

DRAINAGE REPORT

For

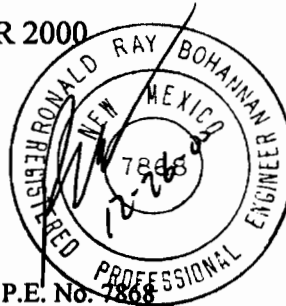
**Sam's Club Albuquerque
Store #4703
GAS STATION**

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PURPOSE

The purpose of this report is to prove the development of the subject +/- 1.05 acre property, located at the southeast quadrant of the intersection on NM 528 and the Coors Bypass (for the use as a Sam's Club Gas Station) is in accordance with the DPM Chapter 22. This report will analyze the existing and proposed conditions and demonstrate the proposed improvements do not adversely effect the surrounding properties, nor the upstream or downstream facilities.

INTRODUCTION

The subject of this report is a +/- 1.05 acre parcel of land located on the southeast quadrant of the intersection of NM 528 Alameda Boulevard and the Coors Bypass. The site is located on Zone Atlas page A-14 and shown on Exhibit A. This site is an out parcel of the existing Sam's Club Store in the Cottonwood Corners Subdivision. The legal description of the property is Tract B-2 of Cottonwood Corners. As shown on FIRM map 35001C0108D, the southeast corner of the site lies with flood zone A0 with a depth of one foot, while the remaining site does not lie within any flood hazard zone

The site was analyzed as fully developed within the Sam's Club Drainage Report (A13/D15). The overall Sam's Club report set the grades and discharge rates for this outparcel. The site completely graded and all the internal curb and storm drain facilities are constructed. The overall grading plan for the existing Sam's Club is included in Map Pocket B. This site layout is consistent with the previous overall grading plan. The only modifications are the deletion of approximately 1400 square feet of paving, which was converted to landscaping and the minor adjustment of grades around the structure.

EXISTING CONDITIONS

The entire site has been final graded. The interior and perimeter curb and gutter is

completed. The site drains to a new type D inlet that was constructed with the development of the Sam's Club. The entire Sam's Club, which this site is an out parcel of, has an allowable discharge of 6.9 CFS. The peak discharge leaving the site is controlled by a series of parking lot ponds and outlet controlled grated inlets. The inlet for this site is located within the southeast quadrant of the site. As shown on the overall Sam's Club grading plan this inlet is labeled inlet #1. No offsite flows enter the site. The entire site drains to this existing manhole.

PROPOSED CONDITIONS

The proposed improvements consist of a 4-island gas station with a 76 square foot control building. Since the site has already been graded no major grading activities will be required. Due to an EPC comment, a portion of the existing onsite curb will be relocated to provide additional landscaping. The storm runoff generated by the site will be collected by the existing type D single grate inlets and routed to the existing 18" CMP located at the southeast corner of the site. As shown on the Sam's Club overall grading plan this inlet is labeled Inlet #1. The discharge rate leaving the site is controlled a 9.687" orifice plate within the existing inlet. The parking lot will act as a detention basin during the 10 and 100-year storm event. As discussed in the Sam's Club Drainage Report, the site has been graded and the orifice plate has been sized to allow the total site discharge to be less than the 6.9 CFS allowed.

SUMMARY AND RECOMMENDATIONS

This site is a completely graded tract within the existing Sam's Club site. Only minor grading will be required to construct the proposed improvements. The site hydrology is governed by the existing Sam's Club Master Drainage Management Plan. All the drainage improvements required to support this site were recently constructed with the Sam's Club. The Drainage Management Plan for this site is in compliance with the governing Master Drainage Plan for the

Sam's Club and the DPM, chapter 22. Since this site encompasses less more than 5 acres, a NPDES permit is not required prior to any construction activity. It is recommended this development be approved for Site Plan for Building Permit