

**Hill Top Planners**

**Proposed Riverside Oyster Reach  
Residential Estate  
Banyula Drive Old Bar**

**Traffic Impact Study**

**FINAL REPORT**

**Prepared by**

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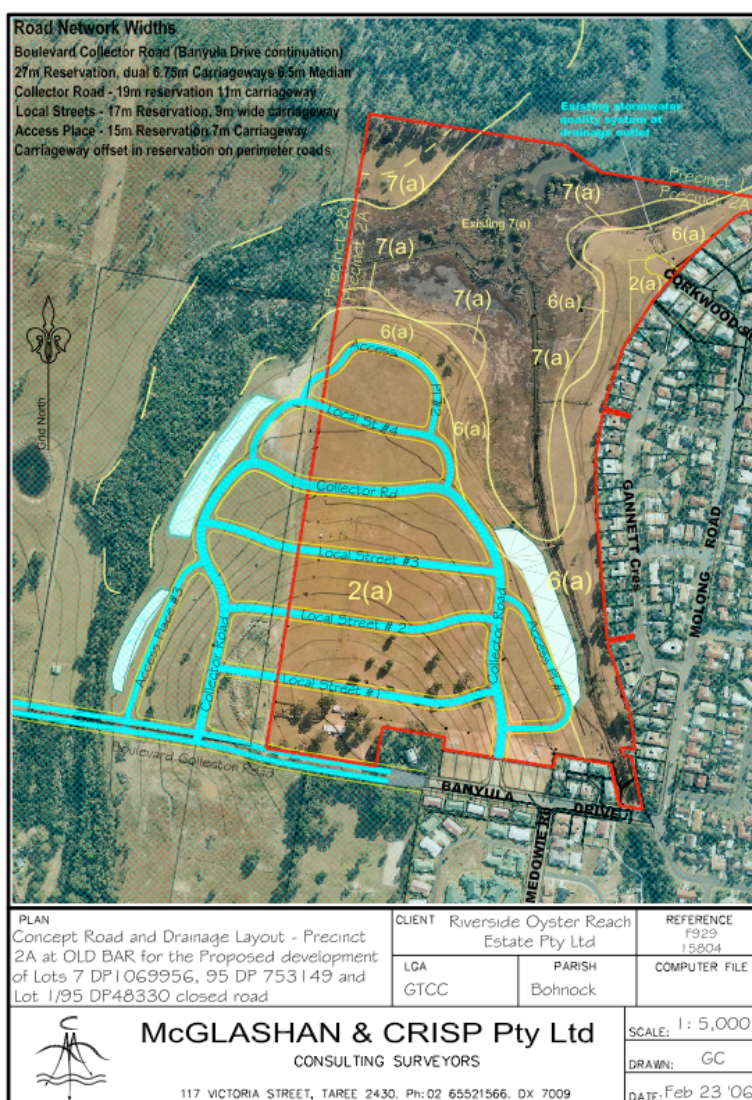
## 1. INTRODUCTION

This report deals with the traffic impacts of a proposed residential 98 Lots residential estate, which forms part of an overall layout that will ultimately accommodate 195 subdivided lots on DP 1069956.

The lots are located north of Banyula Drive, Old Bar west of Seasound Close. Vehicles traveling to and from Taree will journey via Old Bar Road and thence along Medowie Road and Banyula Drive. Subsequent development of lands to the west of the site (Precinct 2B) will see Banyula Drive extended to provide a linkage to Old Bar Road east of Harrogate Lane.

## 2. SITE

The site of the proposed residential development is shown in the site plan prepared by McGlashan & Crisp Pty Ltd and is presented below:



### 3. ACCESS

Access to the proposed 98 Lot development will be via a new road off Banyula Drive, which is 13.5 metres wide. This new road will be 11metes wide and will operate as a local collector when the development of all 195 lots has been completed.

### 4. INTERSECTION SIGHT DISTANCE

Intersection sight distance requirements are specified in the Austroads Guide to Traffic Engineering Practice (GTEP) Part 5 2005. These requirements are detailed in Table 4-2 below:

**Table 4-1: Sight Distance Requirements from Austroads GTEP Part 5 2005**

Design Speed Km/h	SISD – Safe Intersection Sight Distance (1.05m to 1.05m)	
	Minimum 2 secs	Desirable 2.5 secs
50	89	96
60	113	121
70	140	149
80	170	181
90	203	215
100	240	253

The new access road is within an existing residential area with a speed limit of 50 kph. From Table 4-1, for an 85<sup>th</sup> percentile speed of approximately 40kph, sight distance will need to be a minimum of 89 metres in both directions. The vertical alignment of Banyula Road in the area of the access to the proposed development is relatively flat. The proposed junction will meet the given sight distance requirements in both directions.



*Existing intersection of Banyula Drive and collector road*

## 5. TRIP GENERATION AND DISTRIBUTION

### Trip Generation – 98 Lots

RTA Guide to Traffic Generating Developments recommends that the following daily trip generation rates be used for the land use components included in the Southern Portion:

	Unit	Daily	Peak Hour
Dwelling Houses	Dwelling	9	0.85

The trip generation rates discussed above have been used to derive predicted trip generation from the proposed 98 Lots. These trips are presented in Table 5-1 below:

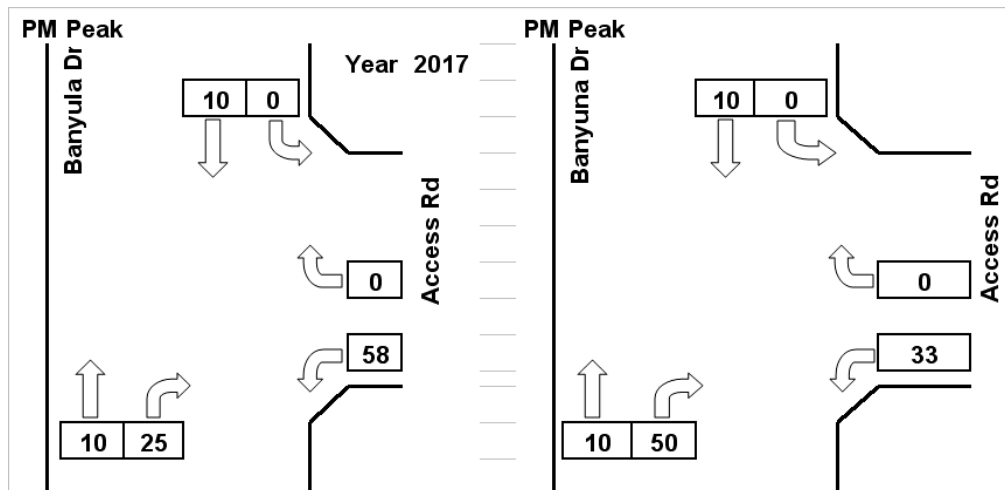
**Table 5-1: Predicted Trip Generation – Proposed 98 Lots**

Component	#	Unit	Trip Rate	Total Trips Peak Hour	
				AM	PM
Residential Estate	98	Dwellings	0.85	83	83

### Discussion

## 6. PREDICTED PEAK HOUR TRAFFIC FLOWS – FULL DEVELOPMENT

The predicted peak hour trips generated by the full development of the Southern Portion are detailed in Figures 9-1 to 9-2 below:



**Figure 6-1: Predicted AM and PM Peak Hour Trip Distribution**

## 7. DISCUSSION

The subject development will generate additional 83 vehicle movements at the AM & PM peak hour. It is estimated that 60% of these movements will use Old Bar Road west of Medowie Road. This will add an additional 50 vehicle movements during the peak hour, equivalent to one movement per minute. Peak traffic flow on Old Bar Road has been assessed by Maunsell/Aecom (*Old bar Precinct 2B Rezoning - Final Traffic Report January 2006*) as between 400 - 600vph with average daily movements of 5500 vpd. The proposed development of Precincts 1, 2B, 3 & 4 will increase this to above 12000vpd. Precinct 2A(155 lots) is assessed at generating 800 vpd while Precincts 1, 2B, 3 & 4 will generate 30200 vpd.

Old Bar Road west of Medowie Road is a two lane road of a good rural standard with a capacity to accommodate up to 1000 vph. June 2005 traffic counts show AM & PM peak flows peaking at 682 vph. This is well within the operational capacity of the existing road.

The proposed 98 lot development will generate an additional 50 vehicle movements on Old Bar Road during the peak hour, resulting in peak flows on Old Bar Road increasing to 732vph. Allowing a 2% increase in traffic growth over the period 2005 - 2017, peak hour flow would be 892 vph in 2017. This would not exceed the capacity of the road, or result in a lowering of the level of service provided by the road.

It is concluded that the proposed 98 lot subdivision will not generate sufficient traffic to require any upgrading works to be undertaken on Old Bar Road, or any local roads.

## 8. RECOMMENDATION

Accordingly it is recommended that the proposed development be approved based on this assessment of Traffic Impact issues.