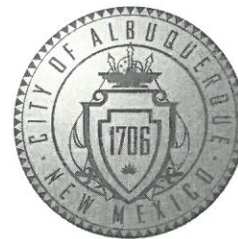


CITY OF ALBUQUERQUE



September 14, 2016

Richard J. Berry, Mayor

David Soule, P.E.
Rio Grande Engineering
P.O. Box 93924
Albuquerque, NM 87199

**RE: A-Class RV
Canopy Addition
Grading and Drainage Plan
Engineer's Stamp Date 8-8-16 (File: D16D002A3)**

Dear Mr. Soule:

Based upon the information provided in your submittal received 8-8-16, the above-referenced plan is approved for Building Permit.

Please attach a copy of this approved plan in the construction sets when submitting for a building permit. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If you have any questions, you can contact me at 924-3986.

Sincerely,

Abiel Carrillo, P.E.
Principal Engineer, Planning Dept.
Development Review Services

Orig: Drainage file



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: _____ **Building Permit #:** _____ **City Drainage #:** _____

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: _____

City Address: _____

Engineering Firm: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Owner: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Architect: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

Check all that Apply:

DEPARTMENT:

- ☐ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ ARCHITECT CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
☐ GRADING PLAN
☐ DRAINAGE MASTER PLAN
☐ DRAINAGE REPORT
☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ TRAFFIC IMPACT STUDY (TIS)
☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ OTHER (SPECIFY) _____

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY
- ☐ PRELIMINARY PLAT APPROVAL
☐ SITE PLAN FOR SUB'D APPROVAL
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL
☐ FINAL PLAT APPROVAL
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
☐ FOUNDATION PERMIT APPROVAL
☐ GRADING PERMIT APPROVAL
☐ SO-19 APPROVAL
☐ PAVING PERMIT APPROVAL
☐ GRADING/ PAD CERTIFICATION
☐ WORK ORDER APPROVAL
☐ CLOMR/LOMR
- ☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

DATE SUBMITTED: _____ By: DAVID SOULE

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____

DRAINAGE REPORT

For

**A Class RV Storage Canopy addition
@Journal Center
7950 Jacs Lane NE
Albuquerque, New Mexico**

Prepared by

Rio Grande Engineering
PO Box 93924
Albuquerque, New Mexico 87199

August 2016



David Soule P.E. No. 14522

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Appendix

Site Hydrology A

Map Pocket
Site Grading and Drainage Plan

PURPOSE

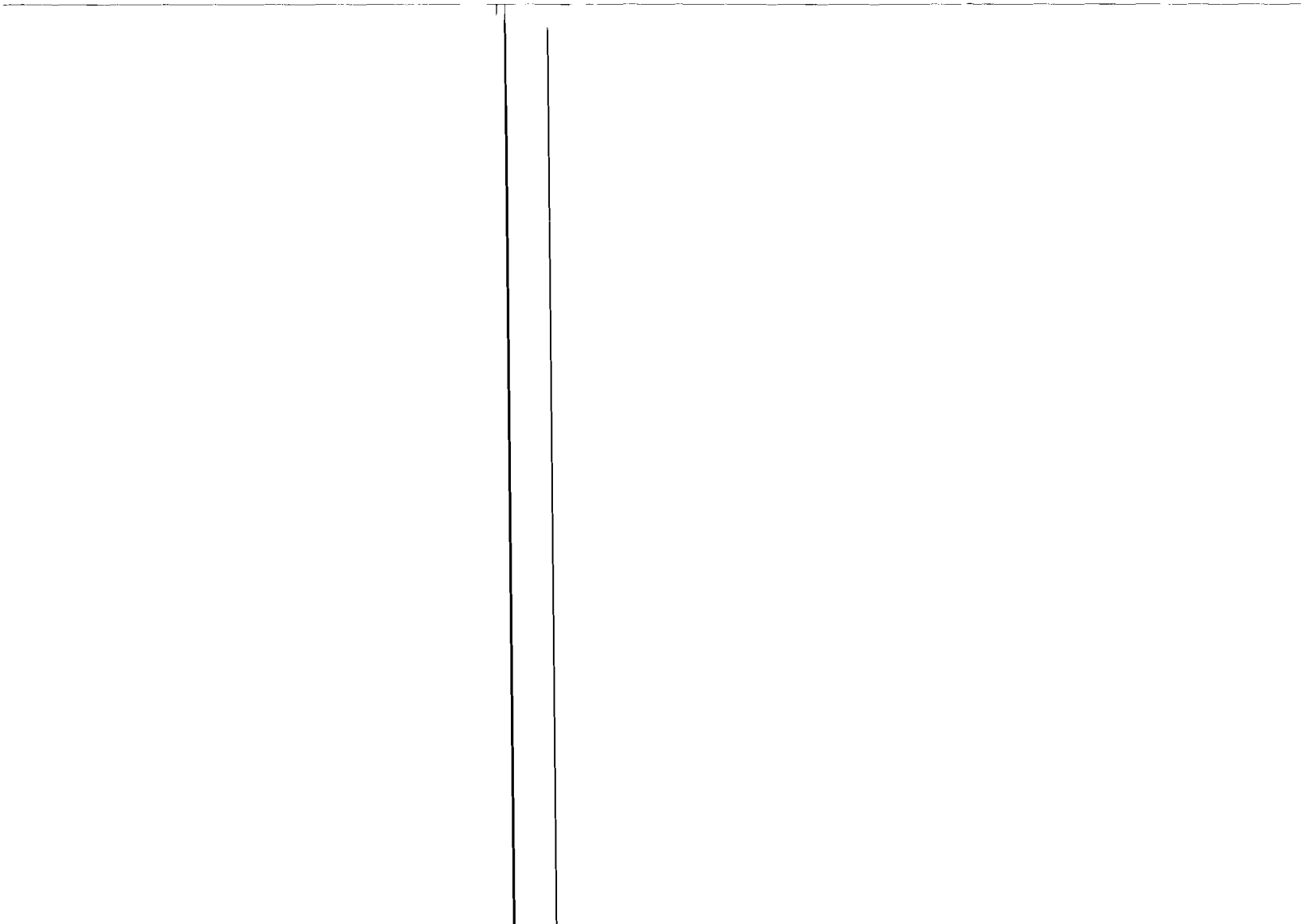
The purpose of this report is to provide the Drainage Management Plan for the construction of an RV storage facility located at 7950 Jacs Lane NE. This plan was prepared in accordance with the City of Albuquerque design regulations, utilizing the City of Albuquerque's Development Process Manual drainage guidelines. This report will demonstrate that the grading does not adversely affect the surrounding properties, nor the upstream or downstream facilities.

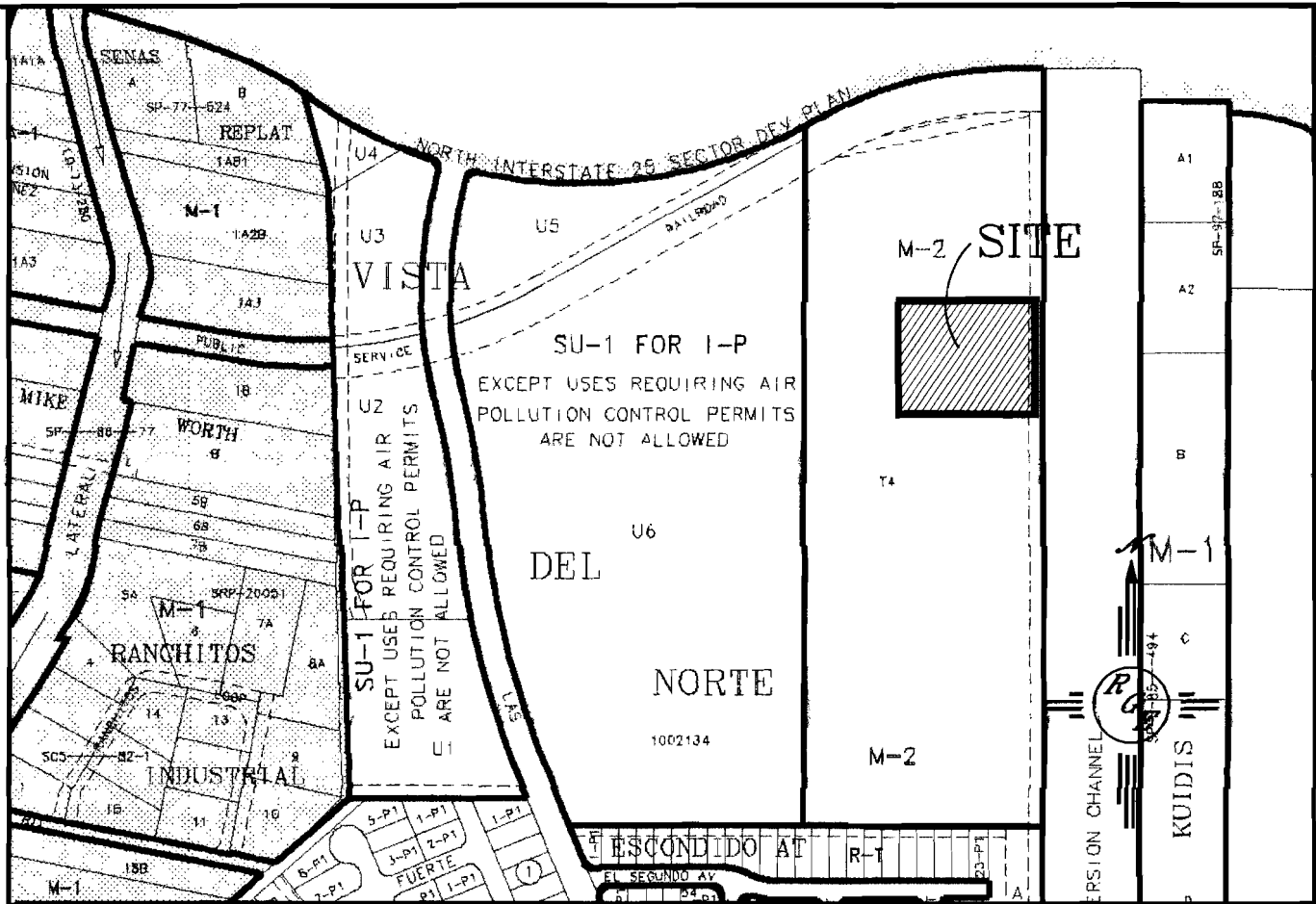
INTRODUCTION

The subject of this report, as shown on the Exhibit A, is a 1.72-acre parcel of land located on the east side of Jacs lane south of Paseo Del Norte. The legal description of this site is Lot 3, Blue Sky Subdivision. As shown on FIRM map35013C0136G, the entire site is located within Flood Zone X. The site was a graded lot within the blue sky subdivision. The entire downstream infrastructure has been constructed. The site is part of the blue Sky master drainage study and allowed free discharge to the existing inlets located adjacent to the site. The development of this site shall conform to the Blue Sky Master Drainage Plan. The scope of this project is to construct canopies over the existing RV parking spaces. This site will require accounting for the first flush volume

EXISTING CONDITIONS

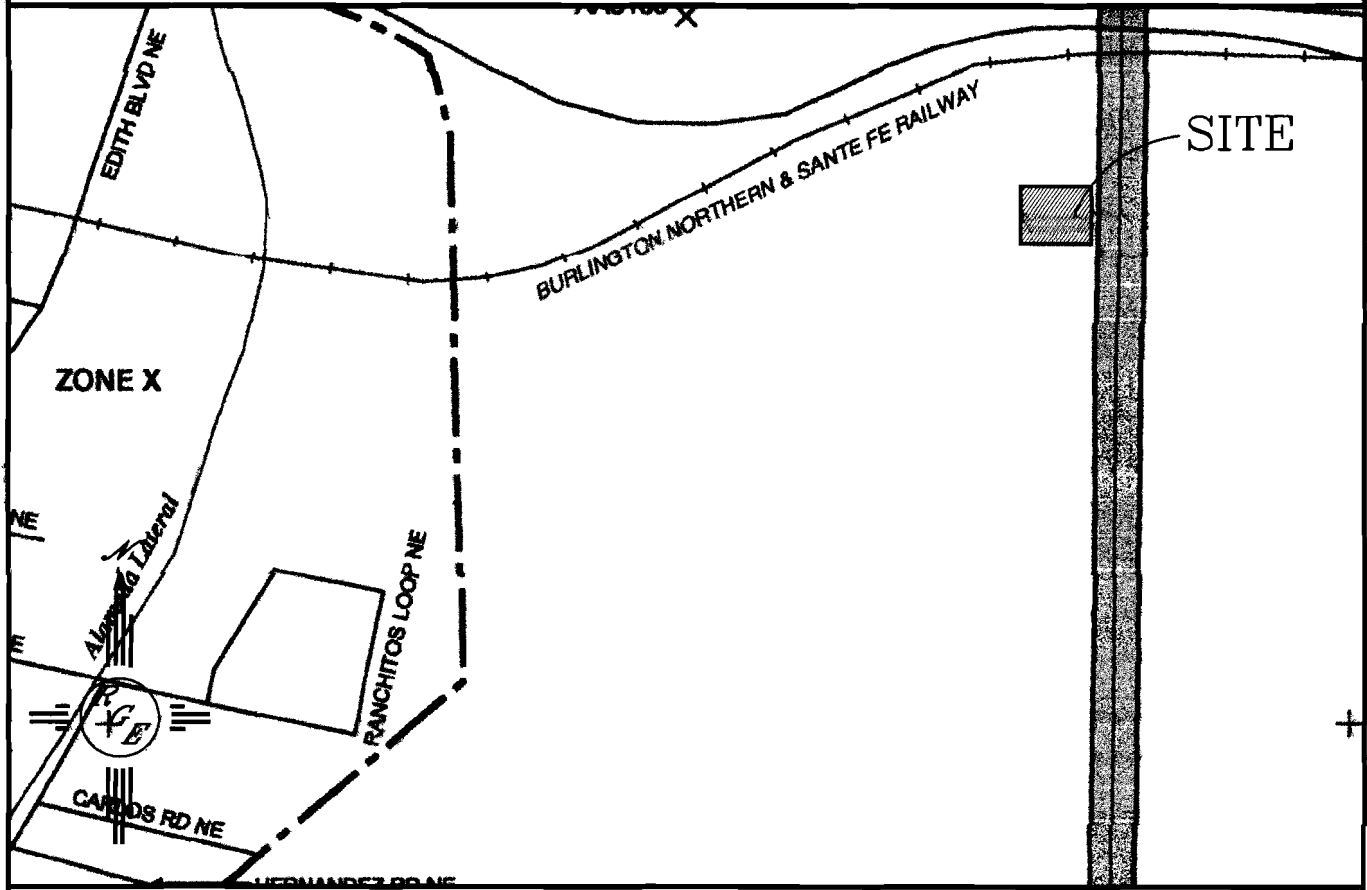
The site is currently developed as a graded lot. The site currently discharges directly to Jacs Lane. The southern portion of the site discharges via surface flow through the driveway, The northern basin flow is captured by an existing type D inlet located at the northwest corner of the site which is connected to existing inlets located adjacent to the site. The storm drain carries the entire subdivision flow to a City maintained retention/detention pond located west off the site on Los Lomitas. The AMAFCA North Diversion Channel is located directly upstream of the site so no upland flows enter the site.





ZONE ATLAS:

D-16-Z



FIRM MAP:

35001C0136 G

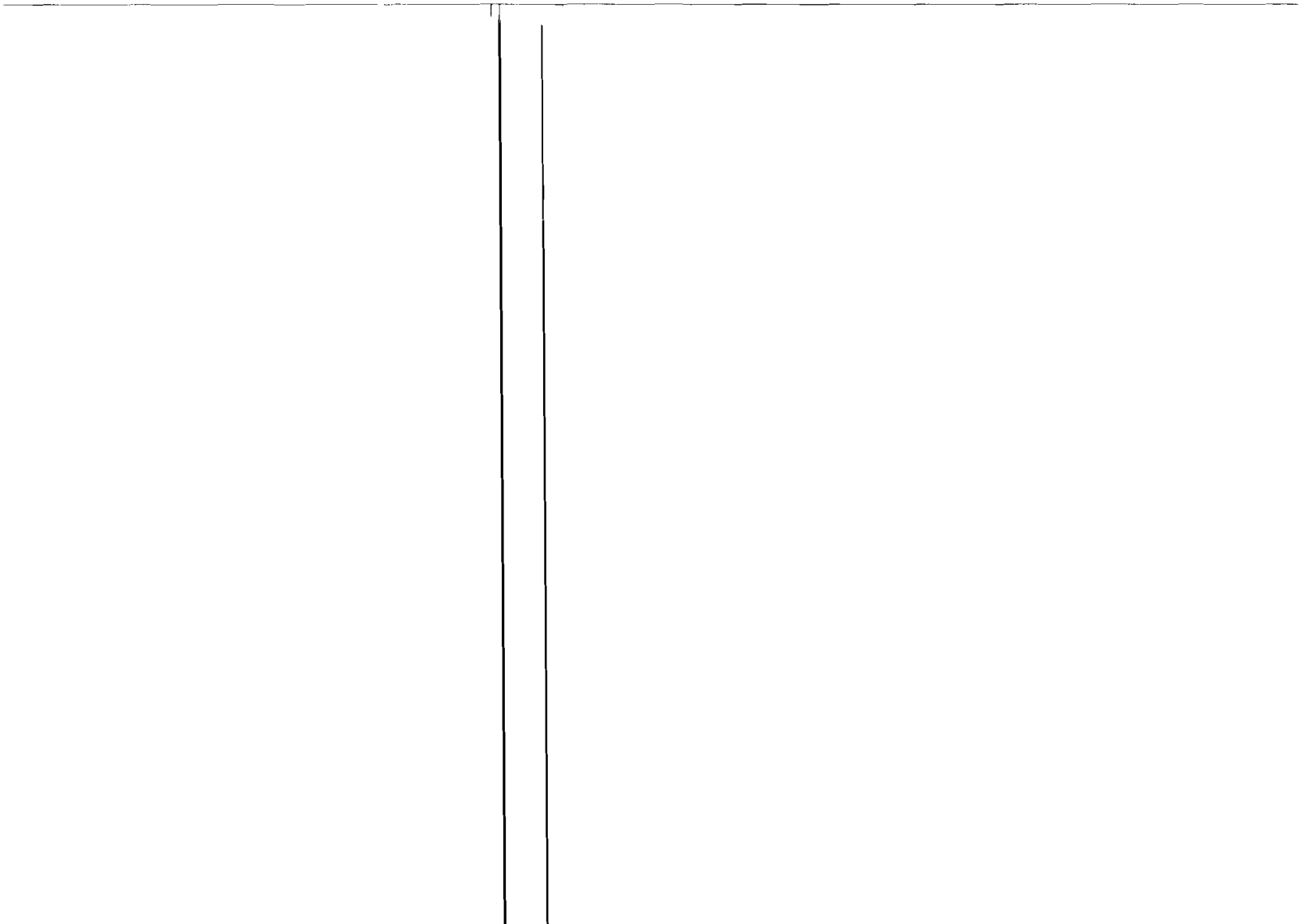
LEGAL DESCRIPTION:
LT 3 PLAT OF BLUE SKY BUSINESS PARK

PROPOSED CONDITIONS

The proposed improvements consist of approximately 40,000 square feet of additional covered storage for RV's. The floors and the drive isles will be gravel. There will be no grading of the site with the exception of the first flush requirement. As shown on the drainage calculations shown in appendix A, this site must retain 1356 cubic feet of storm water. This pond will be located along the western edge of the site. The increased runoff will increase the flow leaving the driveway to 4.15 cfs and 4.80 cfs to the existing inlet. Due to the ground under the canopies remaining gravel, the flow leaving the site will be less than predicted based upon the impervious area determined by the canopies.

SUMMARY AND RECOMMENDATIONS

This project consists of the construction of 40,000 square feet of covered parking area. There will be no change in the drainage patterns. The site is within the master drainage plan area of the Blue Sky development. This site is allowed to free discharge to Jacs and the storm drain within. Since the effected area site encompasses less than 1 acre, a NPDES permit should not be required prior to any construction activity.



APPENDIX A

SITE HYDROLOGY

Weighted E Method

Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year, 6-hr.			10-day
											Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
			%	(acres)	%	(acres)	%	(acres)	%	(acres)				
north basin	54583.00	1.253	0%	0	5%	0.063	48%	0.601466	47%	0.589	1.578	0.165	4.80	0.243
south basin	47241.00	1.085	0%	0	5%	0.054	48%	0.520562	47%	0.510	1.578	0.143	4.15	0.211
combined	101824.00	2.34		0.00		0.12		1.12		1.10		0.31	8.95	0.45

Equations:

Weighted E = Ea*Aa + Eb*Ab + Ec*Ac + Ed*Ad / (Total Area)

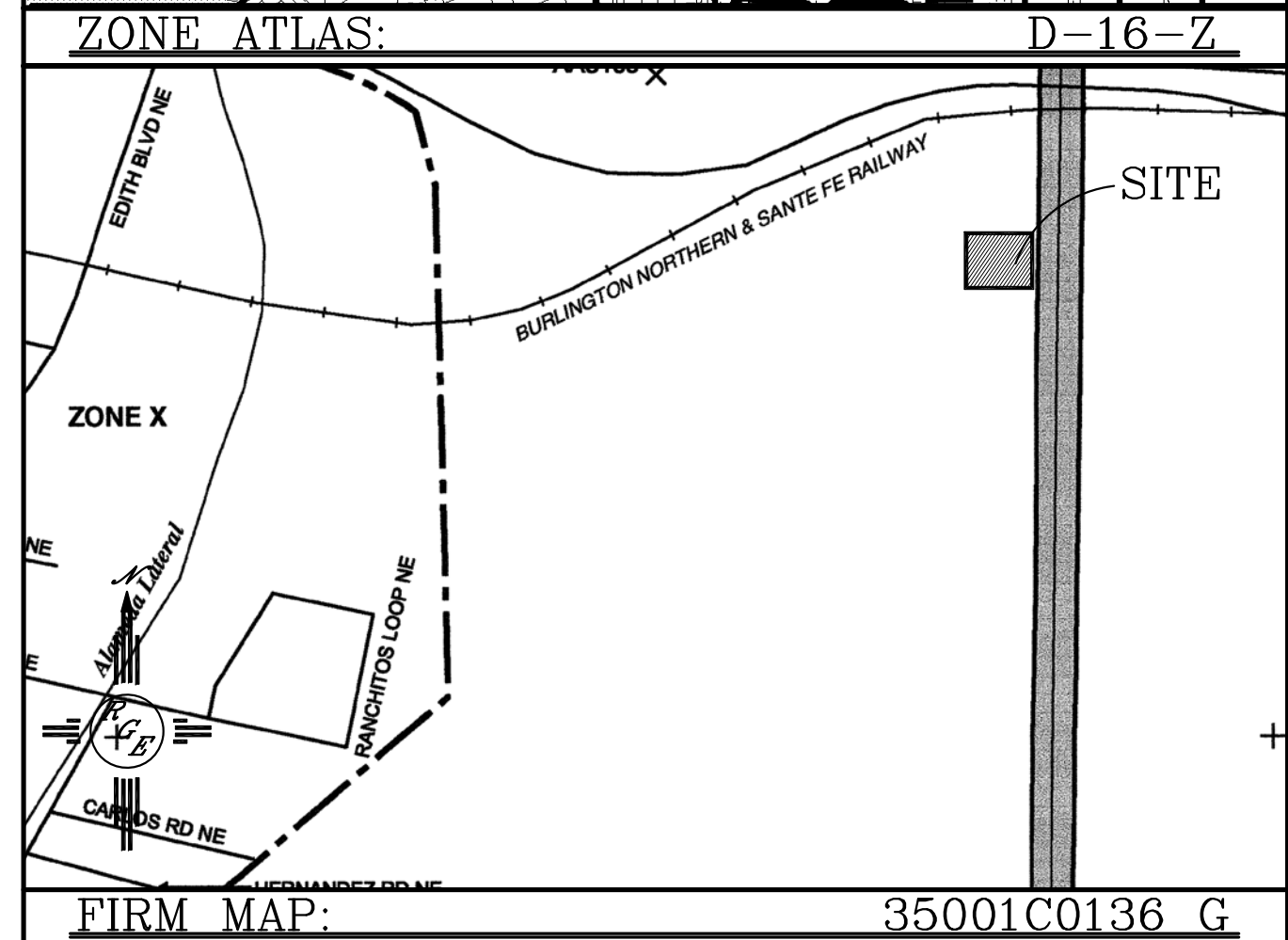
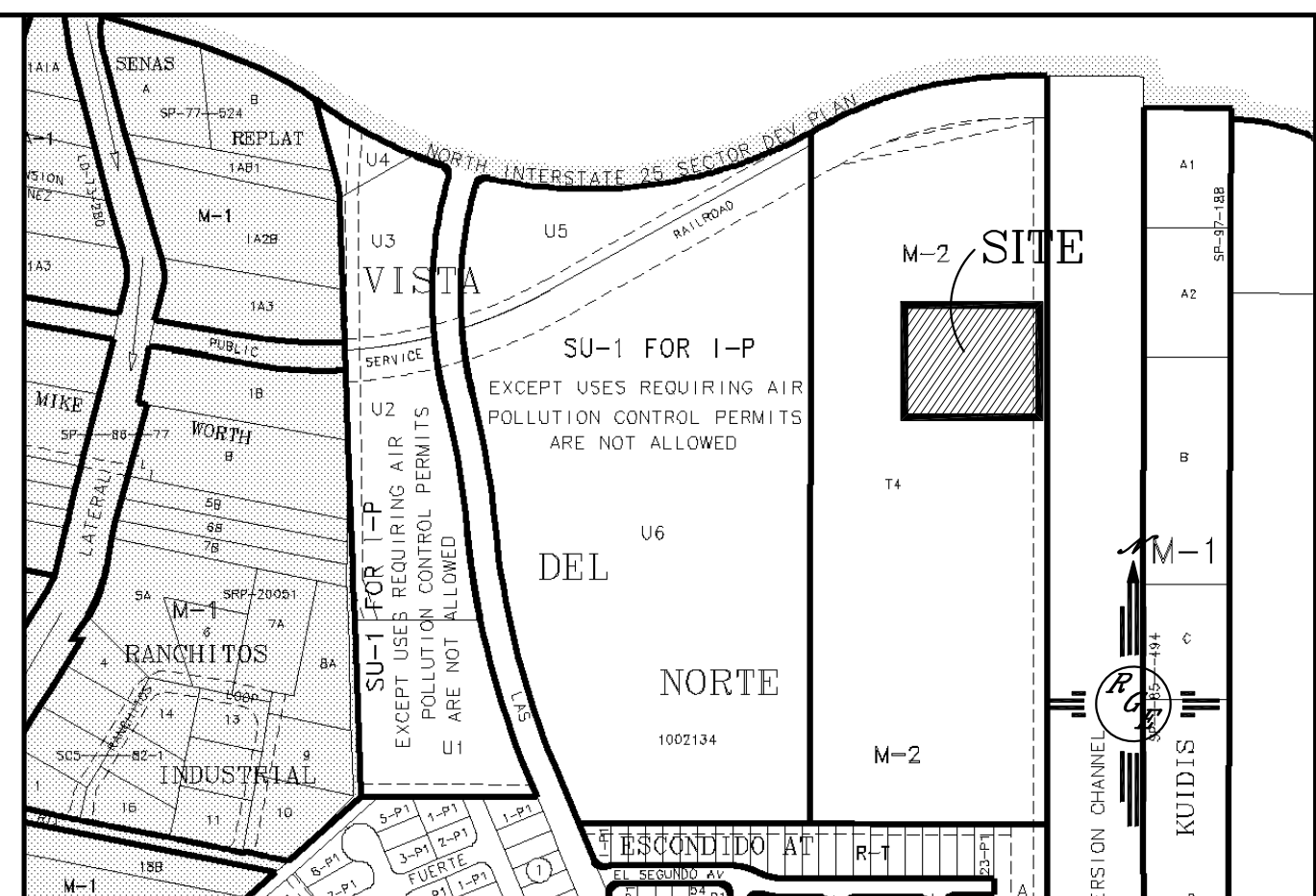
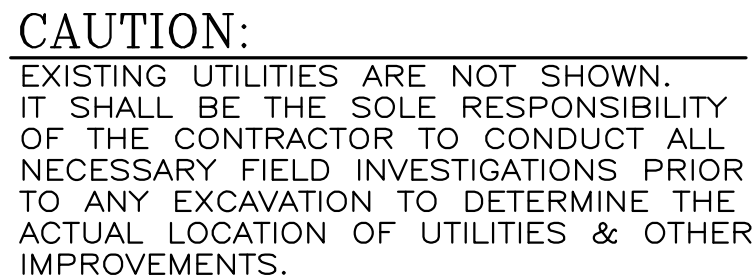
Volume = Weighted D * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm

Ea= 0.53 Qa= 1.56
Eb= 0.78 Qb= 2.28
Ec= 1.13 Qc= 3.14
Ed= 2.12 Qd= 4.7

first flush 1355.956




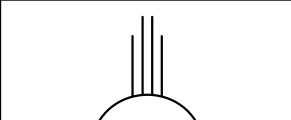
LT 3 PLAT OF BLUE SKY BUSINESS PARK

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL RETAINING WALL DESIGNS TO BE BY OTHERS.
3. WALL ALONG AMAFCA EASEMENT MUST PROVIDE ACCESS FOR AMAFCA.
4. ALL EX. GRADES TO REMAIN

1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

Diagram illustrating the proposed and existing contours and features:

- EXISTING CONTOUR (dashed line)
- EXISTING INDEX CONTOUR (dashed line)
- PROPOSED CONTOUR (solid line)
- PROPOSED INDEX CONTOUR (solid line)
- SLOPE TIE (arrow pointing to the right)
- BOUNDARY (dashed line)
- CENTERLINE (dashed line)
- RIGHT-OF-WAY (solid line)
- PROPOSED CURB AND GUTTER (double solid line)
- EXISTING CURB AND GUTTER (double dashed line)

<p>ENGINEER'S SEAL</p>  <p>8/5/16</p> <p>DAVID SOULE P.E. #14522</p>	<p>A CLASS RV/STORAGE @ JOURNAL CENTER 7950 JACS LANE</p> <p>GRADING AND DRAINAGE PLAN</p>		<p>DRAWN BY WCUJ</p>
			<p>DATE 8-02-16</p>
	 <p><i>Rio Grande Engineering</i></p> <p>1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0989</p>		<p>21110-LAYOUT-4-20-11</p> <p>SHEET # —</p> <p>JOB # 21110</p>