# CITY OF ALBUQUERQUE

*Planning Department*
Brennon Williams, Director

*Mayor Timothy M. Keller*

July 29, 2020

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

RE: **Lot 13 Block 9 Unit 22, S.A.D. 228**
**Volcano Cliffs Subdivision**
**6411 Petirrojo Rd. NW**
**Grading and Drainage Plan**
**Engineers Stamp Date 7/28/2020 (D10D003Q13)**

Ms. McDowell,

Based upon the information provided in your submittal received 7/27/2020, this plan is approved for Grading Permit.

PO Box 1293

**Prior to Building permit approval a Pad Certification will be required, provided by the Engineer or a registered Land Surveyor.**

Albuquerque

Please inform the builder/owner to attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology.

NM 87103

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained, with the approved G&D plan dated 7/28/2020.

www.cabq.gov

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

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

Sincerely,

Ernest Armijo, P.E.
Principal Engineer, Planning Dept.
Development Review Services

# City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

**Project Title:** SOLIS, JAVIER - LOT 13 G&D Building Permit #:_____ Hydrology File #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: LOT 13, BLOCK 9, UNIT 22 VOLCANO CLIFFS SUB'D

City Address: 6411 PETIRROJO RD. NW, Albuquerque, NM 87120

**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:** JAVIER SOLIS Contact: JAVIER SOLIS

Address: 6531 Pato Rd.NW, Albuquerque, NM 87120

Phone#: 505-615-7069 Fax#: _____ E-mail: earthdayrecycling@gmail.com

**TYPE OF DEVELOPMENT:** _____ PLAT (# of lots) X RESIDENCE _____ DRB SITE ___ ADMIN SITE

IS THIS A RESUBMITTAL? _____ Yes X No

**DEPARTMENT** _____ TRANSPORTATION X HYDROLOGY/DRAINAGE

Check all that Apply:

**TYPE OF SUBMITTAL:**

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
X 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:**

X 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) PAD CERTIFICATION

DATE SUBMITTED: 7-28-20 By: JACKIE MCDOWELL

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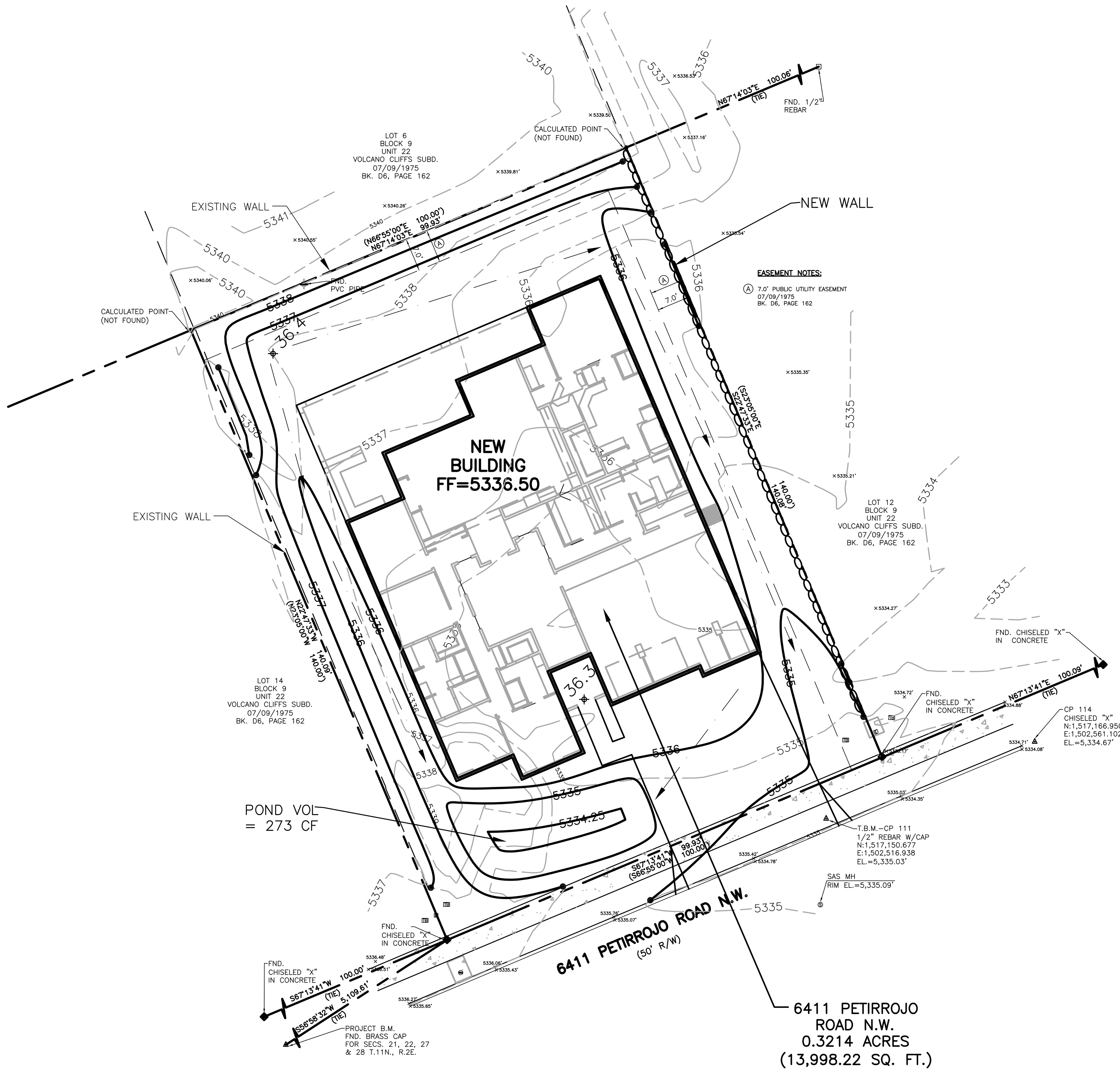
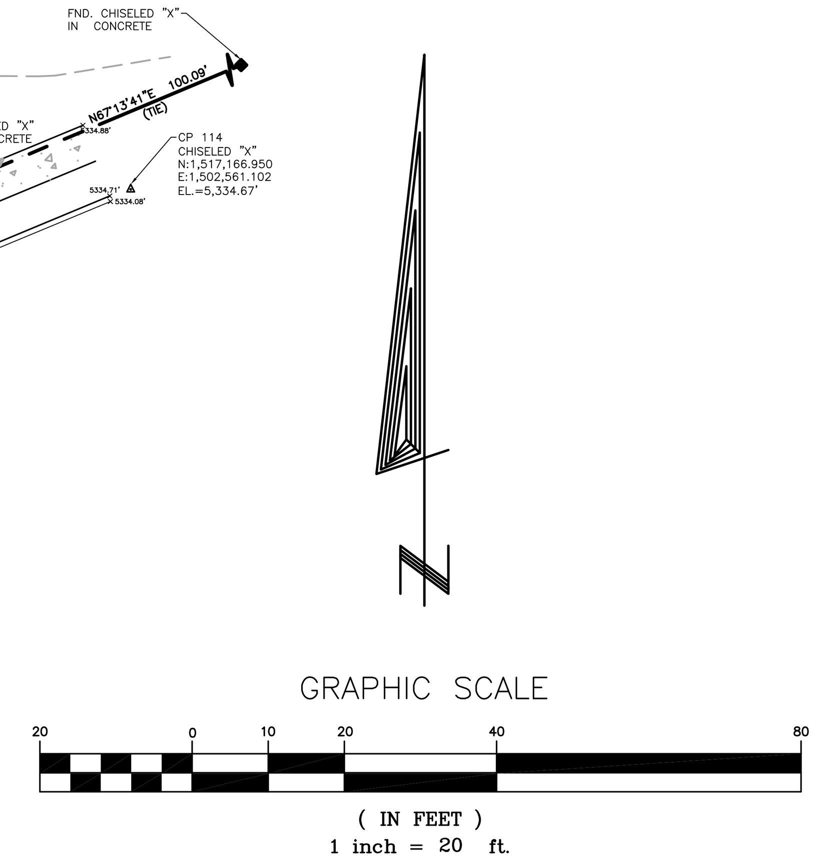
COA STAFF: ELECTRONIC SUBMITTAL RECEIVED:_____

FEE PAID:_____




SURVEY NOTES:

LEGAL DESCRIPTION

LOT 13, BLOCK 9, UNIT 22, VOLCANO CLIFFS SUBDIVISION FILED JULY 9, 1975 IN BOOK D6, PAGE 162.

PROJECT LOCATION

6411 PETIRROJO ROAD N.W., ALBUQUERQUE, NEW MEXICO

SURVEY INFORMATION

TOPOGRAPHIC SURVEY PERFORMED AND COMPILED BY TERRA LAND SURVEYS, LLC. CORRALES, NEW MEXICO JULY 2020.

PROJECT BENCHMARK

PROJECT BENCHMARK IS A CITY OF ALBUQUERQUE CONTROL STATION "S21, S22, S28, S27, T11N R2E, 1911" BEING A USGLO SECTION CORNER ELEVATION = 5,330.151 FEET (NAVD 1988 VERTICAL DATUM).

TEMPORARY PROJECT BENCHMARK

PROJECT BENCHMARK CP 100 IS A TERRA LAND SURVEY 1/2" REBAR WITH PLASTIC CAP STAMPED "TERRA CONTROL" ELEVATION = 5,335.03 FEET (NAVD 1988 VERTICAL DATUM).

NOTES

1. FIELD SURVEY PERFORMED IN JULY 2020.

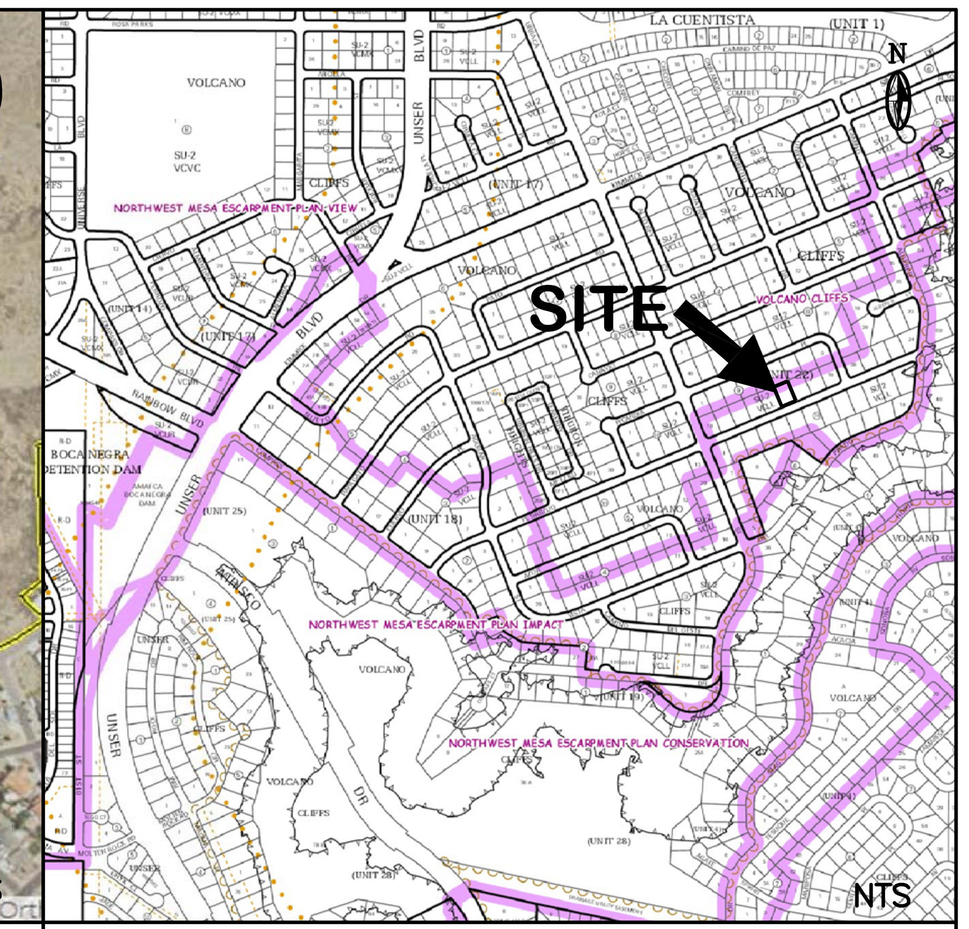
2. TOPOGRAPHIC SURVEY WAS COMPILED UTILIZING GRID COORDINATES REFERENCED TO NAD 1983 CENTRAL ZONE. PRIMARY HORIZONTAL AND VERTICAL CONTROL WAS ESTABLISHED UTILIZING GPS RTK METHODS. COMBINED GROUND TO GRID FACTOR IS 0.999669939/1.000330170 SCALED AROUND 0,0.

3. ELEVATIONS SHOWN FOR PIPES ARE INVERT ELEVATIONS UNLESS OTHERWISE SPECIFIED.

4. CONTOURS SHOWN HEREON ARE AT A ONE FOOT INTERVAL REFERENCED TO THE NAVD 88 VERTICAL DATUM.

5. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL OF THE UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE.

FEMA FLOODWAY MAP PANEL #112G




VICINITY MAP ZONE ATLAS D-10

This is the plan to be used for any garden walls and any openings in the walls shall be placed 3" above final grade in the rear yard to allow for cross lot drainage from west to east (upstream to downstream).

PROPERTY LINE WALLS AND GARDEN WALLS SHALL HAVE TURNED BLOCKS OR WEEP HOLES FOR DRAINAGE.
ALL OPENINGS IN THE WALLS SHALL BE 3" ABOVE GRADE.

STANDARD GRADING NOTE: THE MAXIMUM GRADED SIDE SLOPE SHALL NOT EXCEED 3 FEET (HORIZONTALLY) TO 1 FOOT (VERTICALLY). AREAS DISTURBED BY GRADING WHICH WILL NOT BE TREATED WITH LANDSCAPING SHALL BE SEEDED.

STANDARD WALL AND PAD CERTIFICATION NOTES:

ALL PERMITER GARDEN WALLS SHALL BE PERMITTED SEPARATELY.

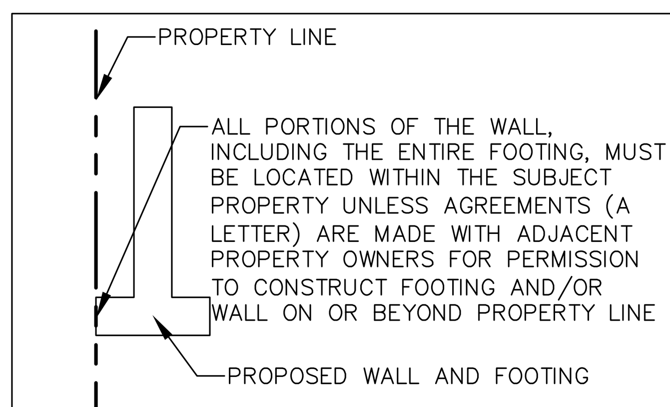
A PAD CERTIFICATION IS REQUIRED BEFORE THE BUILDING PERMIT IS RELEASED.

SURVEY LEGEND

- CONTROL MONUMENT (AS NOTED)
- FOUND REBAR (AS NOTED)
- FOUND CHISELED "X"
- WATER METER
- TELEPHONE RISER
- ELECTRIC BOX
- STREET SIGN
- ×53XX.XX SPOT ELEVATION
- BLOCK WALL
- CONCRETE HATCH
- COVERED PORCH

LEGEND

| | EXISTING | PROPOSED |
|---|---|---|
| CONTOUR | 6045 | 6045 |
| PROPERTY LINE | | |
| ROAD | | |
| SETBACK | | |
| RETAINING WALL/WALL | | |
| SPOT ELEVATION | ×5321.78 | XX.X |




CROSS SECTION
PROPERTY LINE WALL DETAIL

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 0.32 acre site is undeveloped. The site is bounded on the west, north, and east by private property, and on the south by Petirrojo Rd. NW. The site slopes gently 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 227 and 228 Drainage Reports by Wilson & Company, drainage from the lots have been master planned to be intercepted by drainage features downstream of the properties. First flush ponding is required on all developments. 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 from the north and will continue to be allowed to historically flow through the site. On site flows will drain around the structure to new grades and flow to the ponding area. All roof drainage will discharge from the roof to the lot and be directed around the structure to the drainage paths.

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:

6411 Petirrojo Rd. NW

TOPOGRAPHY:

Topographic information provided by Christopher Medina dated July, 2020.

GENERAL DRAINAGE PLAN NOTES:

1. It is recommended that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.

2. This plan recommends positive drainage away from all structures to prohibit ponding of runoff adjacent to the structure. Future alterations of the grades next to the structures are not recommended.

3. Irrigation within 10 feet of any proposed structure is not recommended. Irrigation water adjacent to the structures could cause settlement.

4. This plan establishes on-site drainage and assumes no responsibility for subsurface analysis, foundation or structural design, or utility design.

5. Local codes may require all footings to be placed in natural undisturbed soil. If the contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer is recommended.

6. It is recommended that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.

7. The property boundary shown on this plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey.

8. All work shall be constructed in accordance with the City of Albuquerque Standard Specifications for Public Works Construction with updates.

9. All work on this project shall be performed in accordance with applicable Federal, State, and Local laws, rules, and regulations concerning construction safety and health.

10. Contactor shall ensure that no site soils/sediment or silt enters the righ-of-ways during construction.

11. Areas disturbed due to construction shall be restored per City of Albuquerque Spec. 1012 native seed mix.

GRADING
7-9-20
1=20
SOL0120L

ZONE 1

P(360) = 2.20 inches
P(10 day) = 3.67 inches

| Areas: (acres) | Existing | Proposed |
|---|---|---|
| Treatment A | 0.32 | 0.00 |
| Treatment B | 0.00 | 0.08 |
| Treatment C | 0.00 | 0.08 |
| Treatment D | 0.00 | 0.16 |
| Total (acres) = | 0.32 | 0.32 |

POND VOLUME PROVIDED:

| ELEV. | AREA | VOL. (CF) |
|---|---|---|
| 5335 | 624 | |
| | | 273 |
| 5334.25 | 104 | |

| Volume | 100 year Existing | 100 year Proposed | 10 year Existing | 10 year Proposed | 2 year Existing | 2 year Proposed |
|---|---|---|---|---|---|---|
| Volume (acre-feet) = | 0.012 | 0.037 | 0.002 | 0.021 | 0.000 | 0.010 |
| Volume (cubic feet) = | 511 | 1,626 | 93 | 912 | 0 | 456 |

FIRST FLUSH REQUIRED POND VOL = 0.34"/(12"/FT)*(0.16 AC * 43560 SF/AC) = 197 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 | 0.41 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 |
| Treatment B | 0.00 | 0.16 | 0.00 | 0.06 | 0.00 | 0.00 |
| Treatment C | 0.00 | 0.23 | 0.00 | 0.12 | 0.00 | 0.04 |
| Treatment D | 0.00 | 0.70 | 0.00 | 0.46 | 0.00 | 0.27 |
| Total Q (cfs) = | 0.41 | 1.09 | 0.08 | 0.64 | 0.00 | 0.31 |

ENGINEER'S CERTIFICATION:

I, Jackie S. McDowell, hereby certify that I personally inspected the site shown on this plan on July 25, 2020 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.

6411 PETIRROJO RD. NW, ALBUQUERQUE, NM 87120

CITY OF ALBUQUERQUE, BERNALILLO COUNTY NEW MEXICO

LOT 13, BLOCK 9, UNIT 22
VOLCANO CLIFFS SUBDIVISION

SOLIS, JAVIER – G & D 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 1 of 1 |
|---|---|---|---|
| File SOL0120L | Date JULY,2020 | | |