CITY OF ALBUQUERQUE

Richard J. Berry, Mayor

December 28, 2015

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

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 – 12/16/2015

Dear Mr. Soule:

Based upon the information provided in your submittal received 12-16-2015, the above referenced Grading Plan and Drainage Report is approved for Preliminary Plat, Final Plat and Grading Permit.

Prior to Building Permit approval, 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

PO Box 1293

Albuquerque

New Mexico 87103

www.cabq.gov

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 #: H12d019a

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:

x HYDROLOGY/ DRAINAGE
_____ TRAFFIC/ TRANSPORTATION
_____ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:

_____ ENGINEER/ ARCHITECT CERTIFICATION

_____ CONCEPTUAL G & D PLAN
X 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

X PRELIMINARY PLAT APPROVAL
_____ SITE PLAN FOR SUB'D APPROVAL
_____ SITE PLAN FOR BLDG. PERMIT APPROVAL
X FINAL PLAT APPROVAL
_____ SIA/ RELEASE OF FINANCIAL GUARANTEE
_____ FOUNDATION PERMIT APPROVAL
X 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?: x Yes _____ No

DATE SUBMITTED: 12/15/15 By: _____

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: ___

CITY OF ALBUQUERQUE

Richard J. Berry, Mayor

November 30, 2015

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

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. Soulé:

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. ADDED BASIN MAP
- Provide roof flow direction and outfall locations. ADDED TO PLAN
- 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. REVISED REPORT TO CORRECT
- 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. ADDED BASIN MAP
- 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. CORRECTED

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

Sincerely,

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

Org Drainage file
c pdf Addressee via Email

H12D019A PP FP GP Cmmt

PO Box 1293
Albuquerque
New Mexico 87103
www.cabq.gov

REVISED
DRAINAGE REPORT

For

Montoya Street Townhomes

Lots 1-5 Maciel-David Subdivision

Albuquerque, New Mexico

Prepared by

Rio Grande Engineering
PO Box 93924
Albuquerque, New Mexico 87199

DECEMBER 2015

David Soule P.E. No. 14522

TABLE OF CONTENTS

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.

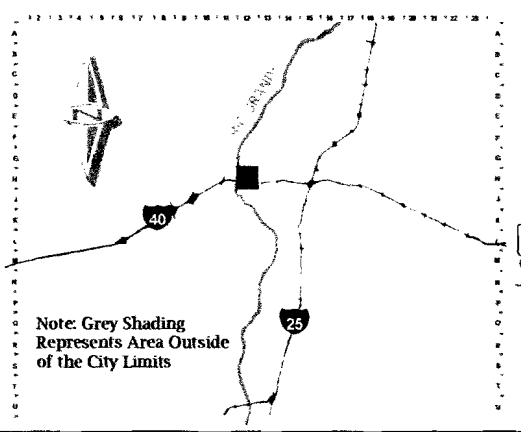
INTRODUCTION

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 discharges to the east in a large storm event. The site is located within a generally flat area of town. The surrounding properties typically have shallow onsite ponding that will overflow and discharge to surrounding properties in large events. Due to this flat grade the site is impacted by flow from adjacent properties, 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.

For more current information and more details visit: http://www.cabq.gov/gis

AGIS
Albuquerque Geographic Information System

Map amended through: 2/4/2010



Zone Atlas Page:

H-12-Z

Selected Symbols

- SECTOR PLANS
- Design Overlay Zones
- City Historic Zones
- H-1 Buffer Zone
- Petroglyph Mon.
- Escarpment
- 2 Mile Airport Zone
- Airport Noise Contours
- Wall Overlay Zone

0 750 1,500 Feet

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 except in major rain events. 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 west to east. A copy of the surrounding topography located in appendix a shows the immediate area generally flows from west to east, with a hard to determine but significant amount of shallow onsite ponding on adjacent properties.

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. Therefore, the lots will retain the entire developed flow on site. The platting action will allow for cross lot drainage easement on all parcels. The purpose of the cross lot easement is to allow the ponding to cross lot lines. 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 the overall development 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 the historical direction south east. 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

EROSION CONTROL NOTES:

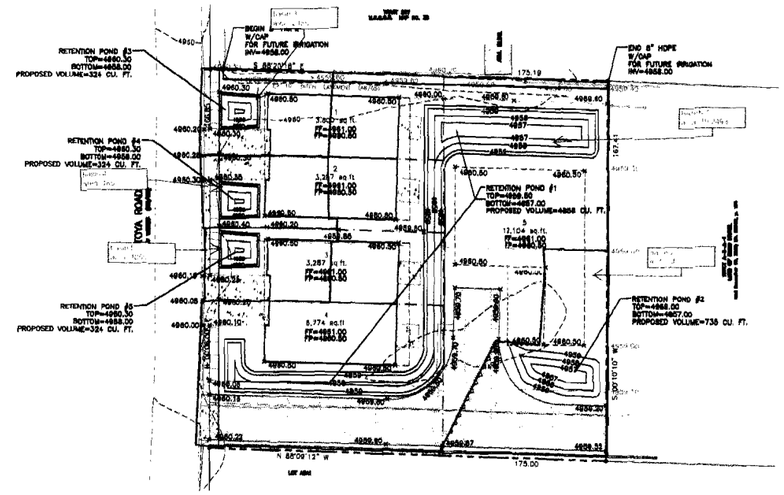
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

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.

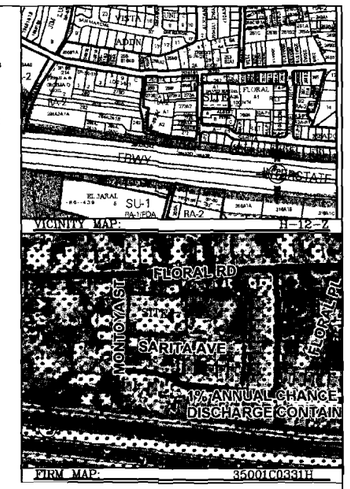
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

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.



VICINITY MAP: H-12-Z

FIRM MAP: 35001C0331H

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

- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- SLOPE TIE
- EXISTING SPOT ELEVATION
- 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

ENGINEER'S SEAL

DAVID SOULE
NEW MEXICO
14322
REGISTERED PROFESSIONAL ENGINEER

10/15/15

DAVID SOULE
P.E. #14322

MONTOYA STREET TOWNHOMES

GRADING AND DRAINAGE PLAN

Rio Grande Engineering
1606 CENTRAL AVENUE SE
SUITE 201
ALBUQUERQUE, NM 87106
(505) 975-1886

DRAWN BY: WCMJ

DATE: 10-15-15

21552-LAYOUT-9-08-15

SHEET #: —

JOB #: 21523

Weighted E Method

Basin	Area (sf)	Area (acres)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	100-Year, 6-hr. Weighted E (ac-ft)	100-Year, 6-hr. Volume (ac-ft)	100-Year, 6-hr. Flow cfs	10-day 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
basin 1	19249.00	0.442	0%	0	42%	0.186	20%	0.088	38%	0.168	1.359	0.050	1.49	0.072
basin2	4143.00	0.095	0%	0	42%	0.040	20%	0.019	38%	0.036	1.359	0.011	0.32	0.016
basin 3	2155.00	0.049	0%	0	42%	0.021	20%	0.010	38%	0.019	1.359	0.006	0.17	0.008
basin 4	1855.00	0.043	0%	0	42%	0.018	20%	0.009	38%	0.016	1.359	0.005	0.14	0.007
basin 5	1855.00	0.043	0%	0	42%	0.018	20%	0.009	38%	0.016	1.359	0.005	0.14	0.007
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

EXISITNG	1.53 CFS	0.044 AC-FT	1901.705 CF
PROPOSED	2.26 CFS	0.110 AC-FT	4796.19753 CF
ALLLOWED	1.85 CFS		

VOLUME GENERATED
10-day

PONDING PROVIDED		GENERATED
POND 1	4896	3156
POND 2	735	679
POND 3	324	353
POND 4	324	304
POND 5	324	304
TOTAL PROVIDED	6603	

Legend

- City Parcels
- Municipal Limits
  - Corrales
  - Edgewood
  - Los Ranchos
  - Rio Rancho
  - Tijeras
  - UNINCORPORATED
- World Street Map

Notes

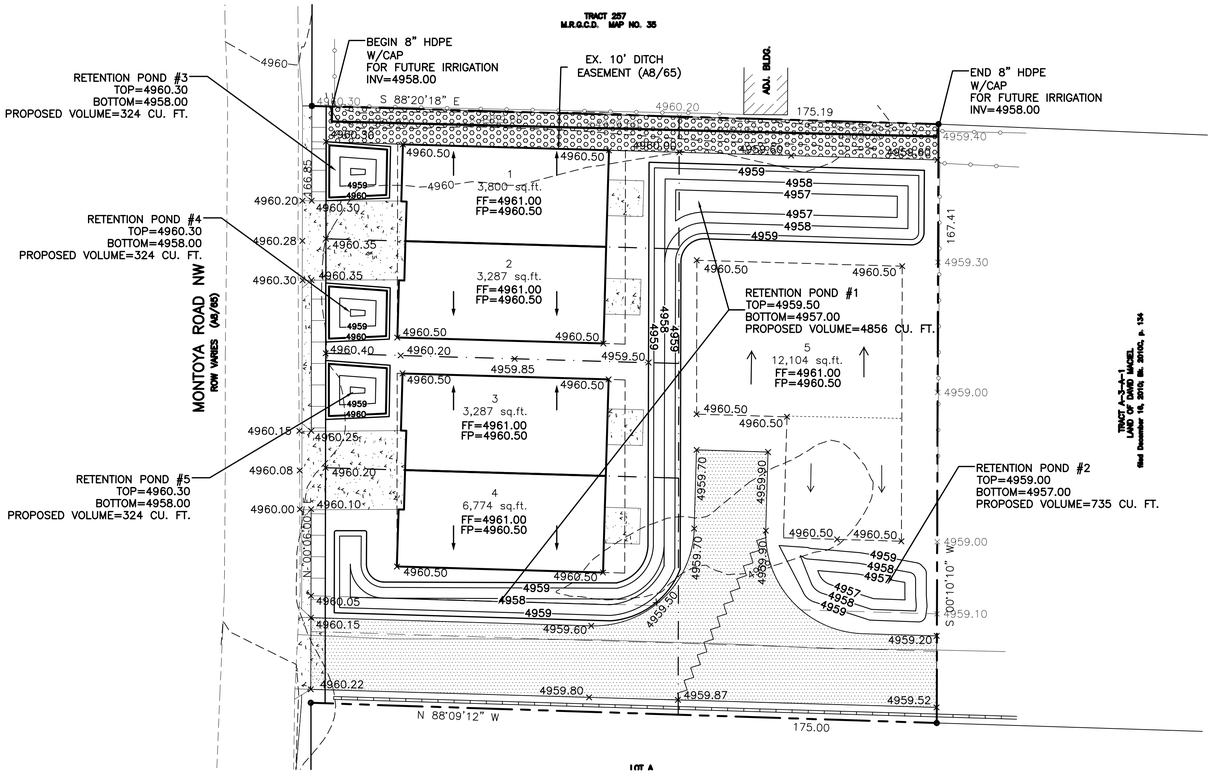
0.1 0 0.03 0.1 Miles

WGS_1984_Web_Mercator_Auxiliary_Sphere

12/15/2015 © City of Albuquerque

This map is a user generated static output from www.cabq.gov/gis and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

THIS MAP IS NOT TO BE USED FOR LEGAL PURPOSES



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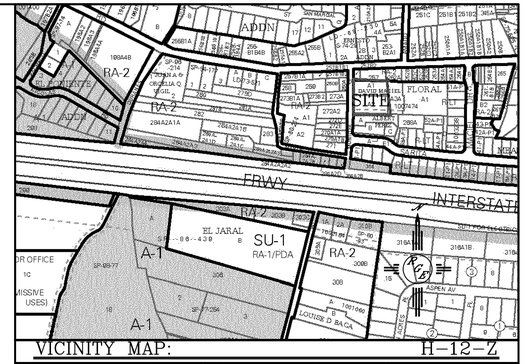
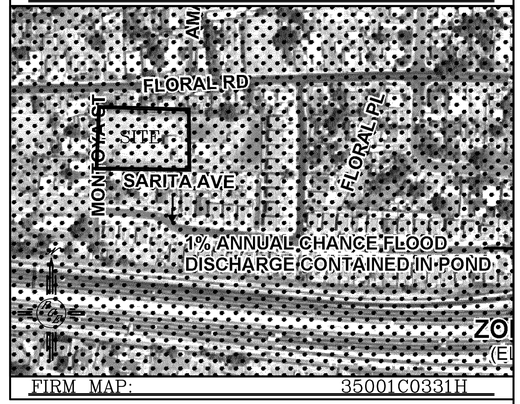


VICINITY MAP: H-12-Z



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- CENTERLINE
- RIGHT–OF–WAY
- EASEMENT
- PROPOSED EDGE OF GRAVEL
- EXISTING EDGE OF PAVEMENT
- EXISITNG SCREEN WALL
- PROPOSED SCREEN WALL
- PROPOSED GRAVEL DRIVE
- EX. 10' DITCH– EASEMENT (A8/65)

N

20 10 0 10 20

SCALE: 1"=20'

CAUTION:

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ENGINEER'S SEAL

DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER

12/16/15

DAVID SOULE
P.E. #14522

MONTOYA STREET TOWNHOMES

GRADING AND DRAINAGE PLAN

DRAWN BY WCWJ

DATE 10–15–15

21523–LAYOUT–8–05–15

SHEET # —

JOB # 21523

Rio Grande Engineering
1606 CENTRAL AVENUE SE
SUITE 201
ALBUQUERQUE, NM 87106
(505) 872–0999