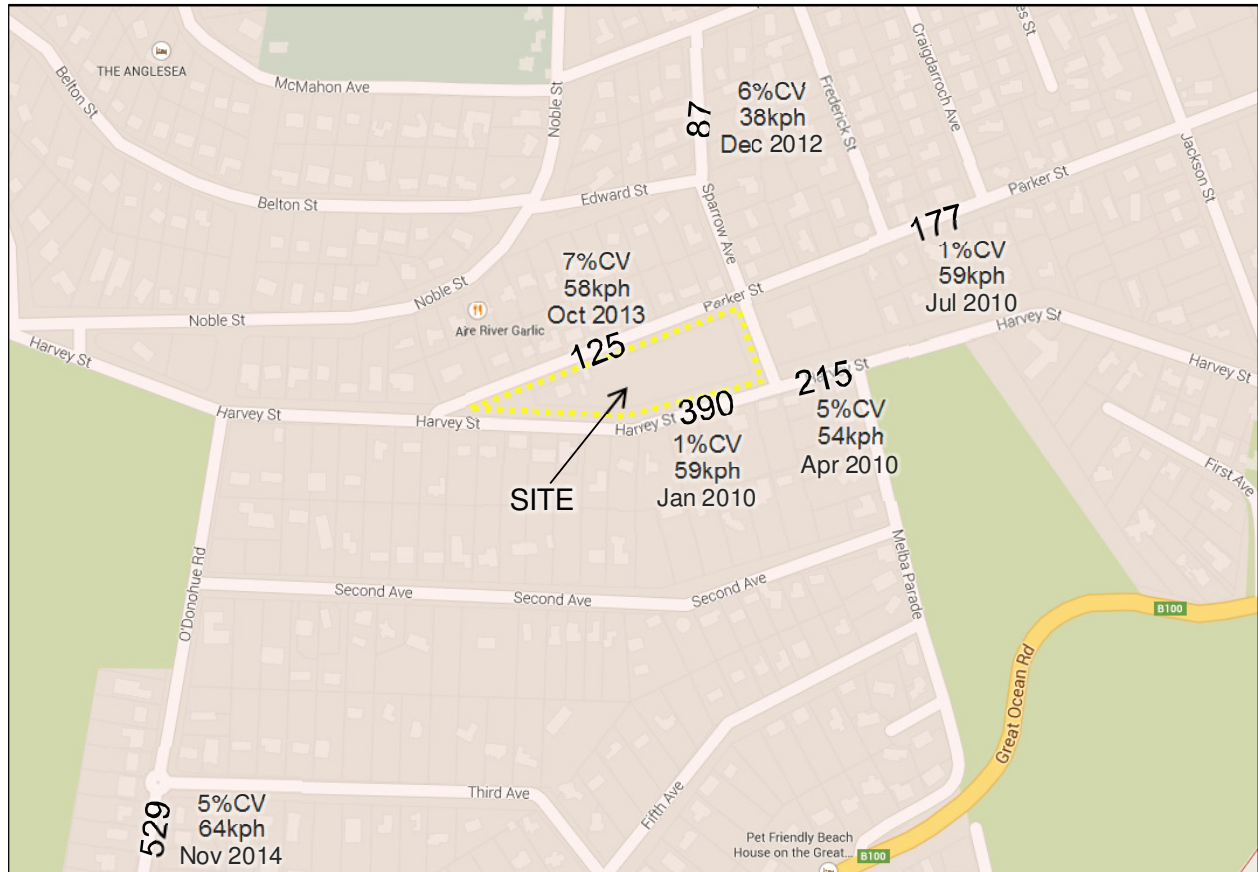
Figure 2.4 Sparrow Avenue (facing north from Harvey Street)



2.3 Traffic Volumes

Council has provided traffic volume and speed survey data for roads in the vicinity of the site as shown in Figure 2.5.

Figure 2.5 Daily Two-Way Traffic Volumes, Percent Commercial Vehicles (CV) & 85th Percentile Speed



Source: Surf Coast Shire Council.

Key outcomes:

- Traffic volumes in the vicinity are relatively low.
- There is evidence that volumes increase significantly during summer periods.

2.4 Accident History

A review of road accidents in the site's vicinity has been undertaken using VicRoads Crashstats database which includes accidents reported to police which resulted in personal injury. The review investigated Harvey Street (Pickworth Drive – Great Ocean Road), Parker Street (entire length), Sparrow Avenue (entire length) for the last available five year period (01/01/09 to 31/12/13). In that time, no accidents were recorded providing no evidence of significant road accident activity in the site's vicinity.

2.5 Car Parking

Informal on-street car parking opportunities are available throughout the local road network either parallel to kerbs or along roadside shoulders. Very few vehicles were observed parking on-street in the vicinity of the site during the afternoon of Friday 24/04/15. Nearby residential dwellings typically have off-street parking provided.

Parking is provided within the roadside verge adjacent the existing site buildings accessed directly from Harvey Street.

2.6 Pedestrian and Cyclist Facilities

Footpaths or dedicated cycle facilities are typically not provided within the nearby road network. Pedestrians typically utilise the edge of roadways in these circumstances.

2.7 Public Transport

Town bus services do not operate within Anglesea. V/Line bus services operate along the Great Ocean Road between Warrnambool and Geelong stopping at Anglesea and connecting with passenger rail services to Melbourne at Geelong station. The nearest stop is a walk distance of approximately 1.5km from the site.

3 Proposal

The proposal involves rezoning of the site to the General Residential Zone. A subdivision design indicates a future provision of 7 residential lots plus a Reserve in the site's western end (for the purpose of Barwon Water's continued use). Of these, Lot 1 encompasses an existing dwelling. Therefore, 6 new residential dwellings may be constructed on-site following its subdivision. It is understood that development of each residential lot would need to go through its own Planning Permit approval process.

Refer Plan of Subdivision attached in Appendix A.

4 Transport Network Layout Assessment

4.1 Lot Access - General

The current plan of subdivision does not incorporate any new roads or accessways with all lots having frontage to both Harvey Street or Parker Street.

It is consistent with their role and function that these roads are utilised for access to the created lots and the decision not to create any new access roads is supported.

4.2 Lot Access – Sight Lines

As is evident by examples in close proximity to the site, residential streets within Anglesea can be characterised by densely vegetated roadside areas. Such vegetation can be restrictive to sight lines between driveways and oncoming traffic. Figure 4.1 shows some examples of this situation on Parker Street opposite the site.

Figure 4.1 Examples of Restricted Sight Lines from Driveways on Parker Street



For the most part, vegetation along the site's road frontages is scattered. With some removal and trimming, good lines of sight from lot driveways is anticipated.

At a bend in Harvey Street adjacent proposed Lots 2 & 3, the roadway bends and there is dense vegetation. An Anglesea Grey Gum is to be retained in this location. As shown Figure 4.2, sight distance around the bend is currently restricted.

Access to Lots 2 & 3 could be via Parker Street avoiding any sight distance issues. However, if lot access is to be via Harvey Street, it should be well sited to avoid impacting the Grey Gum whilst providing safe sight lines. Provided some of the vegetation at vehicle height can be cleared, it may be most appropriate to locate driveway access in the middle of the bend, therefore providing good lines of sight from the bends apex in both directions. Otherwise, a driveway location maximising separation from the bend would be the next most appropriate treatment. Given development of each residential lot would go through its own Planning Permit approval process, such details can be resolved at that time.

Figure 4.2 Existing Sight Line Restrictions around Harvey Street Bend



5 Traffic Assessment

5.1 Traffic Generation

Guidance on the likely traffic generating characteristics of residential dwellings has been sought from the Roads and Traffic Authority "*Guide to Traffic Generating Developments*" (2002) and the Institute of Transportation Engineers "*Trip Generation Manual*" (2012). These sources indicate that single lot dwellings generate traffic at the following rates:

- AM peak hour, 0.85vph / lot, 25% entering, 75% exiting.
- PM peak hour, 1.0vph / lot, 65% entering, 35% exiting.
- Daily, 10vpd / lot, 50% entering, 50% exiting.

On this basis, residential development of the subdivision could be expected to generate in the order of 6 additional vehicle movements in the peak hour and 60 additional vehicle movements over a 24 hour period.

It is worth noting that as a tourism destination, Anglesea's population varies by time of year and residential traffic generation may be lower than above for a large part of the year when a proportion of local dwellings are unoccupied.

5.2 Traffic Distribution

The direction in which vehicles travel to and from the site is influenced by a variety of factors including the site's location, configuration of access, characteristics of the surrounding road network and trip purpose.

After reviewing these factors it is considered reasonable to expect site traffic will disperse throughout the local road network with the majority travelling to/from The Great Ocean Road using either Harvey Street or Parker Street. O'Donohue Road could also be expected as a popular access route. Assuming up to 40% of development traffic are concentrated along any one of these roadways, this would account for a potential increase in traffic volumes of up to 3vph during peak times and 24vpd over 24 hours.

5.3 Roadway Capacities

The Planning Scheme and Infrastructure Design Manual set out a range of criteria for how new residential street networks should be planned. They include guidance of indicative maximum traffic volumes which are significantly less than roadway capacity but are considered suitable targets for the roadways role and function. An indicative maximum of between 1,000-3,000vpd is specified for local streets. Based on existing traffic volumes and the traffic generation assessment above, it is clear that post development traffic volumes on the nearby road network will be well below local street indicative maximums.

5.4 Traffic Impacts

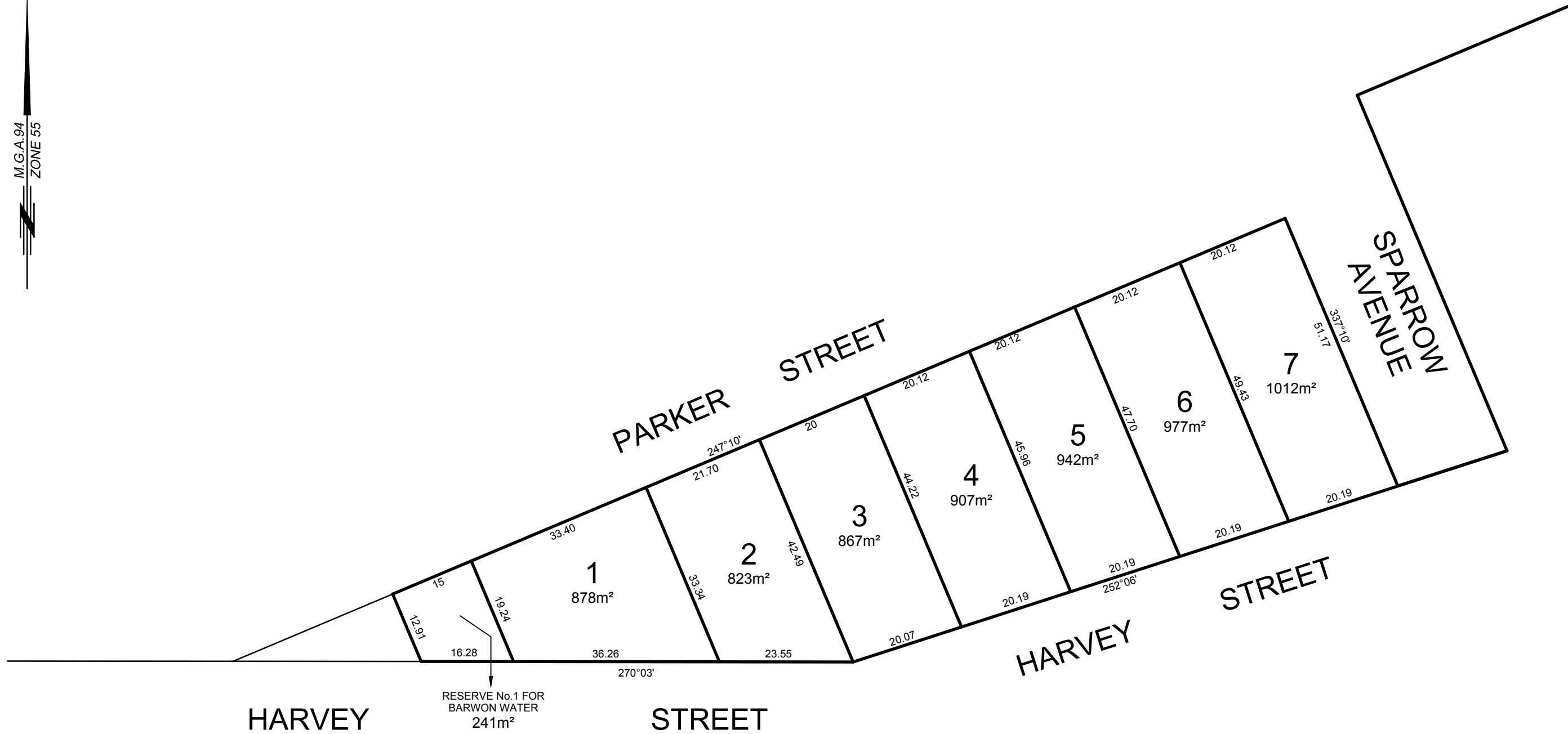
Given all of the above, it is considered that traffic generated by residential development of the site can be easily accommodated by the local road network without significant impact to its safe and efficient operation.

6 Conclusions


The following conclusions have been made within this report:

1. Proposed lot access via either Parker Street or Harvey Street is consistent with the role and function of these roads.
2. Residential development of the site is anticipated to generate up to 3 vehicles per hour and 24 vehicles per day additional vehicular movements along any one nearby road.
3. The current subdivision design is not expected to have any significant impact to the safe and efficient operation of the surrounding road network.

Appendix A Plan of Subdivision



Rev.	Revision	Date
-	-	-

<div>PLAN OF SUBDIVISION</div> <div>69B HARVEY STREET ANGLESEA, 3230</div>	Job Number: 13629-05 Sheet: 1 of 1 Date of Survey: -		Date of Issue 14/11/16
	<div>LENGTHS ARE IN METRES</div> <div>7.50 0 7.50 15 22.50 30 37.50</div> <div></div> <div>1:750</div>		At Size A3
	Survey: -	Drawn: AD	Checked: CM
	-	DWG: 13629-05-PP	