

APPENDIX 5

Traffic Impact Study

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TRAFFIC IMPACT STATEMENT

FOR

SUBDIVISION OF PART PORTIONS 24, 25 & 88 PARISH OF BEGA &
PORTION 158 PARISH OF WALLAGOOT

WALLAGOOT LANE

JELLAT NSW

FOR

JELLAT PASTORAL COMPANY PTY LTD

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1. INTRODUCTION

This report has been prepared at the request of Mr Michael Collins of Caddey Searl and Jarman - Surveyors on behalf of the Jellat Pastoral Company Pty Ltd.

The report represents a Traffic Impact Statement with respect to a proposed development application to be lodged with Bega Valley Shire Council and is initially to be reviewed by Planning NSW.

The application is for a proposed concessional lot subdivision of the existing 4 parcels of land. The subdivision will comprise 6 concessional allotments, 1 agricultural allotment and 1 residual allotment of varying land area.

The report addresses current peak traffic flows for the existing road and the peak traffic flows generated by the proposed subdivision, in relation to the intersection of the proposed subdivision access road with Wallagoot Lane.

2. SITE DETAILS

2.1 Site Location

The site is described as part Portions 24, 25 and 88 Parish of Bega and Portion 158 Parish of Wallagoot.

The site of the subdivision is located approximately 500 metres south of Tathra Road on Jellat Jellat flat, approximately 6 kilometres east of Bega township.

Please refer Figure 1.

2.2 Site Description (existing)

The site contains 2 existing residences.

The land straddles Wallagoot Lane and in part fronts Tathra Road. The northern and eastern sections of the property comprise river flats and the land rises gently to the south.

The Portions are mostly cleared and used for grazing and cropping purposes.

The total site occupies approximately 127 Ha in area.

2.3 Adjoining Land Use

The land use of adjacent allotments consist of pastoral properties.

2.4 Site Zoning

The current zoning of the site is:

- Rural 1(a) Zone - Bega Valley Shire Council Local Environment Plan 2002.

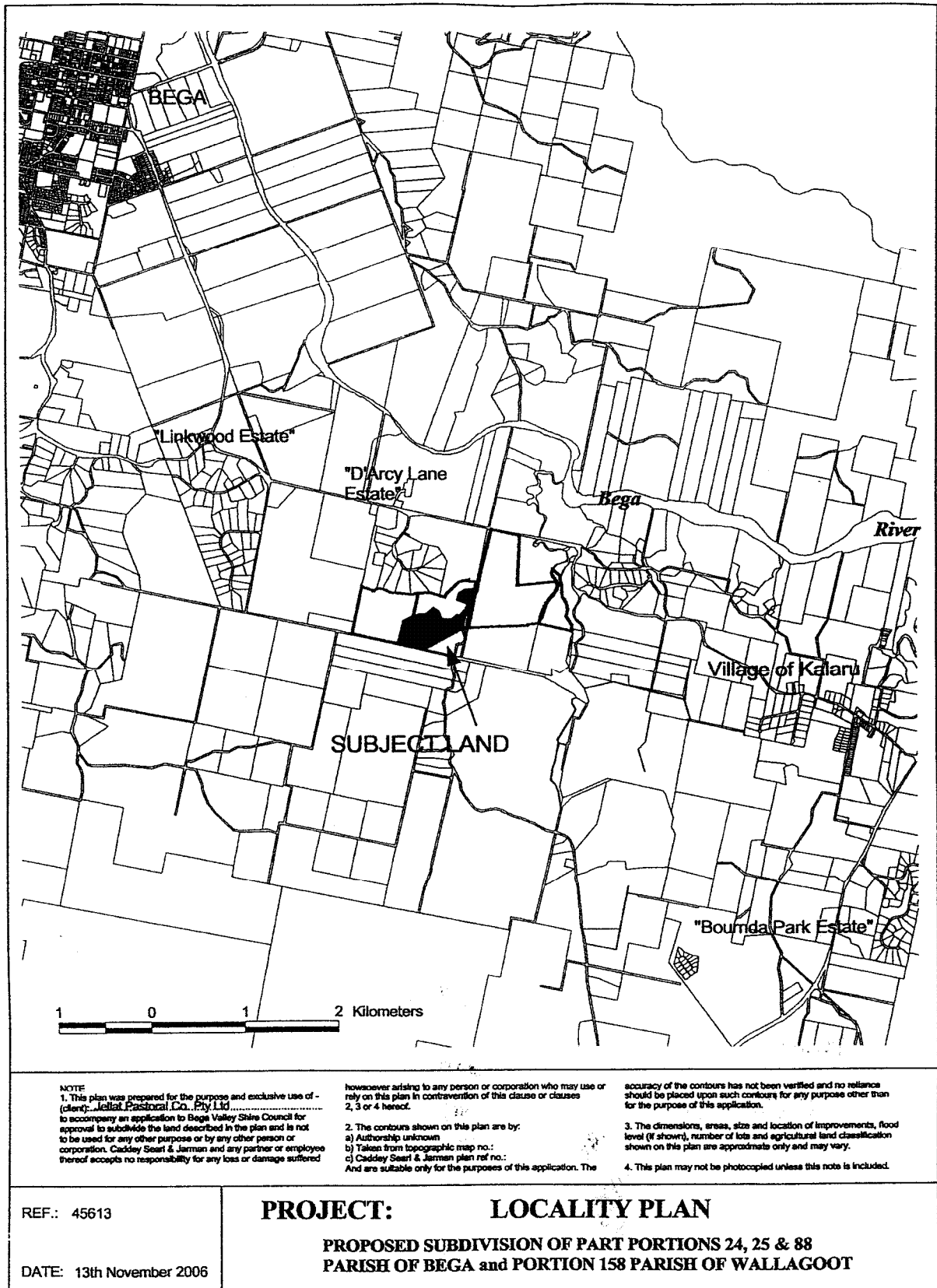


Figure 1 - Location plan of site.

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3. PROPOSED SUBDIVISION

3.1 General

Please refer Figure 2.

The proposed development will be a subdivision of the existing 4 part allotments into 7 new allotments consisting of the following:

- 6 allotments of area approximately 4.1 hectares or less,
- 1 allotment of area approximately 19.1 hectares,
- 1 residual allotment of 86.4 hectares.

3.2 Vehicular Access

The proposed subdivision will have one main vehicular access roadway intersecting with Wallagoot Lane and serving 5 allotments.

The remaining 3 allotments will have individual access onto Wallagoot Lane via their road frontage.

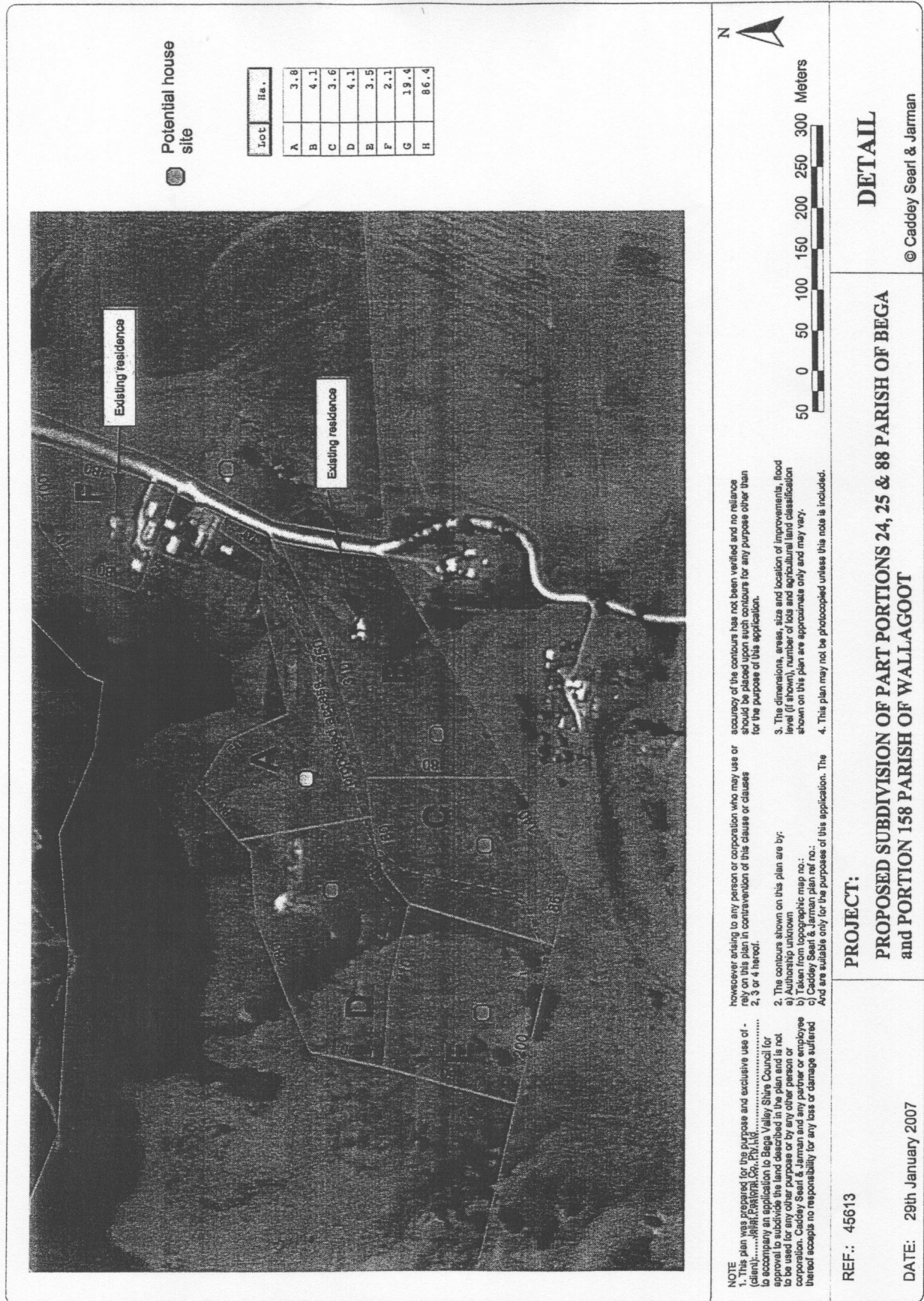


Figure 2 - Plan of site subdivision showing proposed access roadway.

4. EXISTING TRAFFIC CONDITIONS

4.1 General

Existing traffic data utilised in this report has been obtained from automated axle count traffic count data from Bega Valley Shire Council (BVSC) for Wallagoot Lane. The data represents actual automated axle counts averaged over from a length of days and represents an Average Annual Daily Traffic (AADT) count.

According to Figure 4.5.12 of Reference 1 (RTA - Road Design Guide) Note 1 peak hourly traffic rates are to be calculated as 15% of AADT.

4.2 Wallagoot Lane

Wallagoot Lane traffic data from BVSC figures are represented below in Figure 3.

<u>LOCATION</u>	<u>YEAR</u>	<u>AADT</u>	<u>PEAK HOURLY</u>
Wallagoot Lane	2000	86	13
Wallagoot Lane (North)	2002	112	17
Wallagoot Lane (South)	2002	94	14
Wallagoot Lane (South)	2004	121	18
Wallagoot Lane (South)	2006	90	14
<i>Maximum</i>		121	18

Figure 3: Bega Valley Shire Council Traffic Axle Counts - Wallagoot Lane

4.3 Existing Allotment Traffic Generation

The existing allotments presently contain 2 existing residences. Using the established parameter 10 vehicular traffic movements per day per residence (Ref 2) the existing traffic generated is 20 AADT with a peak of 3 vehicles / hr.

5. TRAFFIC GENERATION - PROPOSED SUBDIVISION

5.1 Traffic Generation

The traffic generated by the proposed development is listed in Figure 4.

<i>LOCATION</i>	<i>AADT</i>	<i>PEAK HOURLY</i>
5 Lot subdivision Access Roadway	50	8
3 Lots fronting Wallagoot Lane	30	5

Figure 4: ***Proposed Development - Traffic Generated (Wallagoot Lane)***

It is likely that the rates shown represent morning or evening peak hours. This would occur as residents proceed to and from places of employment, school, shopping and complete other daily activities.

6. INTERSECTION ANALYSIS

6.1 Intersection of proposed 5 lot access roadway with Wallagoot Lane.

Analysis of the proposed intersection has been performed with reference to Figure 4.5.12 - Warrants For Rural Turn Lanes (Ref 1).

The distribution of the proposed subdivision traffic generated has been apportioned as follows:

- 90% turning north towards the closest townships of Bega, Kalaru and Tathra and the nearest bitumen main road access to Merimbula (to the south) and
- 10% balance turning south onto approximately 8 km of gravel surfaced Wallagoot Lane towards Sapphire Coast Drive (bitumened main road to Merimbula).

The critical points of conflict are as follows in Figure 5:

<i>POINT OF CONFLICT</i>	<i>TURNING PEAK HOURLY</i>	<i>OPPOSING PEAK HOURLY</i>
Wallagoot Lane South bound RHT into Access Road	7	18
Wallagoot Lane North bound LHT into Access Road	1	0
Access Road Exit LHT (north) into Wallagoot Lane	7	18
Access Road Exit RHT (south) into Wallagoot Lane	1	43

**Figure 5: Proposed Development Access Road / Wallagoot Lane Intersection
Traffic Generated**

According to Reference 1, the recommended intersection treatments are as follows:

- Type BAR intersection is warranted for the RHT from Wallagoot Lane into the proposed subdivision access road and a
- Type BAL intersection is warranted for the LHT from Wallagoot Lane into the proposed subdivision access road.

From an inspection of the site on 11 May 2007, the proposed intersection with Wallagoot Lane has 150 metres site distance to the north and 200 metres site distance to the south. Wallagoot Lane is a gravelled two lane surface at this location and is posted at 100 km/hr speed limit. The stopping site distance required at 100 km/hr with respect to Reference 1 Table 2.3.6 is 150m. Likely travel speeds for this portion of the gravelled roadway would be less than 90 km/hr.

7. CONCLUSIONS

Peak hourly traffic volumes have been calculated from axle count data obtained from BVSC. This data has been compared to the anticipated traffic generated by the proposed subdivision as stipulated by the RTA publication "Guide To Traffic Generating Developments" (Ref 2) and entering Wallagoot Lane via a proposed access road intersection.

When compared with the recommended traffic volumes of the RTA publication 'Road Design Guide' - Figure 4.5.12, the following intersection treatments are recommended to be included onto Wallagoot Lane at the proposed access road intersection:

- Type BAR treatment for the RHT from Wallagoot Lane
- Type BAL treatment for the LHT from Wallagoot Lane.

Configurations of these BA (BASIC) type intersection treatments may be obtained from Figure 4.5.2 of Ref 1.

APPENDIX A

References:

1. RTA Publication - 'Road Design Guide'.
2. RTA Publication - 'Guide To Traffic Generating Developments'
December 1993 Issue 2.