

# CITY OF ALBUQUERQUE



November 30, 2015

David Soule, PE  
**RIO GRANDE ENGINEERING**  
P.O. Box 93924  
Albuquerque, NM 87199

Richard J. Berry, Mayor

**RE: Montoya Street Townhomes (File: H12D019A)**  
**Tracts A1 and A2 Lands of David Maciel**  
**Montoya St NW between Floral Rd and I-40**  
**Grading Plan and Drainage Report**  
**Engineer's Stamp Date – 10/15/15**

Dear Mr. Soule:

Based upon the information provided in your submittal received 10-15-15, the above referenced Grading Plan and Drainage Report cannot be approved for Preliminary Plat, Final Plat and Grading Permit until the following comments are addressed.

- Provide drainage flow areas to better identify overall site drainage patterns.
- Provide roof flow direction and outfall locations.
- Clearly identify and define property lines.
- Clearly identify the location and limits of the 10 ft Ditch Easement located on the north property line.
- The Drainage Report indicates flows from a storm event exceeding the 100-yr, 6 hr storm event will discharge to Montoya Street. Per the spot elevations identified on the Grading Plan, it appears flows will be directed east away from Montoya Street. Show on the Grading Plan how this will be achieved.
- The Drainage Report states the platting action will allow for cross lot drainage easement on all parcels yet the Drainage Report identifies flows to be retained onsite or discharged onto Montoya Street during a larger design storm. Provide offsite flow information and how offsite flows will be managed onsite.
- A scale check on the area for townhomes 1-5 appears as though the area provided is incorrect. Re-check the areas to ensure the information is correct.

If you have any questions, you can contact me at 924-3994.

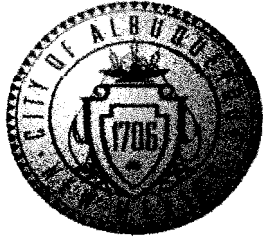
Sincerely,

Rudy Archuleta, P.E.  
Senior Engineer, Planning Dept.  
Development Review Services

Orig: Drainage file  
c.pdf Addressee via Email

H12D019A\_PP\_FP\_GP\_Cmnt

1 of 1



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title:montoya town homes

Building Permit #:

City Drainage #:

DRB#:1004732

EPC#:

Work Order#:

Legal Description:tracts a1 and a2 lands of david maciel

City Address:

Engineering Firm:RIO GRANDE ENGINEERING

Contact:DAVID SOULE

Address:PO BOX 93924, ALBUQUERQUE, NM 87199

Phone#:505.321.9099

Fax#:505.872.0999

E-mail:DAVID@RIOGRANDEENGINEERING.COM

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: 10/15/15 By:

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED:

REVISED  
DRAINAGE REPORT

For

**Montoya Street Townhomes**  
**Lots 1-4 Maciel-David Subdivision**  
**Albuquerque, New Mexico**

Prepared by

Rio Grande Engineering  
PO Box 93924  
Albuquerque, New Mexico 87199

OCTOBER 2015



David Soule P.E. No. 14522

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Site Hydrology ..... A

**Map**

Site Grading and Drainage Plan

## **PURPOSE**

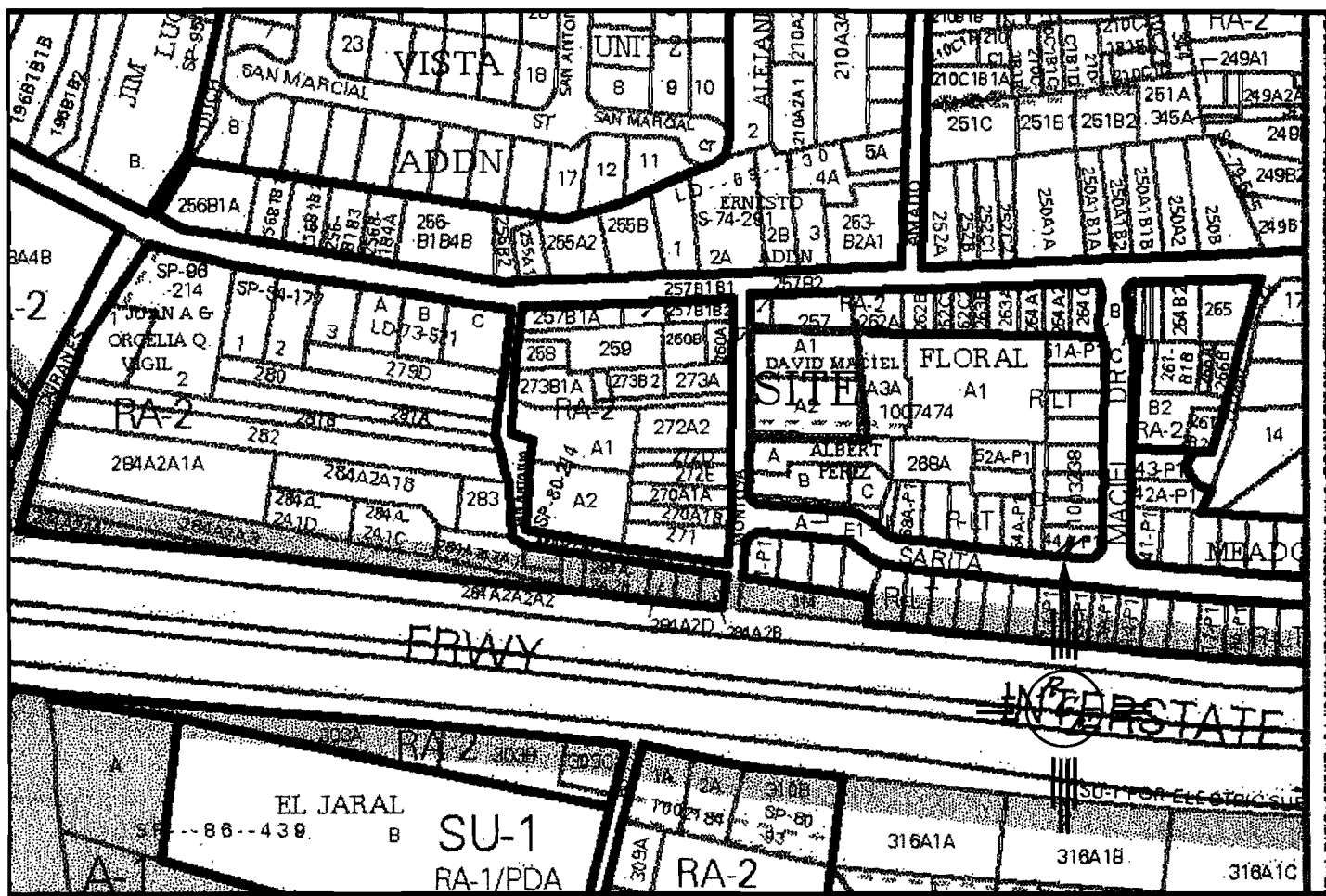
The purpose of this report is to provide the Drainage Management Plan for the development of a 5-lot subdivision located on Montoya Street NW between Floral Road and Interstate 40. This plan was prepared in accordance with the City of Albuquerque design regulations, utilizing the City of Albuquerque's 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 0.68-acre parcel of land located on the east side of Montoya Road south of Floral Road NW. The existing legal description of this site is tracts A1&A2 Land of David Maciel; the developed property will be known as lots 1-5 Montoya Street Townhomes Subdivision. As shown on FIRM map35013C0331H, the entire site is located within Flood Zone X. The site has had grading activities upon it in the past. It appears a structure may have occupied the parcel in the past, and the site appears to have been graded and compacted in the past, there is no native vegetation on the site. The site is lower than the road and currently ponds its storm water on site. The site will discharge to Montoya street in a large storm event. It does not appear that the site is impacted by significant upland flows, as the general area is flat and localized shallow ponding is evident on the surrounding properties and roadways. The development of the site will require the site to either discharge at a maximum rate of 2.75 per acre or pond the entire 100-year 10-day developed storm.

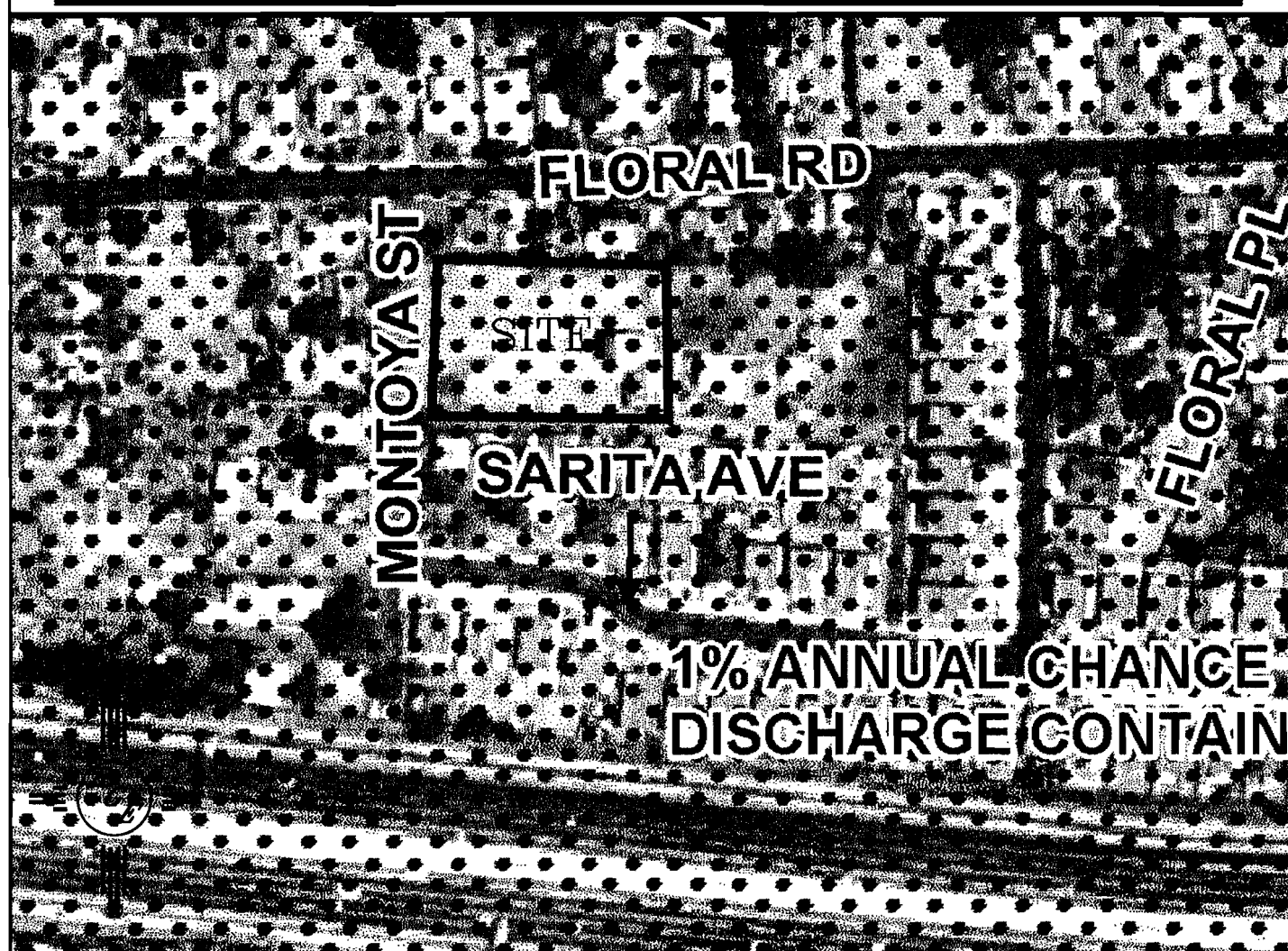
## **EXISTING CONDITIONS**

The site currently generates 1.53 cfs and 1,900 cubic of developed storm water in a 100-year event. Due to the fact the site contains a low spot, the site does not discharge. It appears this low point may have been the remnant of grading associated with the removal of a structure. The surrounding area is flat and the area contains shallow ponding in yards and general flow from east to west.



VICINITY MAP:

H-12-Z



## **PROPOSED CONDITIONS**

The proposed improvements consist of a new 5-lot subdivision serviced by existing roadways and private easements. Due to the existing grades of the lot, and the flat nature of Montoya road, the valley drainage scheme of 2.75 cfs per acre is not achievable. The lots will retain the entire developed flow on site. The platting action will allow for cross lot drainage easement on all parcels. As shown in appendix A, the developed site will generate a peak discharge of 2.26 cfs and a 10-day volume of 4,797 cubic feet. The site consists of raised pads and 18" deep ponds in the front and back yards. The proposed perimeter and intermediate fencing will contain turned blocks every 18' to allow cross lot drainage in conformance to the valley grading scheme. The on site ponding exceeds the required volume. The first flush volume of 315 cubic feet is retained on site.

## **SUMMARY AND RECOMMENDATIONS**

This project is an infill development of a 5-lot residential subdivision with the near north valley. The development is consistent with the valley flat grading scheme policies of the city of Albuquerque. The site allows for cross lot drainage and retains the entire 100-year, 10-day storm water volume generated. The pads are raised such that they are higher than the existing adjacent grades and surrounding streets. In an event exceeding the 100-year event, the site will discharge to Montoya road. The site has been designed in accordance with City of Albuquerque Drainage ordinance. This drainage plan and report conforms to the governing drainage regulations of the Valley Grading Scheme. Since the effected area site encompasses less than 1 acre, a NPDES permit may 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
			%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
Existing	29257.00	0.672	0%	0	100%	0.672	0%	0.000	0%	0.000	0.780	0.044	1.53	0.044
PROPOSED	29257.00	0.672	0%	0	42%	0.282	20%	0.134	38%	0.255	1.359	0.076	2.26	0.110

Equations:

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

Volume = Weighted D \* Total Area

First flush requirement    315.0004 cubic feet

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

Where for 100-year, 6-hour storm(zone2)

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

Developed Conditons

FLAT GRADING SCHEME

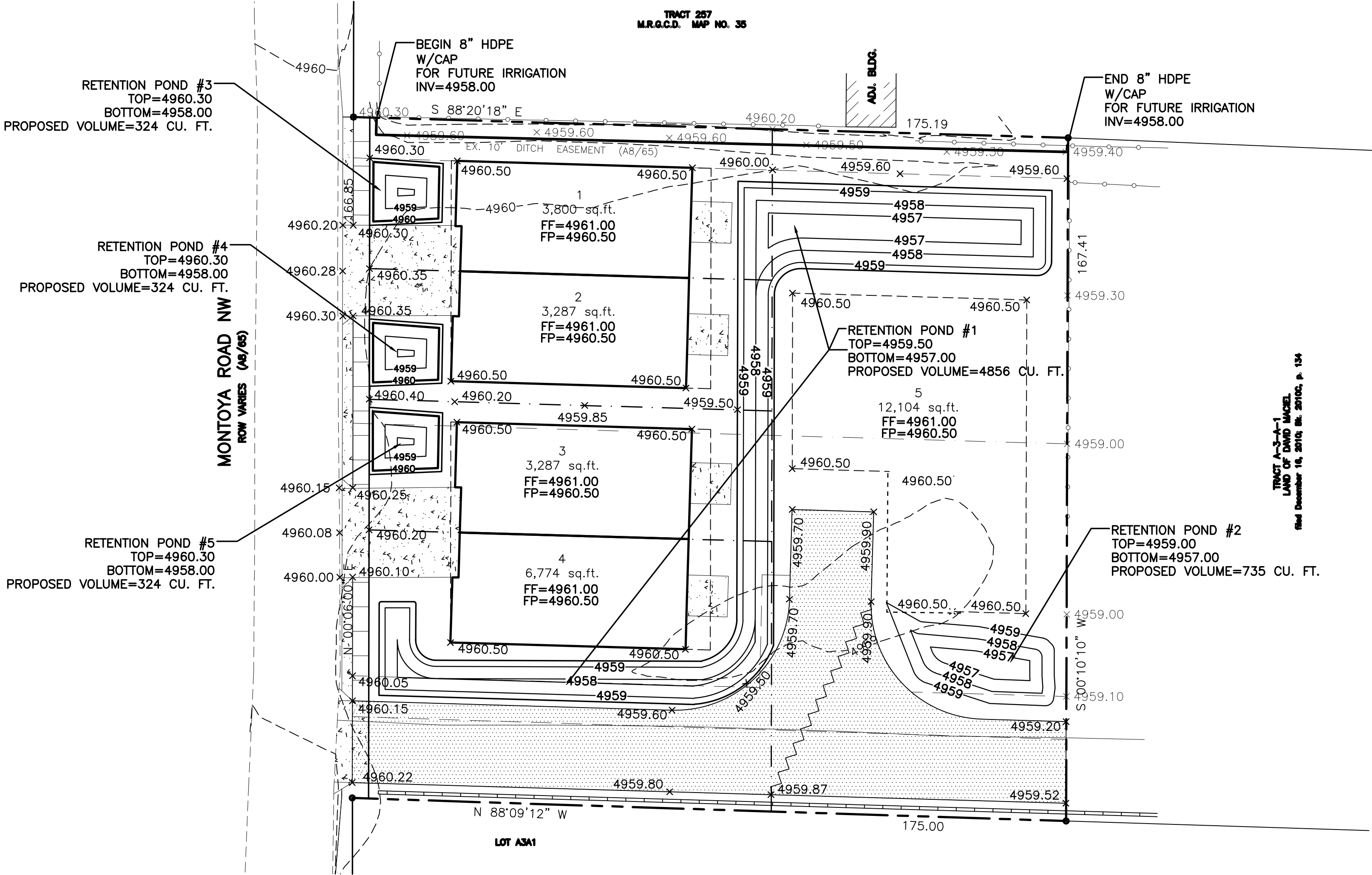
VOLUME GENERATED

EXISTITNG	1.53 CFS	0.044 AC-FT	1901.705 CF
PROPOSED	2.26 CFS	0.110 AC-FT	4796.19753 CF
ALLOWED	1.85 CFS		

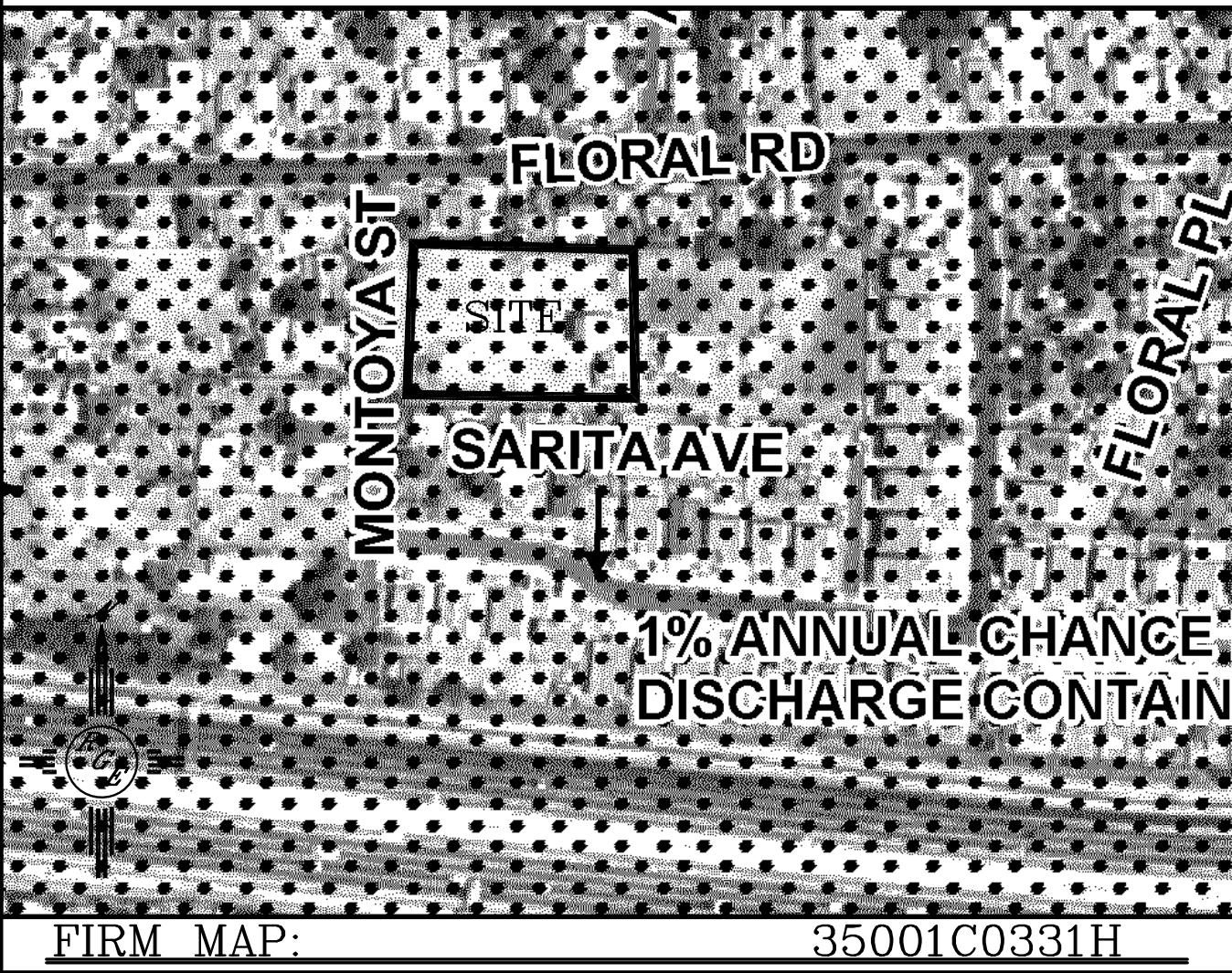
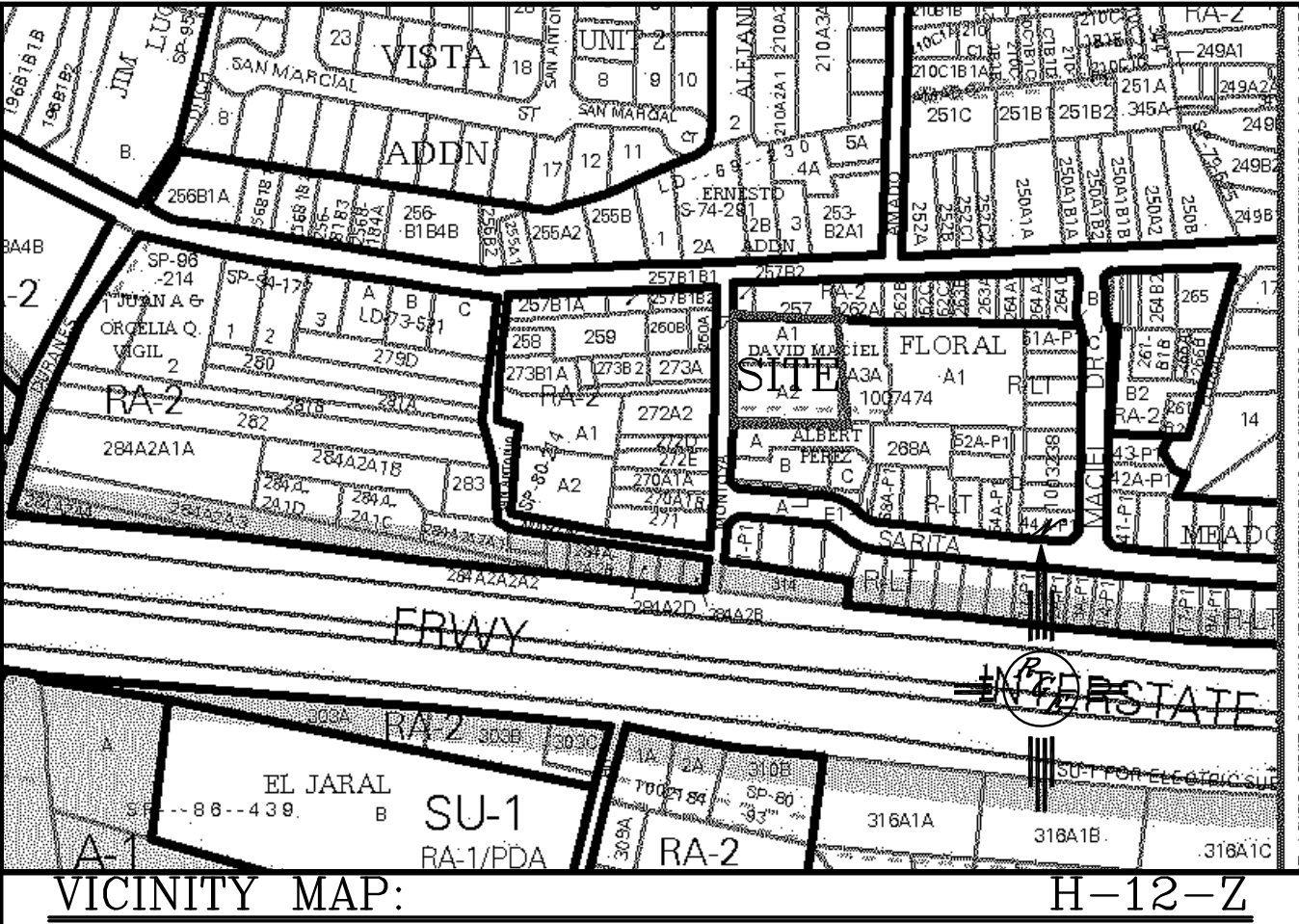
PONDING PROVIDED		
POND	1	4896
POND	2	735
FRONT YARDS		972 (THREE PONDS
TOTAL PROVIDED		6603

EROSION CONTROL NOTES:

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.



**CAUTION:**  
EXISTING UTILITIES ARE NOT SHOWN.  
IT SHALL BE THE SOLE RESPONSIBILITY  
OF THE CONTRACTOR TO CONDUCT ALL  
NECESSARY FIELD INVESTIGATIONS PRIOR  
TO ANY EXCAVATION TO DETERMINE THE  
ACTUAL LOCATION OF UTILITIES & OTHER  
IMPROVEMENTS.

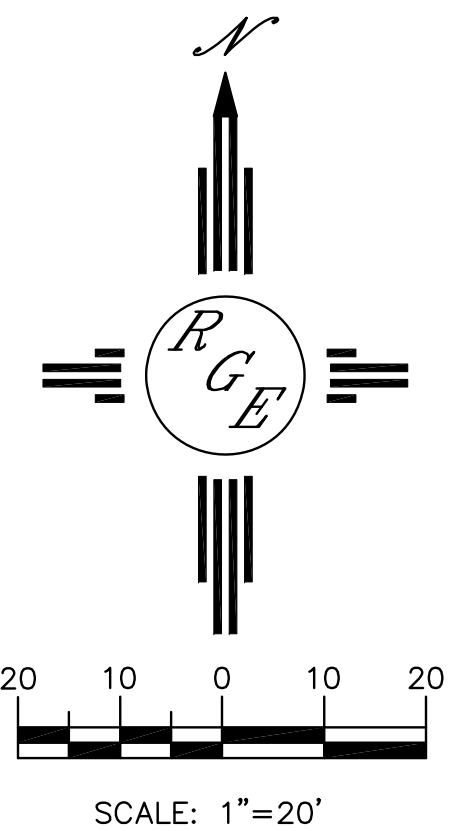


**LEGAL DESCRIPTION:**  
TRACTS A-1 AND A-2 LAND OF DAVID MACIEL

- NOTES:**
1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. All walls shall provide 1 turned block at grade every 18'
3. All lots shall be provided reciprocal cross lot drainage easement

LEGEND

---	5414	---	EXISTING CONTOUR
---	5415	---	EXISTING INDEX CONTOUR
---	5414	---	PROPOSED CONTOUR
---	5415	---	PROPOSED INDEX CONTOUR
---	5415	---	SLOPE TIE
×	4048.25	×	EXISTING SPOT ELEVATION
×	4048.25	×	PROPOSED SPOT ELEVATION
---		---	BOUNDARY
---		---	CENTERLINE
---		---	RIGHT-OF-WAY
---		---	EASEMENT
---		---	PROPOSED EDGE OF GRAVEL
---		---	EXISTING EDGE OF PAVEMENT
---		---	EXISTING SCREEN WALL
---		---	PROPOSED SCREEN WALL
---		---	PROPOSED GRAVEL DRIVE



<div>ENGINEER'S SEAL</div> <div>DAVID SOULE NEW MEXICO REGISTERED PROFESSIONAL ENGINEER (14522)</div> <div>10/15/15</div> <div>DAVID SOULE P.E. #14522</div>	MONTOKA STREET TOWNHOMES	DRAWN BY WCUJ
		DATE 10-15-15
		21523-LAYOUT-8-05-15
<div></div> <div>Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999</div>	SHEET # —	JOB # 21523