

# CITY OF ALBUQUERQUE

Planning Department  
Alan Varela, Director



Mayor Timothy M. Keller

February 6, 2024

Jackie McDowell  
McDowell Engineering, Inc.  
7820 Beverly Hills Ave. NE  
Albuquerque, NM 87122

**RE: 5046 Valle Del Sol Rd. NW  
Garage Addition  
Grading and Drainage Plan  
Engineer's Stamp Date: 01/20/24  
Hydrology File: J11D038**

Dear Ms. McDowell:

PO Box 1293

Based upon the information provided in your submittal received 01/29/2024, the Grading and Drainage Plan is approved for Building Permit and Grading Permit. **Since this has an existing house, a pad certification is not needed for this project.** Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

Albuquerque

**PRIOR TO CERTIFICATE OF OCCUPANCY:**

NM 87103

1. Engineer's Certification, per the DPM Part 6-14 (F): Engineer's Certification Checklist For Non-Subdivision is required.

www.cabq.gov

If you have any questions, please contact me at 924-3995 or [rbrissette@cabq.gov](mailto: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:** MCDONALD, JIMMIE & DEBORAH **Building Permit #:** BP-2023-49483 **Hydrology File #:** J11D038  
**DRB#:** \_\_\_\_\_ **EPC#:** \_\_\_\_\_ **Work Order#:** \_\_\_\_\_  
**Legal Description:** LOT 2, PLAT OF LOTS 1-2, LANDS OF MCDONALD  
**City Address:** 5046 VALLE DEL SOL RD. NW, ALBUQUERQUE, NM 87105

**Applicant:** MCDOWELL ENGINEERING, INC. **Contact:** JACKIE MCDOWELL  
**Address:** 7820 BEVERLY HILLS AVE. NE, ALBUQUERQUE, NM 87122  
**Phone#:** 505-828-2430 **Fax#:** 505-821-4857 **E-mail:** jackmcdowell@comcast.net

**Other Contact:** MCDONALD, JIMMIE & DEBORAH **Contact:** JIMMIE MCDONALD  
**Address:** 506 REGINA RD. NW  
**Phone#:** 505-563-2981 **Fax#:** \_\_\_\_\_ **E-mail:** mcdonald.jimmie@gmail.com

**TYPE OF DEVELOPMENT:** \_\_\_\_\_ PLAT (# of lots) ☒ RESIDENCE \_\_\_\_\_ DRB SITE \_\_\_\_\_ ADMIN SITE

IS THIS A RESUBMITTAL? ☒ Yes \_\_\_\_\_ No

**DEPARTMENT** \_\_\_\_\_ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

### 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?

### 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) \_\_\_\_\_

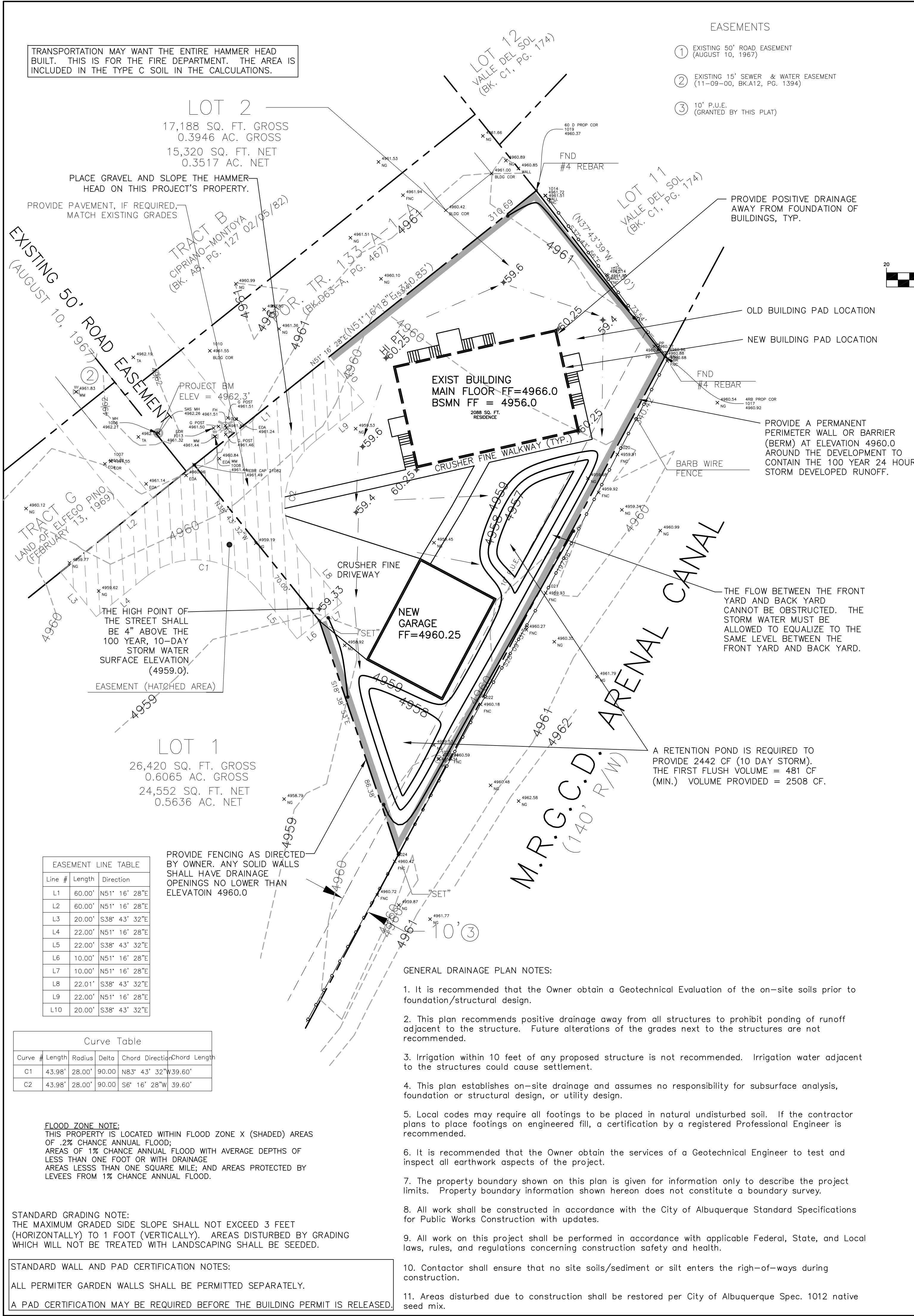
**DATE SUBMITTED:** 1-20-24 **By:** JACKIE MCDOWELL

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

FEE PAID: \_\_\_\_\_





#### DRAINAGE PLAN

#### SCOPE:

Pursuant to the latest City of Albuquerque and Bernalillo County Ordinances, the Drainage Plan shown hereon outlines the drainage management criteria for controlling developed runoff on and exiting the project site. A single family home exists and a detached garage is proposed for the site.

#### EXISTING CONDITIONS:

Presently, the 0.39 acre site is developed. The site is bounded on the northwest, northeast, and southwest by private property, and on the southeast by MRGCD Arenal Canal. The site is relatively level. As shown on FEMA Panel #329H, dated August 16, 2012, the site is not located in a 100 year flood plain.

#### PROPOSED CONDITIONS:

Current COA Drainage Ordinance requires a "Flat Grading Scheme" for this area in the City. A pond has been provided to store the runoff from this site. As shown by the plan, the building is located in the center of the lot. Negligible off-site flows enter the site from the west. On site flows will drain around the structures via swales, and flow to the southeast to the retention pond. All roof drainage will discharge from the roof to the lot and be directed around the structures to the drainage paths and pond.

Supplemental calculations are shown as part of this Grading and Drainage plan.

#### CALCULATIONS:

The calculations shown hereon define the 100 year-6 hour design storm falling within the project area under existing and developed conditions. The Hydrology is per "Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque, New Mexico in cooperation with Bernalillo County, New Mexico and the Albuquerque Metropolitan Arroyo Flood Control Authority.

#### PROPERTY ADDRESS:

5046 Valle del Sol Rd. NW, Albuquerque, NM 87105

#### TOPOGRAPHY:

Topographic information provided by David Acosta, PS, CTSI (Construction Survey Technologies, Inc.) August, 2018.

Precipitation Zone = 1

Depth at 100-year, 6-hour storm (Table A-2)

P(360) = 2.20 inches

P(10 day) = 3.67 inches

Land Treatments:

From Table 5 - Percent Treatment D

Single Family Residential =

$75\text{SQR}((N\%N) + (5\%N))$

where N = units/acre

N = -----, ok < 6

ZONE 1

POND VOLUME PROVIDED:

Areas (acres)	Existing	Proposed	ELEV.	AREA	VOL. (CF)
			4959	2193	1701.5
Treatment A	0.39	0.00	4958	1210	
Treatment B	0.00	0.10			806.5
Treatment C	0.00	0.16	4957	403	
Treatment D	0.00	0.13			
Total (acres) =	0.39	0.39		TOTAL	2508

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.014	0.040	0.003	0.021	0.000	0.008
Volume (cubic feet) =	623	1,748	113	921	0	413

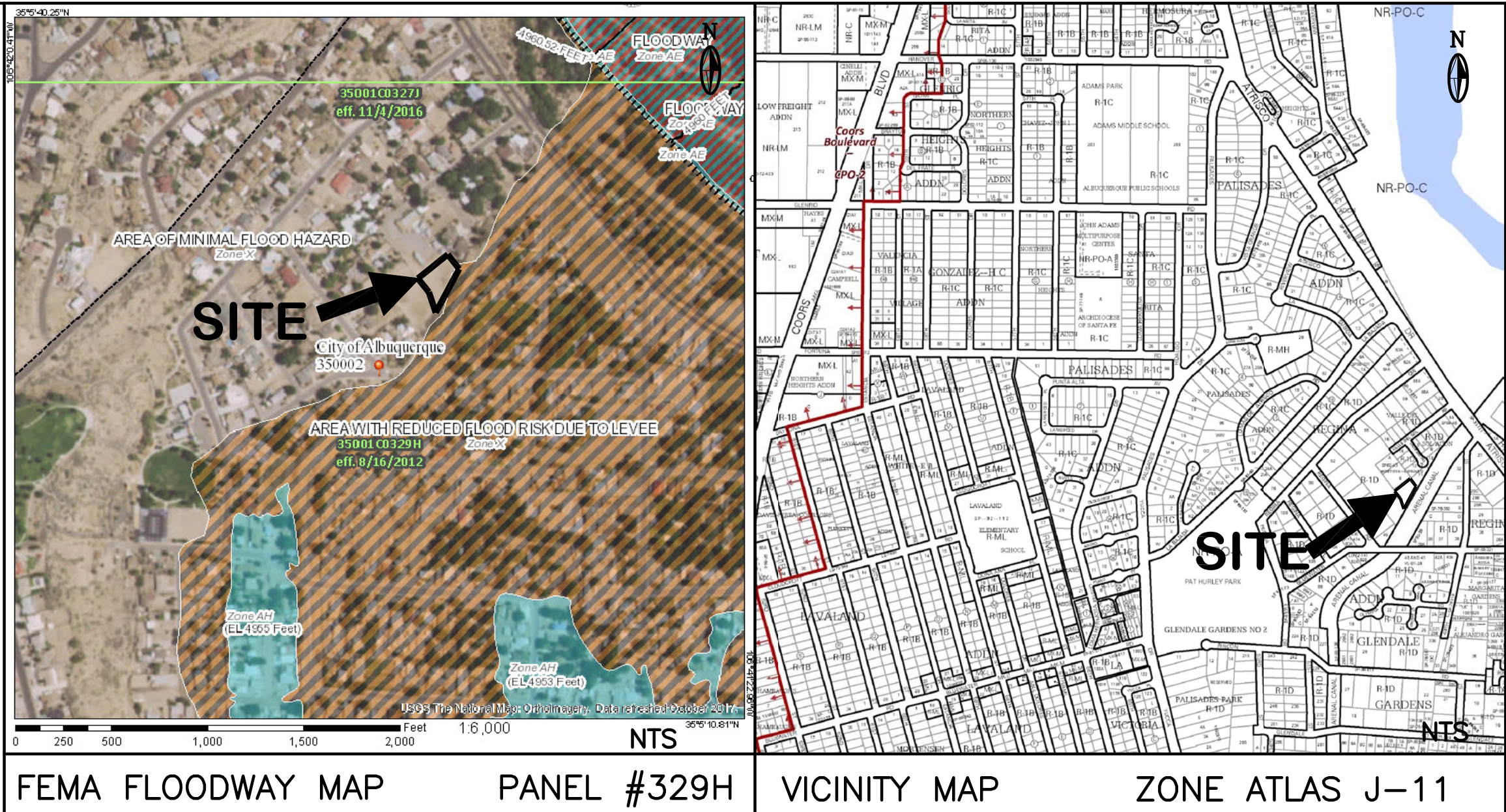
FIRST FLUSH REQUIRED POND VOL =  $.34''/(12''/FT) * (0.39 \text{ AC} * 43560 \text{ SF/AC}) = 481 \text{ CF}$

Total Q(p), cfs	100 year Existing Q(p)*A	100 year Proposed Q(p)*A	10 year Existing Q(p)*A	10 year Proposed Q(p)*A	2 year Existing Q(p)*A	2 year Proposed Q(p)*A
Treatment A	0.50	0.00	0.09	0.00	0.00	0.00
Treatment B	0.00	0.23	0.00	0.09	0.00	0.00
Treatment C	0.00	0.46	0.00	0.24	0.00	0.08
Treatment D	0.00	0.57	0.00	0.38	0.00	0.22
Total Q (cfs) =	0.50	1.23	0.09	0.69	0.00	0.30

POND VOLUME REQUIRED:

$v(10 \text{ day}) = V(360) + A(D) * (P(10\text{day}-P(360))/12 \text{ in/ft}) = 0.0561 \text{ ac-ft}$

$= 2442 \text{ cu-ft}$



#### PAD CERTIFICATION:

THE BUILDING HAS BEEN ROTATED SLIGHTLY TO ACCOMMODATE A BETTER DRAINAGE FLOW AND VIEWS WHILE ALLOWING MORE DISTANCE FROM THE BUILDING TO THE PROPERTY LINE AND THE DRAINAGE INTENT FOR THE PROJECT REMAINS UNCHANGED, THEREFORE, THIS PAD IS IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED GRADING & DRAINAGE PLAN.

9-7-18  
REV 11-6-18  
REV 1-20-24 - GARAGE ADD'N

#### ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on August 21, 2018 and as of that date it appeared that no filling, grading, or excavation had occurred thereon since completion of the topographic survey used to prepare this plan.

5046 Valle del Sol Rd. NW, Albuquerque, NM 87105

CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT 2, PLAT OF LOTS 1-2  
LANDS OF MCDONALD

MCDONALD - GRADING & DRAINAGE PLAN

McDowell Engineering, Inc.

7820 BEVERLY HILLS AVE. NE ALBUQUERQUE, NM 87122  
TELE: 505-828-2430 FAX: 505-821-4857

Designed JSM Drawn STAFF Checked JSM Sheet of  
File MCD0118L Date AUGUST, 2018 1 1