# CITY OF ALBUQUERQUE

*Planning Department*
Alan Varela, Director

*Mayor Timothy M. Keller*

June 22, 2023

Jesse Luehring, P.E.
Critical View Engineering, LLC
11501 Modesto Ave NE
Albuquerque, New Mexico 87122

RE: **Lot 21 Block 1 Unit 27 SAD 228**
**5505 Valiente Rd. NW**
**Volcano Cliffs Subdivision**
**Grading and Drainage Plan**
**Engineers Stamp Date 5/19/2023 (C11D009)**

Mr. Luehring,

Based upon the information provided in your submittal received 6/20/2023, this plan is approved for Grading Permit.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

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

**Advise the owner contractor not to use dirt as a ramp to climb the curb, use lumber or crusher fines for this purpose. Place this note on the plan.**

**Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained with the approved G&D plan and Pad Certification. Also, if a swimming pool is to be placed after this approval a new grading and drainage plan will need to be resubmitted showing the changes for the land treatments.**

**Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist is required.**

If you have any questions, please contact me at 924-3695 or Rudy Rael at 924-3977.

Sincerely,

Tiequan Chen, P.E.
Principal Engineer, Hydrology
Planning Department, Development Review Services

RR/TC
C: File C11D009

# City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

**Project Title:** G & D for 5505 Valiente Rd Building Permit #: _____ Hydrology File #: _____

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

Legal Description: Lot 21, Block 1, Volcano Cliffs, Unit 27

City Address: 5505 Valiente Rd NW, Albuquerque NM, 87120

**Applicant:** Critical View Engineering Contact: Jesse Luehring

Address: 10900 Florence Ave NE, Albuquerque NM 87122

Phone#: 505-321-5917 Fax#: _____ E-mail: criticalviewabq@gmail.com

**Other Contact:** Owner Contact: Frankie Gonzales

Address: _____

Phone#: _____ Fax#: _____ E-mail: fgonzal2@outlook.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:**

____ BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY

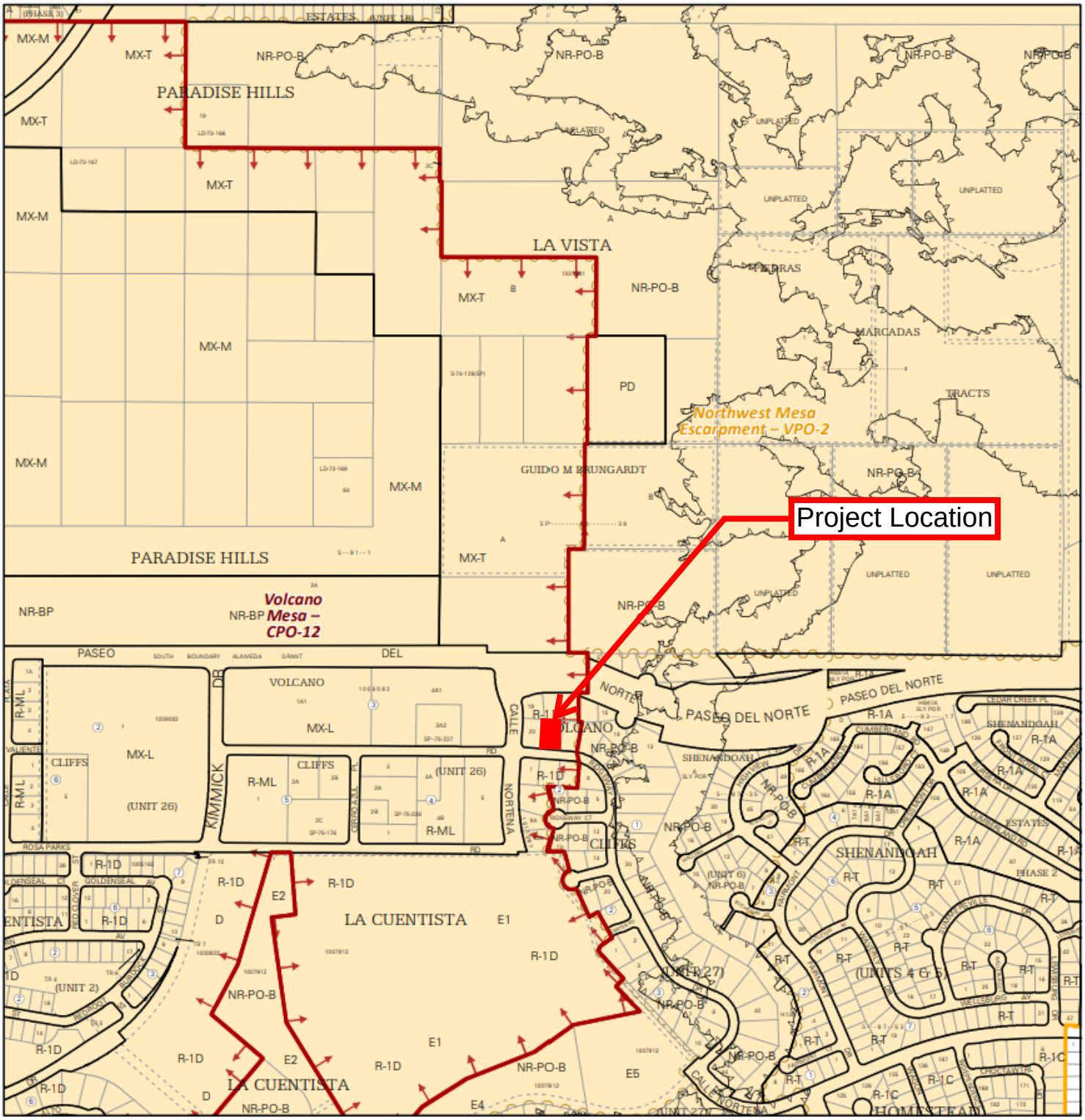
____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
____ SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL

____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
X 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: Jesse Luehring, PE`

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____



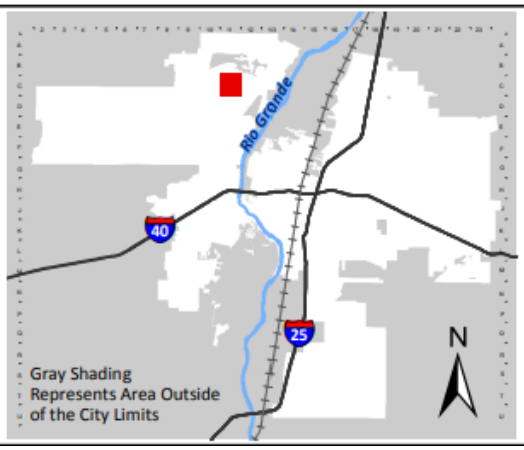

For more details about the Integrated Development Ordinance visit: http://www.cabq.gov/planning/codes-policies-regulations/integrated-development-ordinance

# IDO Zone Atlas May 2018

AGIS Albuquerque Geographic Information System

**IDO Zoning information as of May 17, 2018**

**The Zone Districts and Overlay Zones are established by the Integrated Development Ordinance (IDO).**



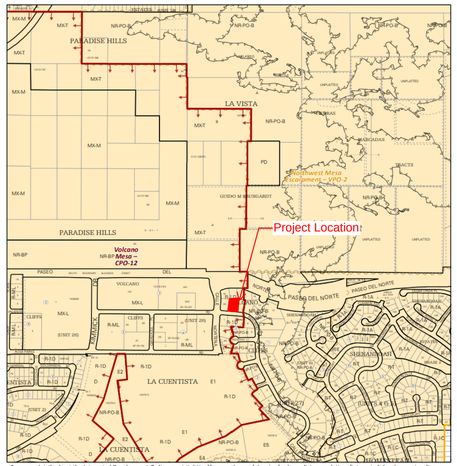

Zone Atlas Page:

## C-11-Z

- Easement
- Escarpment
- Petroglyph National Monument
- Areas Outside of City Limits
- Airport Protection Overlay (APO) Zone
- Character Protection Overlay (CPO) Zone
- Historic Protection Overlay (HPO) Zone
- View Protection Overlay (VPO) Zone

Feet: 0 250 500 1,000

## Vicinity/Zone Atlas Map




IDO Zone Atlas
May 2018

AGIS

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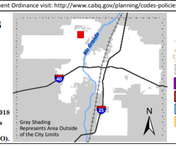


Zone Atlas Page:
**C-11-Z**

Easement
Escarpment
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Areas Outside of City Limits
Airport Protection Overlay (APO) Zone
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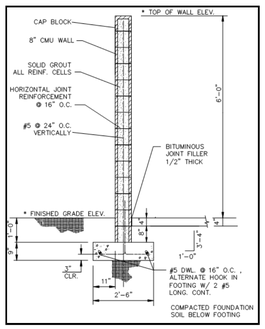
0 250 500 1,000 Feet

## CMU Garden Wall Detail




## Earthwork Volumes

| | Earthwork Volumes | | |
|---|---|---|---|
| | Neat | Factored | Assumed Factors |
| Cut: | -118.859 | -142.631 | 1.2 |
| Fill: | 664.5333 | 755.1515 | 0.88 |
| Net | 545.6741 | 612.5204 | |

## Drainage Calculations

**Lot 21, Block 1, Volcano Cliffs, Unit 27**

| *Developed Land Treatment* | | | *Allowed Conditions* | | *Zone 1 DMP Coefficients (Table 6.2.13)* | | | *Developed Calcs* | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Land Type | Proposed Area Lot (SF) | Proposed Area % | Volcano Heights DMP Allowed Conditions | Allowed Volumes | 100-Yr Storm Inch Depth (6 hr) | 100-Yr Excess Precip (In) | Peak Discharge CFS/AC | Peak Rate of Discharge (CFS) | 100-Yr Storm Volume (Ac-Ft) | Req. SWQV Volume (Ac-Ft) |
| Type D | 8590 | 58% | 50% | 0.032 | *2.17* | *2.24* | *4.12* | 0.81 | 0.037 | 0.006902 |
| Type C | 4242 | 29% | 35% | 0.009 | *2.17* | *0.95* | *2.87* | 0.28 | 0.008 | - |
| Type B | 2000 | 13% | 15% | 0.003 | *2.17* | *0.73* | *2.16* | 0.10 | 0.003 | - |
| | *14832* | *100%* | *100%* | *0.044* | | | | *1.19* | *0.047* | *0.006902* |

| | |
|---|---|
| **Peak Discharge:** | **1.191 CFS** |
| **Stormwater Quality Volume:** | **300.7 Cubic Ft** |
| **100-Yr Storm Volume (Proposed)** | **2061.0 Cubic Ft** |
| **100-Yr Storm Volume (Allowed)** | **1930.6 Cubic Ft** |
| **100-Yr Storm Retention Volume** | **130.3 Cubic Ft** |

| | |
|---|---|
| Total Drainage Basin Area: | 14832 SF<br>0.340 AC |

Survey Notes:
1. Field survey was performed February 25, 2021.
2. Elevation datum is NAVD 1988. AGRS Benchmark Reference; AGRS Station "8_C11" Elev. = 5284.916, which is a 1 3/4 inch Aluminum Disc set south of Ridgeway Court, in a volcanic outcropping.
3. Record Plat; Volcano Cliffs Unit 27 filed November 15, 1971 in Plat Book D4, Page 173.
4. Boundary established by Gary E. Gritsko N.M.P.S. 8686 unrecorded Boundary Survey Plat dated January 21, 2020.

N
0 10 20 40 Feet
SCALE: 1" = 10'
Contour Interval = 1.0'

Survey prepared under the responsible direction of:
JESSE J. VOELLER NEW MEXICO 10466 LICENSED PROFESSIONAL SURVEYOR
Rio Grande Surveying Co.
POB 7155, Abq., NM 87194
505-379-4579 m
rgsc360@gmail.com

## General Notes

1. All perimeter walls shall be permitted separately
2. No grading shall be allowed on adjacent properties
3. All disturbed areas shall be stabilized with concrete, gravel, asphalt, or native seed mix
4. It is recommended to contract with a licensed geotechnical engineer for all aspects of earthwork and engineered fill material

## Narrative:

This is a grading and drainage plan for the construction of the building pad for the Lot at address 5505 Valiente Rd NW (UPC 101106425915140521)

The purpose of this plan is to establish the finished floor elevation, house layout, site concrete layout, wall locations, and general lot drainage of the site. This drainage plan has been prepared in accordance with the 2020 revision to the City of Albuquerque Development Process Manual, and in accordance with the Special Assessment District 228 Master Drainage Plan.

## Drainage Intent:

Existing Conditions: This lot is an 0.34 acre vacant land property within the volcano cliffs development. The lot slopes approximately 5% to the Northeast. There are negligible offsite flows entering the property. All onsite flows exit the site to the East and drain to the adjacent open space.

Proposed Conditions: Improvements to the lot include a new residence, concrete driveway, and swimming pool that will add approximately 8590 SF of impervious area, or 58% of the property area (Developed conditions of the subdivision allows up to 50%). The lot is designed to drain to the adjacent openspace at the NE corner in accordance with the master drainage plan for the site. Due to the increased amount of impervious area, additional detention ponding is required, however stormwater quality pond volume requirements govern.

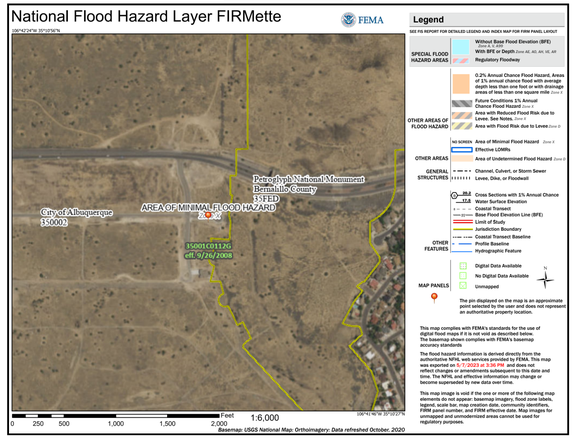
This pond is located at the NE corner of the proposed development. The feature is designed to capture and infiltrate the DPM required stormwater quality volume of approximately 300.7 CF. Storm event flows in excess of this volume will discharge from this water quality detention pond at the NE corner of the property by overflowing the drainblocks to the adjacent openspace.

Additional improvements will include the construction of garden walls and gates. Drainage paths will not be impacted by these improvements.

## Stormwater Quality Volumes (DPM 6-12):

The required Stormwater Quality Volume to be managed on this lot is for a 0.62" storm (new development). After accounting for initial abstraction, this results in a net of 0.42" rainfall on impervious (Type D) soils, or 301 cubic feet of detention storage for this property. The initial storage on site will be collected and held in the landscape pond near the street, and the larger pond near the SE outfall of the property as shown on the Plan.

## FEMA Flood Map




Grading and Drainage Plan
5505 Valiente Rd. NW
Lot #21, Block 1, Volcano Cliffs, Unit 27


Critical View Engineering, LLC
10900 Florence Ave NE
Albuquerque NM, 87122
505-321-5917


JESSE J. LUEHRING NEW MEXICO 21684 PROFESSIONAL ENGINEER
5/19/23

Drawn: 5/19/23
Rev: 0

CRITICAL VIEW ENGINEERING