Pacific Proving Grounds North
Mesa, Arizona

Master Traffic Impact Analysis
Seventh Revision

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Prepared for:
HARVARD INVESTMENTS

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Table of Contents

List of Figures

List of Tables

List of Appendices

Executive Summary

Introduction

Harvard Investments is planning a residential and commercial development, identified as Pacific Proving Grounds North (PPGN), in east Mesa. The property is located approximately four (4) miles south of US-60, one mile east of the north-south portion of SR-202, and immediately north of the proposed SR-24.

This revised report updates the previous *Pacific Proving Grounds North Master Traffic Impact Analysis – Sixth Revision*, dated February 2012. Changes to this report include a reduction in the single-family residential density in DU2 – Phase 1. The reduced density results in a net reduction of 591 dwelling units. Therefore, a total 2,909 single-family residential dwelling units are included in the updated analysis.

During the preparation of the various traffic analyses for proposed developments in the vicinity of the proposed PPGN, the intersection of Ellsworth Road and Ray Road has changed substantially. Both the Master Transportation Plan prepared for Mesa Proving Grounds in September 2008 and the Transportation Analysis Memorandum prepared for the City of Mesa in January 2009, assumed a typical four-approach intersection for Ellsworth Road and Ray Road. These two (2) documents and their projected traffic volumes provided the basis for this analysis – specifically the ambient traffic volumes without the proposed PPGN. Therefore the intersection analyses at the Ellsworth / Ray intersection in this document assume a typical four-approach intersection. The current concept for the Ellsworth Road intersection consists of two (2) four-approach intersections in close proximity. The street diagrams in this report – except those portraying previous analyses and those depicting current analyses results – reflect the two-Ellsworth-Ray intersection concept.

The development will provide retail and office uses. To remain conservative, this analysis assumes only retail uses.

Results

The proposed development is anticipated to generate the following weekday and Saturday traffic volumes.

	Weekday			Saturday	
Time Period	**Day**	**AM**	**PM**	**Day**	**Peak**
Residential	23,155	2,306	2,292	22,303	1,868
Retail	69,981	1,602	6,476	89,438	8,542
Office	0	0	0	0	0
Total	93,136	3,908	8,768	111,741	10,410

Recommendations with PPGN

Figure 1 indicates the recommended through lane number of the primary streets internal and adjacent to Pacific Proving Grounds North. Traffic volumes and recommended roadway classifications are based upon maximum build-out potential for Pacific Proving Grounds North. Therefore, the roadway classifications, lane numbers, and lane configurations are conservatively large.

The street classifications are:

- Ellsworth Road ..... 6-lane Arterial with Raised Median
- Ray Road ..... 6-lane Arterial with Raised Median
- Williams Field Road ..... 6-lane Arterial with Raised Median
- Crismon Road ..... 4-lane Arterial with Raised Median (except at Williams Field)
- Internal primary street ..... 2-lane Collector (except at Ellsworth and at Crismon)

The number of lanes on Crismon Road varies by location and should provide two or three through-lanes-per-direction as shown on **Figure 1**. At its intersection with Williams Field Road, this street should provide three (3) northbound and southbound through lanes. The three (3) through lanes should narrow to two (2) through lanes per direction north of the primary development street and south to the property line.

The number of lanes on the primary development street varies by location and should provide one or two through-lanes-per-direction as shown on **Figure 1**. At its intersection with Ellsworth Road, this street should provide two (2) westbound approach left-turn lanes, one westbound approach right-turn lane, and two (2) eastbound departure lanes. At its intersection with Crismon Road, this street should provide separate eastbound left-turn and shared through / right-turn lanes. Also, this street should provide two (2) westbound departure lanes to accommodate the two (2) northbound left-turn lanes. The two (2) westbound lanes should narrow from two (2) lanes to one lane per direction approximately 600 feet west of Crismon Road.