

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

January 9, 2020

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

**RE: Lots 10 A-D Los Hermanos Addition
Grading & Drainage Plan and Drainage Report
Engineer's Stamp Date: 12/24/19
Hydrology File: G15D203**

Dear Mr. Soule:

Based upon the information provided in your resubmittal received 12/30/19, the Grading & Drainage Plan and Drainage Report are approved for Building Permit and for action by the DRB on the Preliminary Plat.

PO Box 1293

Once the grading is complete, a pad certification will be required prior to release of Building Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter and the pad certification approval letter.

Albuquerque

As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Dough Hughes, PE, jhughes@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

NM 87103

www.cabq.gov

Also as a reminder, please provide Drainage Covenant for the retention ponds per Chapter 17 of the DPM prior to Permanent Release of Occupancy. Please submit this on the 4th floor of Plaza de Sol. A \$25 fee will be required.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: los hermonos sub **Building Permit #:** _____ **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: Lots 10a,10b 10c,10d Los Hermanos addition
City Address: _____

Applicant: _____ **Contact:** _____
Address: 4620,4622 CARLTON NE
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: RIO GRANDE ENGINEERING **Contact:** DAVID SOULE
Address: PO BOX 93924 ALB NM 87199
Phone#: 505.321.9099 **Fax#:** 505.872.0999 **E-mail:** david@riograndeengineering.com

TYPE OF DEVELOPMENT: _____ PLAT _____ RESIDENCE ☒ DRB SITE _____ ADMIN SITE

Check all that Apply:

DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE
_____ TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:

_____ ENGINEER/ARCHITECT CERTIFICATION
_____ PAD CERTIFICATION
_____ CONCEPTUAL G & D PLAN
☒ GRADING PLAN
☒ DRAINAGE REPORT
_____ DRAINAGE MASTER PLAN
_____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
_____ ELEVATION CERTIFICATE
_____ CLOMR/LOMR
_____ TRAFFIC CIRCULATION LAYOUT (TCL)
_____ TRAFFIC IMPACT STUDY (TIS)
_____ STREET LIGHT LAYOUT
_____ OTHER (SPECIFY) _____
_____ PRE-DESIGN MEETING?

IS THIS A RESUBMITTAL?: _____ Yes ☒ No

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
_____ FLOODPLAIN DEVELOPMENT PERMIT
_____ OTHER (SPECIFY) _____

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

DRAINAGE REPORT

For

**LOTS 10 A-D
LOS HERMANOS ADDITION**

Albuquerque, New Mexico

Prepared by

Rio Grande Engineering
PO Box 93924
Albuquerque, New Mexico 87199

December 2019



1 / 9 / 20

David Soule P.E. No. 14522

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Site Hydrology/Original Grading Plan.....	A
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Map Pocket

Site Grading and Drainage Plan	
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PURPOSE

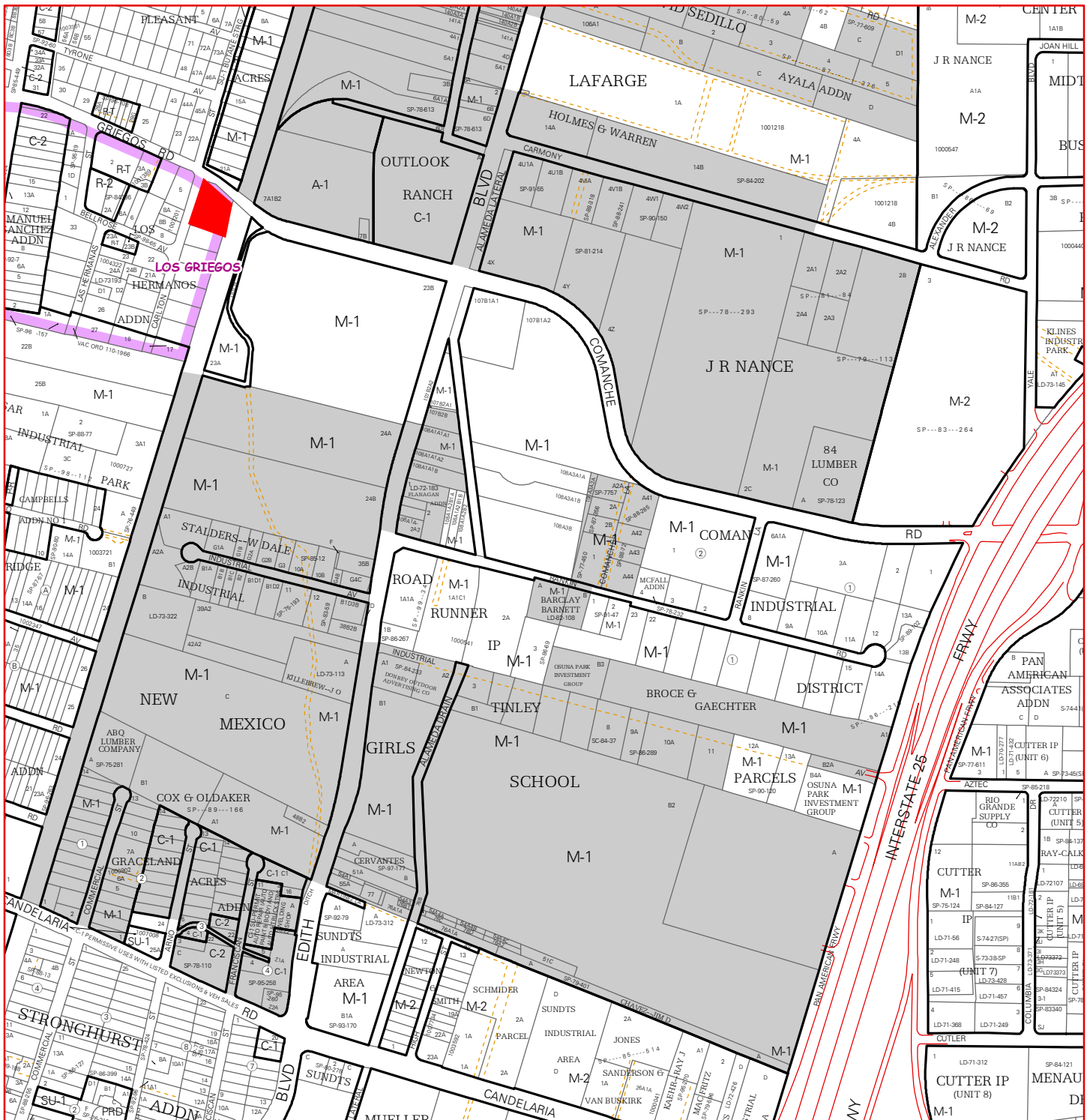
The purpose of this report is to provide the Drainage Management Plan for the infill development of a previously developed lot on south east corner of Carlton and Griegos NE. This plan was prepared in accordance with the City of Albuquerque design regulations, utilizing the City of Albuquerque's Development 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

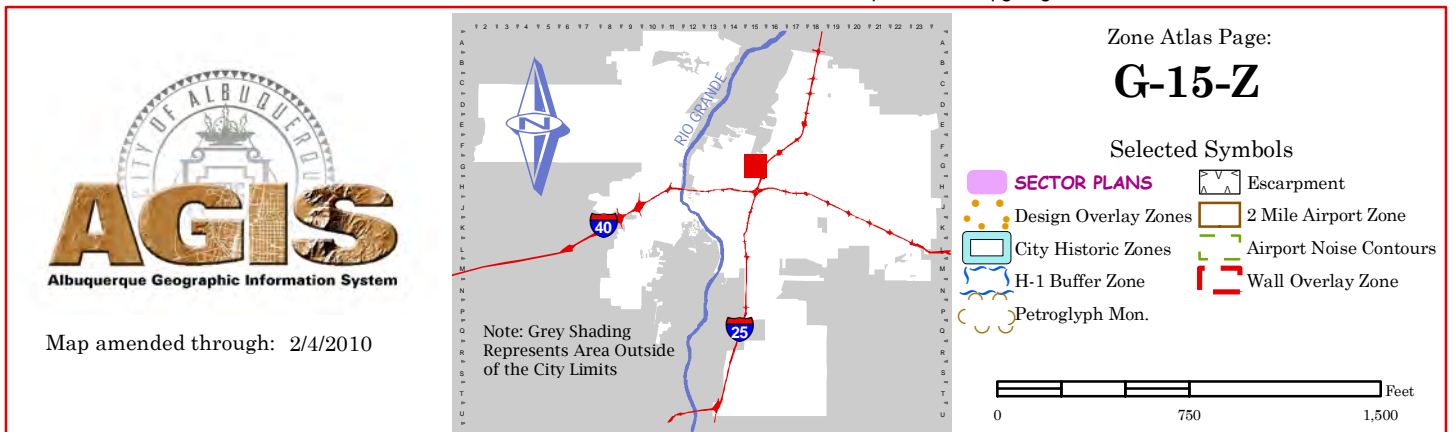
The subject of this report, as shown on the Exhibit A, is a 0.735-acre parcel of land located on the south east corner of Carlton and Griegos NE in the near north east part of Albuquerque. The legal description of this site is lot 10A,B,C,D, Los Hermanos Addition. As shown on FIRM map35001C0119G, the entire property is located within Flood Zone X. This site is surrounded by fully developed parcels. This site is an existing developed site within fully developed areas. Based on the site location and the adjacent drainage infrastructure this development must maintain existing drainage patterns and match existing conditions as closely as possible.

EXISTING CONDITIONS

The site is currently developed. The site accepts 0.3 cfs from the adjacent railroad right of way. No other flows impact the property. The site is not in native condition. The location provides for significant pedestrian and vehicle impact on the property. The site currently generates 2.47 cfs, when combined with the upland flow; the site discharges 2.83 cfs to Carlton road.



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



PROPOSED CONDITIONS

The proposed improvements consist of a 4 lot subdivision. The site will be graded to accommodate the new buildings while maintaining the existing drainage patterns. As shown in on the grading plan, each lot will be graded to contain two onsite basins. The front basin includes the western portion of the site. This basin generates 0.36 cfs for lot 10A and 069 for each lots 10B, 10C, 10D. This basin has a required water quality volume of 60 cf for lot 10A and 38 CF for each lots 10B,10C,10D. The front basin discharges to Carlton Street as sheet flow. The rear basins contain the balk half of the pad and east yard. This basin generates 613 cf for lot 10A and1,033 cf for lots 10B,10C,10D. The developed flow from this basin is combined with the upland flow and retained onsite. The rear yards have an emergency overflow on the side yard of each pad. The combined flow leaving the site is predicted to be 2.43 cfs, which is less than the historical. .

SUMMARY AND RECOMMENDATIONS

This project is an infill project within a completely developed area of Northeast Albuquerque. The site is currently developed. The site currently discharges 2.83 cfs to Carlton including the upland flows passing through. The proposed drainage plan will maintain the existing drainage patterns and allow the front basin to discharge to the street, and the rear basins shall retain the developed flow and upland flow. The post development discharge will be 2.43 cfs, which is a reduction from historical rates. The site retains the required first flush volumes. The development has emergency overflow out the proposed side yards to the adjacent roadways. Since this site work area encompasses less than 1 acre, a NPDES permit and Erosion and Sediment Control Plan may not be required prior to any construction activity.

APPENDIX A
SITE HYDROLOGY

Weighted E Method
LOTS 10 A

Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year, 6-hr.			100 yr 10-DAY
			%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
UPLAND	120.00	0.003	0%	0	40%	0.001	40%	0.001	20%	0.001	1.188	0.000	0.01	0.000
EXISTING	8032.00	0.184	0%	0	20%	0.037	55%	0.101	25%	0.046	1.308	0.020	0.62	0.026
PROP TO STREET	4201.00	0.096	0%	0	25%	0.024	25%	0.024	50%	0.048	1.538	0.012	0.36	0.019
PROP TO REAR	3831.00	0.088	0%	0	25%	0.022	43%	0.038	32%	0.028	1.359	0.010	0.30	0.014

LOTS 10 B-D

Basin	Area (sf)	Area (acres)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year, 6-hr.			100 yr 10-DAY
			%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	Volume (ac-ft)
UPLAND	4940.00	0.113	0%	0	40%	0.045	40%	0.045	20%	0.023	1.188	0.011	0.35	0.014
EXISTING	24005.00	0.551	0%	0	20%	0.110	55%	0.303	25%	0.138	1.308	0.060	1.85	0.078
PROP TO STREET	8114.00	0.186	0%	0	25%	0.047	25%	0.047	50%	0.093	1.538	0.024	0.69	0.036
PROP TO REAR	15891.00	0.365	0%	0	25%	0.091	43%	0.157	32%	0.117	1.359	0.041	1.25	0.057

Equations:

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

FRONT YARD FIRST FLUSH REQUIRED

Volume = Weighted D * Total Area

A 60 cubic feet
 B-D 38 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 Condions

LOT	EXISTING DISCHARGE	UPLAND	TOTAL HISTORIC DISCHARGE	PROPOSED DISCHARGE	REQUIRED RETAINAGE*
10A	0.62 CFS	0.01 CFS	0.63 CFS	0.36 CFS	612.49 CF
10B	0.62 CFS	0.12 CFS	0.73 CFS	0.69 CFS	1032.95 CF
10C	0.62 CFS	0.12 CFS	0.73 CFS	0.69 CFS	1032.95 CF
10C	0.62 CFS	0.12 CFS	0.73 CFS	0.69 CFS	1032.95 CF

*REAR YARD RETAINS UPLAND AND ONSITE

Pan

Zoom In

Zoom Out

Initial View

Previous Extent

Next Extent

Bookmarks

Navigation Tools

Print

Export

Share

Identify

Print and Share

Layers

All Available Layers

Filter Layers...

Filter

☐ IDO Zoning

☐ Land Use

☒ Infrastructure

☒ Transportation

☐ Boundaries

☐ Neighborhood Associations and Coalitions

☒ Zone Grid

☐ Police Area Commands

☐ Fire Station District

☐ City Council Districts

☐ County Commission Districts

☐ Parks

☐ Open Space

