

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

July 9, 2018

Jackie McDowell, PE
McDowell Engineering, Inc.
7820 Beverly Hills Ave NE
Albuquerque, NM 87121

**RE: Lot 3 Block 10 Unit 22, S.A.D. 228
Volcano Cliffs Subdivision
6424 Petirrojo Rd. NW
Grading and Drainage Plan
Engineers Stamp Date; 5-17-18 (D10D003F3)
Pad Certification Date; 6/15/18**

Dear Ms. McDowell,

PO Box 1293

Based upon the information provided in your submittal received 7/6/18, this plan is approved for Building Permit.

Albuquerque

Please have the owner/builder attach a copy of this approved plan, to the construction sets in the permitting process prior to sign-off by Hydrology. Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained, with the approved G&D plan dated 2/9/18.

NM 87103

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist of this plan will be required.

www.cabq.gov

If you have any questions, please contact me at 924-3986 or Rudy Rael at 924-3977.

Sincerely,

James D. Hughes, P.E.
Principal Engineer, Hydrology
Planning Department

RR/JDH
C: File



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: _____ Building Permit #: _____ City Drainage #: D10D003F3

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: _____

Surveyor: _____ Contact: _____

Address: _____

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

Contractor: _____ Contact: _____

Address: _____

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

TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
- ☐ DRAINAGE PLAN 1st SUBMITTAL
- ☐ DRAINAGE PLAN RESUBMITTAL
- ☐ CONCEPTUAL G & D PLAN
- ☐ GRADING PLAN
- ☐ EROSION & SEDIMENT CONTROL PLAN (ESC)
- ☐ ENGINEER'S CERT (HYDROLOGY)
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ ENGINEER'S CERT (TCL)
- ☐ ENGINEER'S CERT (DRB SITE PLAN)
- ☐ ENGINEER'S CERT (ESC)
- ☐ SO-19
- ☐ OTHER (SPECIFY) **PAD CERTIFICATION**

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☐ SIA/FINANCIAL GUARANTEE RELEASE
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ S. DEV. PLAN FOR SUB'D APPROVAL
- ☐ S. DEV. FOR BLDG. PERMIT APPROVAL
- ☐ SECTOR PLAN APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY (PERM)
- ☐ CERTIFICATE OF OCCUPANCY (TCL TEMP)
- ☐ FOUNDATION PERMIT APPROVAL
- ☐ BUILDING PERMIT APPROVAL
- ☐ GRADING PERMIT APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ WORK ORDER APPROVAL
- ☐ GRADING CERTIFICATION
- ☐ SO-19 APPROVAL
- ☐ ESC PERMIT APPROVAL
- ☐ ESC CERT. ACCEPTANCE
- ☐ OTHER (SPECIFY) **PAD CERTIFICATION**

WAS A PRE-DESIGN CONFERENCE ATTENDED: _____ Yes _____ No _____ Copy Provided

DATE SUBMITTED: _____ By: JACKIE MCDOWELL

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

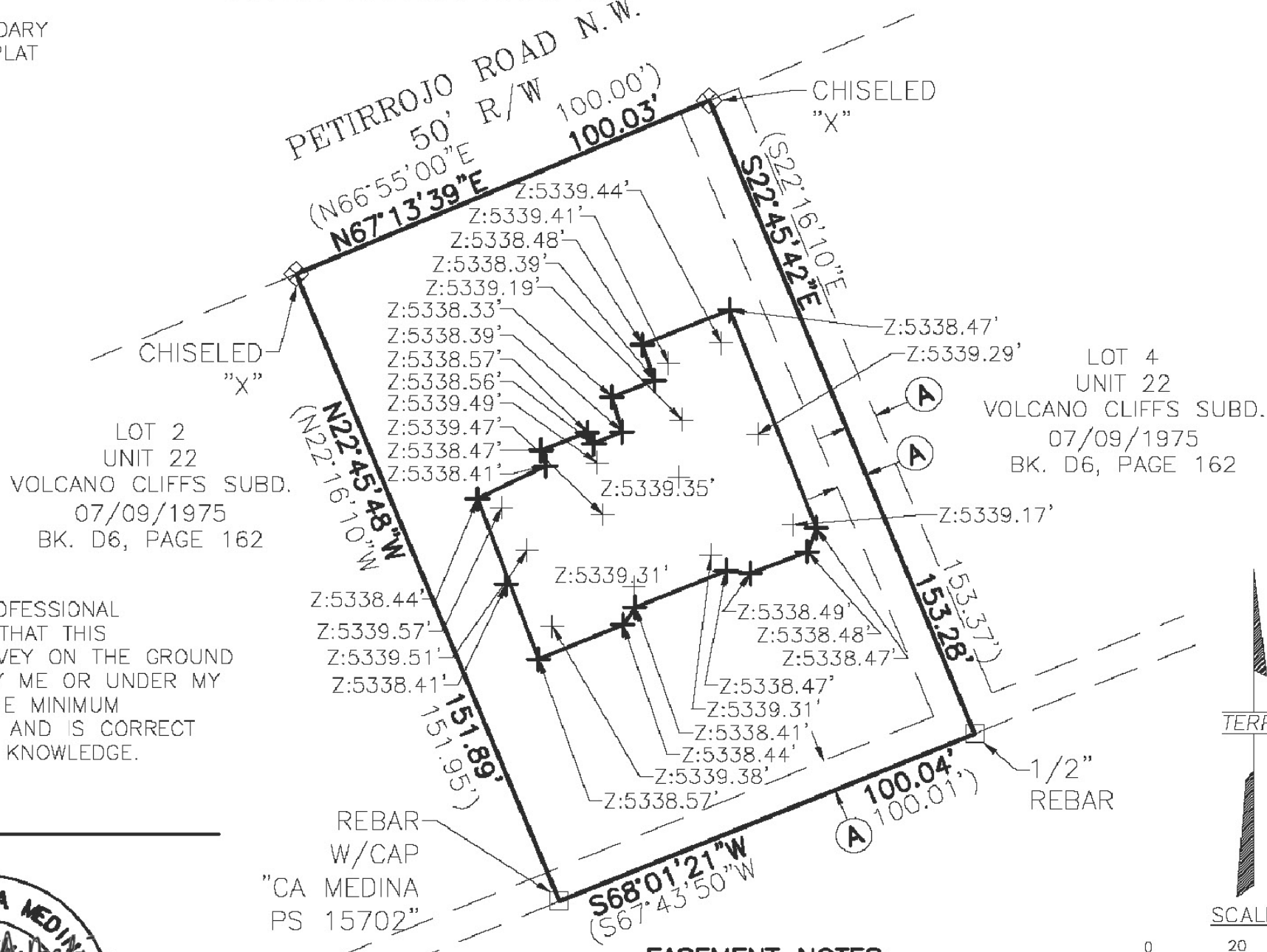
1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre that are part of a larger common plan of development

NOTES:

1. FIELD SURVEY PERFORMED ON JUNE 2018.
2. ALL DISTANCES SHOWN ARE GROUND DISTANCES.
3. BASIS OF BEARINGS IS STATE PLANE NAD 83 NM CENTRAL ZONE USING USGLO SECTION CORNER "S21, S22, S28, S27, T11, R2E, 1911".
4. ELEVATIONS REFERENCED TO NAVD 88 VERTICAL DATUM. PROJECT BENCHMARK IS USGLO SECTION CORNER "S21, S22, S28, S27, T11, R2E, 1911" EL.=5,330.151 FEET
5. THIS IS NOT A BOUNDARY SURVEY. BOUNDARY INFORMATION SHOWN TAKEN FROM RECORD PLAT AND SHOWN FOR ORIENTATION ONLY.

PAD CERTIFICATE

LOT 3
BLOCK 10
VOLCANO CLIFFS
UNIT 22
6424 PETIRROJO ROAD NW.



SURVEYOR'S CERTIFICATION:

I, CHRISTOPHER A. MEDINA, NEW MEXICO PROFESSIONAL SURVEYOR NO. 15702, DO HEREBY CERTIFY THAT THIS TOPOGRAPHIC SURVEY AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION; THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND IS CORRECT AND TRUE TO THE BEST OF MY BELIEF AND KNOWLEDGE.

Christopher A. Medina
CHRISTOPHER A. MEDINA, NMPLS NO. 15702

JUNE 15, 2018

DATE



EASEMENT NOTES:

- (A) 7.0' PUBLIC UTILITY EASEMENT
07/09/1975
BK. D6, PAGE 162

(IN FEET)
1 inch = 40 ft.
SHEET 1 OF 1
TERRA PROJECT NO. 2018-028

THE MAXIMUM GRADED SIDE SLOPE SHALL NOT EXCEED 1:1 (VERTICALLY). AREAS DISTURBED BY EROSION TREATED WITH LANDSCAPING SHALL BE SEEDDED.

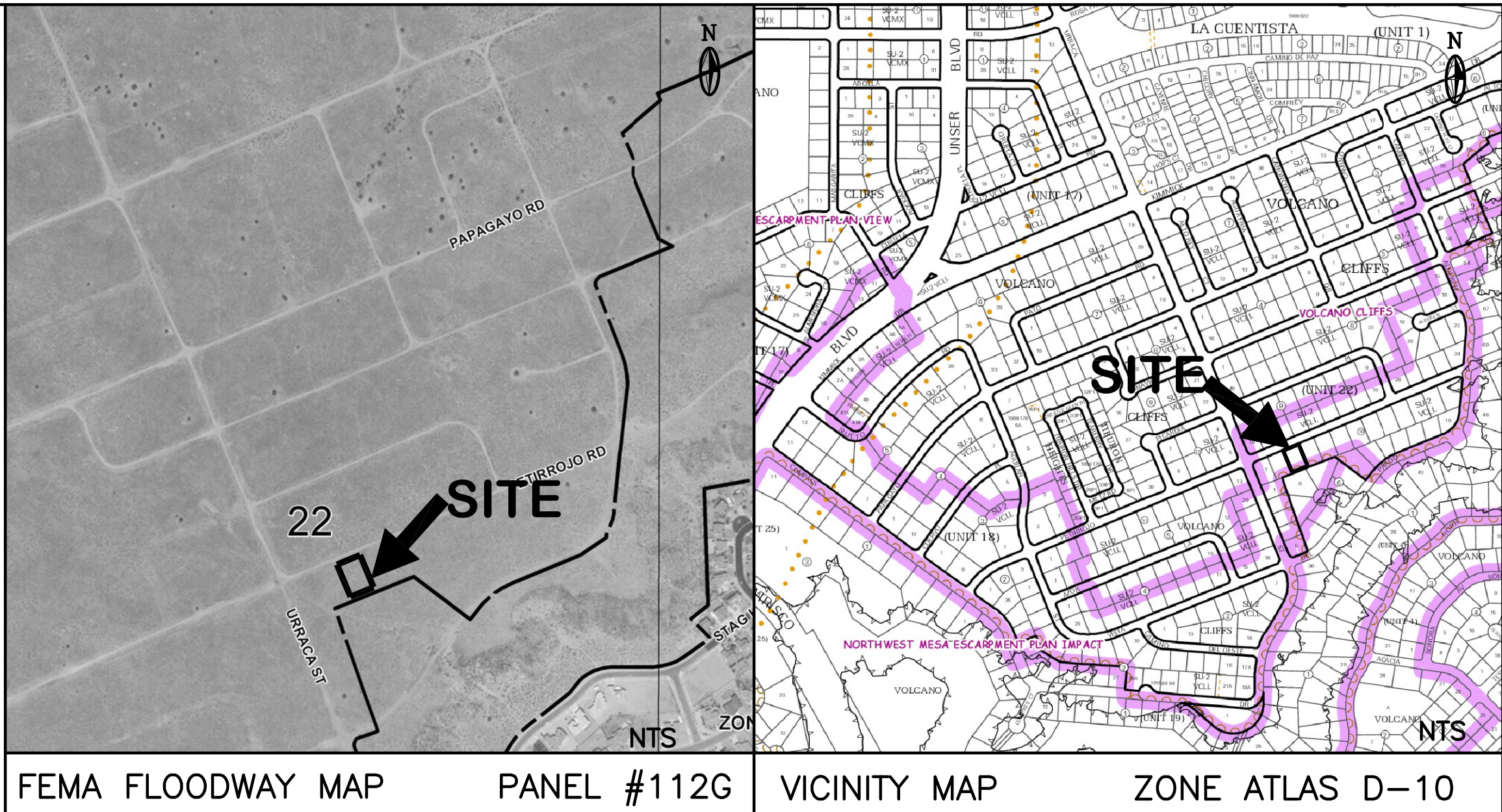
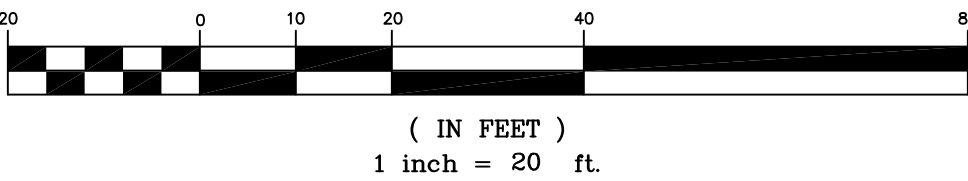
CERTIFICATION NOTES:

ALLS SHALL BE PERMITTED SEPARATELY.

REQUIRED BEFORE THE BUILDING PERMIT IS RELEASED.

ed for any garden walls and shall be placed 3" above rd to allow for cross lot st (upstream to downstream).

GRAPHIC SCALE



LEGEND

	EXISTING	PROPOSED
CONTOUR	--- 6045 ---	--- 6045 ---
PROPERTY LINE	---	---
ROAD	---	---
SETBACK	---	---
RETAINING WALL/WALL	---	---
SPOT ELEVATION	+5338.23'	*XXX*

Areas: (acres)	Existing	Proposed
Treatment A	0.35	0.00
Treatment B	0.00	0.21
Treatment C	0.00	0.00
Treatment D	0.00	0.14
Total (acres) =	0.35	0.35

POND VOLUME PROVIDED:

ELEV.	AREA	VOL. (CF)
5332.5	622	441.5
5331.5	261	

TOTAL POND VOL PROVIDED = 441.5

Volume	100 year Existing	100 year Proposed	10 year Existing	10 year Proposed	2 year Existing	2 year Proposed
Volume (acre-feet) =	0.013	0.035	0.002	0.018	0.000	0.009
Volume (cubic feet) =	559	1,512	102	798	0	374

FIRST FLUSH REQUIRED POND VOL = 0.34"(12"/FT)*(0.35 AC * 43660 SF/AC) = 432 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	0.45	0.00	0.08	0.00	0.00	0.00
Treatment B	0.00	0.43	0.00	0.16	0.00	0.01
Treatment C	0.00	0.00	0.00	0.00	0.00	0.00
Treatment D	0.00	0.61	0.00	0.40	0.00	0.24
Total Q (cfs) =	0.45	1.04	0.08	0.56	0.00	0.24

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 is proposed for the site with associated parking, access, landscaping, and utility improvements.

EXISTING CONDITIONS:

Presently, the 0.35 acre site is undeveloped. The site is bounded on the south, east and west by private property, and on the north by Petirrojo Road NW. The site slopes from the northwest to the southeast. As shown on FEMA Panel #112G, the site is not located in a 100 year flood plain.

PROPOSED CONDITIONS:

Per the SAD 228 Drainage Report by Wilson & Company, drainage from the lot has been master planned to be intercepted by drainage features downstream of the properties. Current COA Drainage Ordinance requires that ponds must be provided to handle the First Flush volume which has been calculated and is included on this plan. As shown by the plan, the building is located in the center of the lot. Negligible off-site flows enter the site due to existing grades on adjacent lots and will be allowed to continue. On site flows will drain around the structure via swales, and flow to the southeast to the first flush retention pond located along the southeasterly side of the home. All roof drainage will discharge from the roof to the lot and be directed around the structure to the drainage paths and pond.

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

CALCULATIONS:

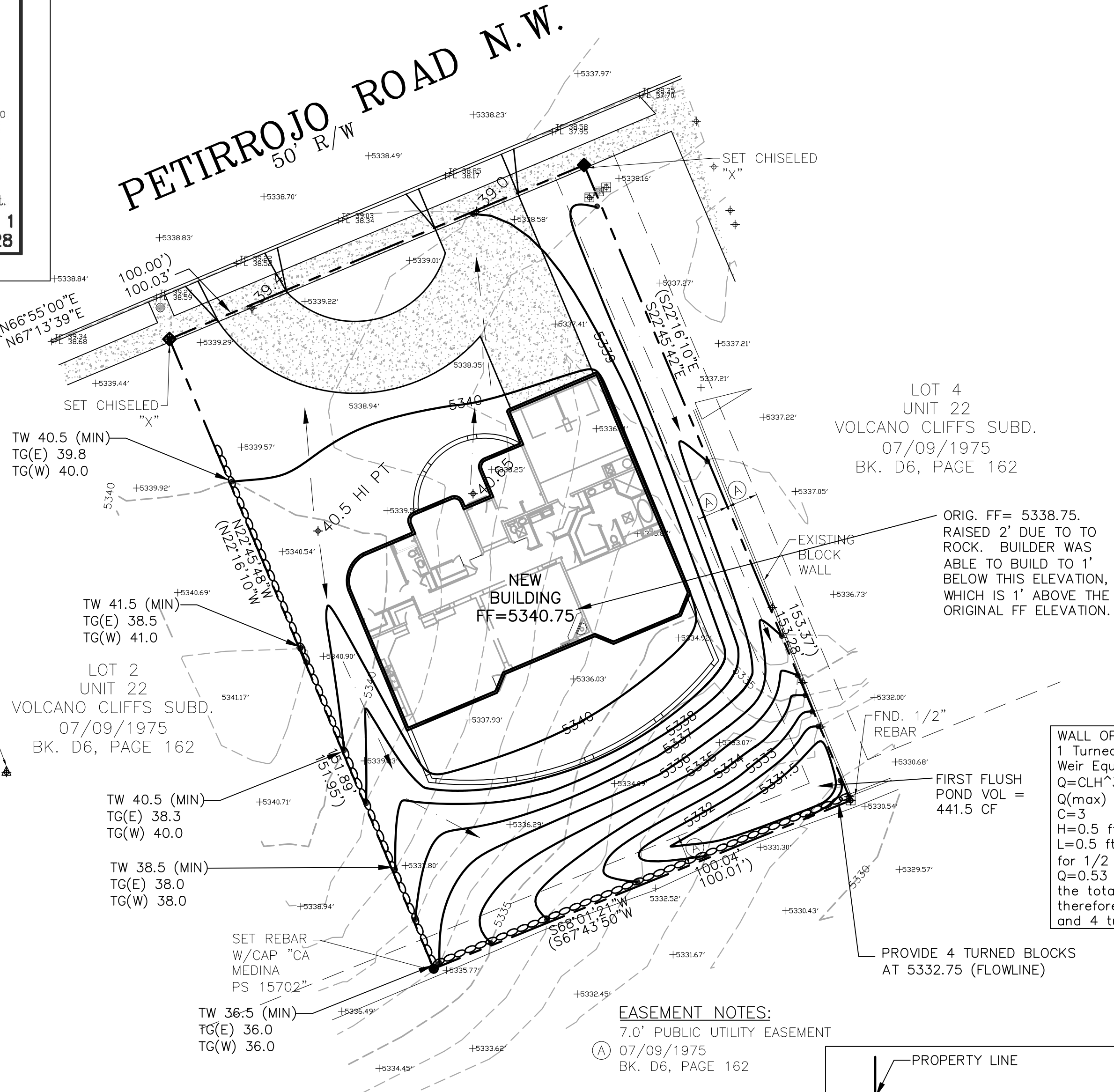
The calculations shown hereon define the 100 year-6 hour design storm falling within the project area under existing and developed conditions. The Hydrology is per "Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque, New Mexico in cooperation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

PROPERTY ADDRESS:

6424 Petirrojo Rd. NW

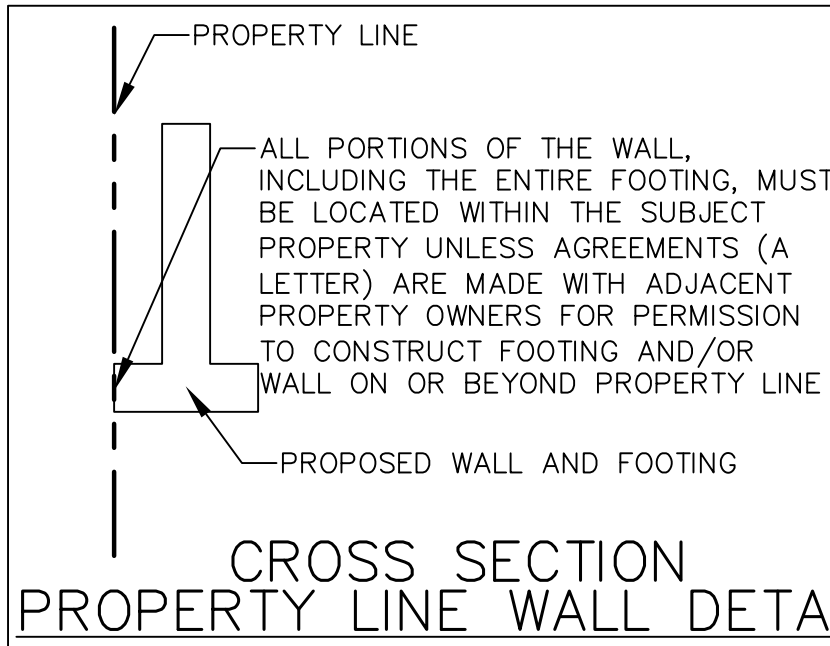
TOPOGRAPHY:

Topographic information provided by Christopher Medina, Terra Land Surveys, LLC. dated March 26, 2018.



- EASEMENT NOTES:
7.0' PUBLIC UTILITY EASEMENT
(A) 07/09/1975
BK. D6, PAGE 162

WALL OPENING CALCULATIONS:
1 Turned Block
Weir Equation
 $Q = CLH^{3/2}$
 $Q(max) = 1.04$ cfs (total site runoff)
 $C=3$
 $H=0.5$ ft
 $L=0.5$ ft
for 1/2 block, 6" x 6" opening
 $Q=0.53$ cfs capacity, so for the full block,
the total block capacity = 1.06 cfs
therefore, 1 turned block is adequate
and 4 turned blocks are provided



5-10-18
REV. 5-17-18
PAD CERT. 6-15-18

ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on March 28, 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.

CITY OF ALBUQUERQUE, BERNALILLO COUNTY		NEW MEXICO					
LOT 3, BLOCK 10, UNIT 22 VOLCANO CLIFFS SUBDIVISION							
AYALA - ALTERNBURG - 6424 PETIRROJO - 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	ALTO118L		Date	APRIL, 2018		1	1