

# MEMORANDUM

To: Nick Ortiz  
County of San Diego

Date: September 15, 2014

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From: John Boarman, P.E. *JFB*  
LLG, Engineers

LLG Ref: 3-14-2340

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Subject: Orchard Hills, Supplemental Traffic Analysis

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Linscott, Law & Greenspan, Engineers (LLG) completed a supplemental analysis of the Richland Road / Borden Road intersection and the Richland Road segment between the Richland Elementary School and Borden Road in relation to the traffic study our firm prepared for the project dated August 8, 2012. Traffic counts were conducted in September 2014 when local schools were in session. The intersection counts were conducted between 7:00 AM and 9:00 AM and 2:30 PM – 4:30 PM to coincide with peak school times. The segment count was estimated assuming the AM peak hour represented 6% of the ADT, a conservative assumption.

Table A shows the results and shows that while the morning peak hour delays are greater than reported in the 2012 traffic study (since the 2014 counts was conducted when school was in session), no significant impact is calculated. Table B shows that the Richland Street segment operates at an acceptable level of service.

Appendix A shows the project traffic volume assignment and shows that the project adds only a very small amount of traffic to the Richland Road / Borden Road intersection. The project adds less than these amounts during the school afternoon peak hour since many people are still at work during this time period.

Please call with any questions.

**LINSCOTT  
LAW &  
GREENSPAN**  
→  
*engineers*

**Engineers & Planners**  
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cc: File

**TABLE A  
ANALYSIS RESULTS**

Intersection	Control Type	Peak Hour	Existing		Existing + Project		
			Delay <sup>a</sup>	LOS <sup>b</sup>	Delay	LOS	Δ
Richland Road / Borden Road	MSSC <sup>c</sup>	AM	31.9	D	34.1	D	2.2
		PM	18.3	C	18.9	C	0.6

*Footnotes:*

- a. Delay measured in seconds per vehicle.
- b. Level of Service
- c. Minor Street Stop-Controlled intersection, minor street delay is reported.

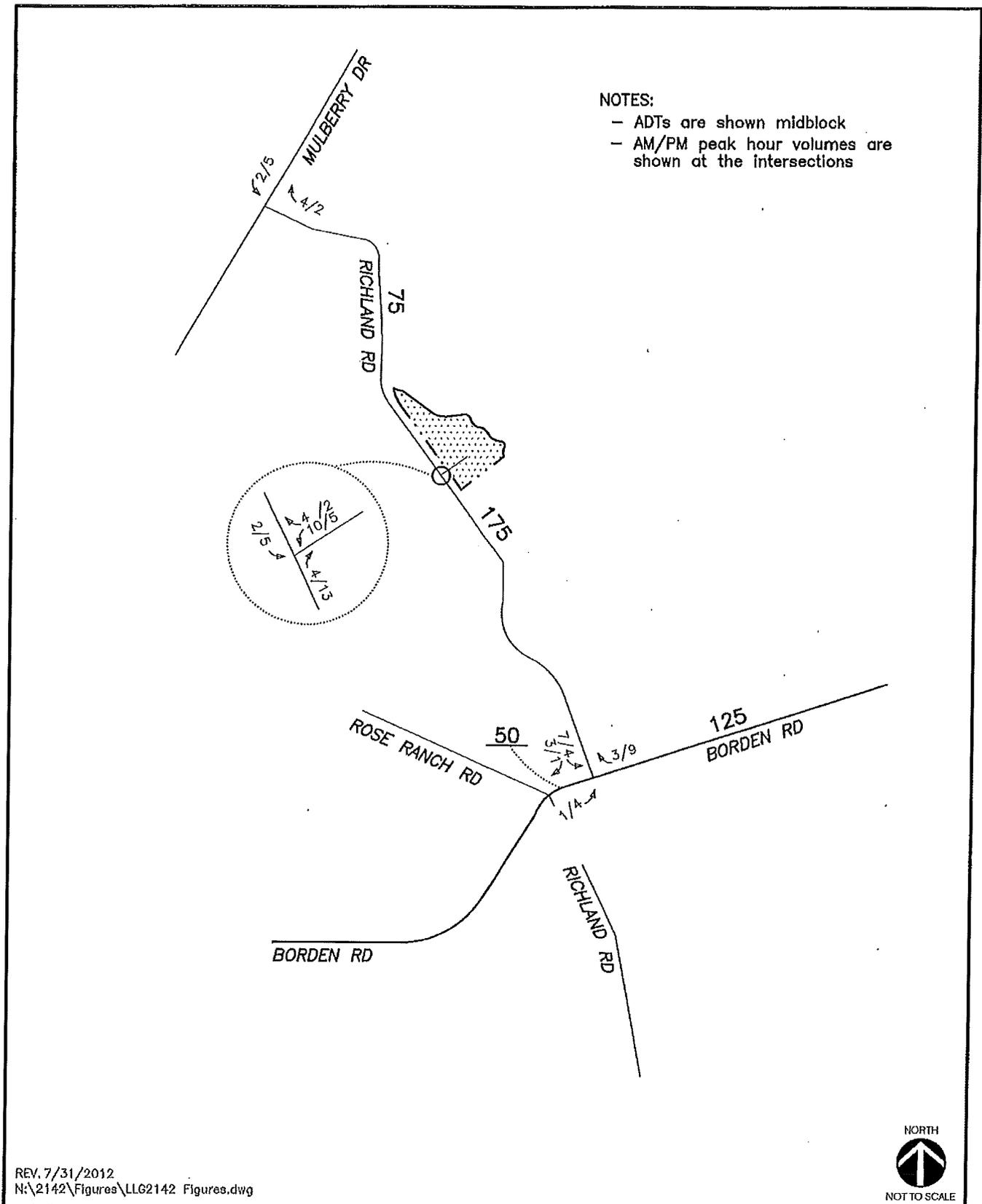
**STREET SEGMENT OPERATIONS**

Street Segment	Existing Capacity (LOS E) <sup>a</sup>	Existing		Existing + Project		Impact Type
		ADT <sup>b</sup>	LOS <sup>c</sup>	ADT	LOS	
<b>Richland Road</b>						
Mulberry Drive to Borden Road	16,200	4,330	C	4,580	C	None

*Footnotes:*

- a. Capacities based on the City of San Marcos Roadway Classification & LOS table.
- b. Average Daily Traffic
- c. Level of Service

# Appendix A



**Figure 7-2**  
**Project Traffic Volumes**  
**AM/PM Peak Hours & ADT**