CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director

Mayor Timothy M. Keller

October 18, 2022

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

RE: **Lot 11 Block 9 Unit 18 SAD 228**
6524 Papagayo Pl. NW
Volcano Cliffs Subdivision
Grading and Drainage Plan
Engineers Stamp Date 10/3/2020 (D10D003I11)
CO Certification Date: 10/18/2022

Mr. Luehring,

Based on the Certification received on 10/17/2022, the site is acceptable for release of Certificate of Occupancy by Hydrology.

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

Sincerely,

Tiequan Chen, P.E.
Principal Engineer, Hydrology
Planning Department

RR/EA
C: File D10D003I11

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: G & D for 6524 Papagayo Building Permit #: _____ Hydrology File #: F12D004

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

Legal Description: Lot 11, Block 9, Volcano Cliffs Unit 19

City Address: 6524 Papagayo Rd NW

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: Builder Contact: Lukas Gallegos

Address: 1901 Avondale Pl NW, Albuquerque NM 87120

Phone#: 505-340-7544 Fax#: _____ E-mail: handwconstructionllc@gmail.com

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

IS THIS A RESUBMITTAL? X Yes ____ No

DEPARTMENT ____ TRANSPORTATION X HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- X 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
- X 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: 10/18/22 By: Jesse Luehring

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

Critical View Engineering
PO Box 90073
Albuquerque, NM 87199
505-321-5917

October 18, 2022

Rudy Rael
City of Albuquerque, Planning Department
Development Review Services

RE: RESUBMITTAL #2--COO Certification by Engineer of Record (F12D004)

Property Desc: Lot 11, Block 9, Unit 19

I, Jesse J. Luehring, NM Professional Engineer #21684, working on behalf of Critical View Engineering, LLC, hereby certify that the overall grading of the subject property is in substantial conformance to the approved plans dated 8/11/20, and will drain in accordance with the design intent. All 'as-built' elevations are shown on the attached plan.

The record information edited onto the original design document has been obtained under my supervision, and is true and correct to the best of my knowledge and belief. This certification is for the pad elevation, finished floor elevation and site grading, and is submitted to support the Certificate of Occupancy per DPM Part 6-14(G) for this residence. ***Revision includes an increase land treatment 'D' for the footprint change and pool that were constructed but not reflected in the original approved G&D. Also included is additional photos demonstrating the addition of a swale to protect against masonry wall erosion.***

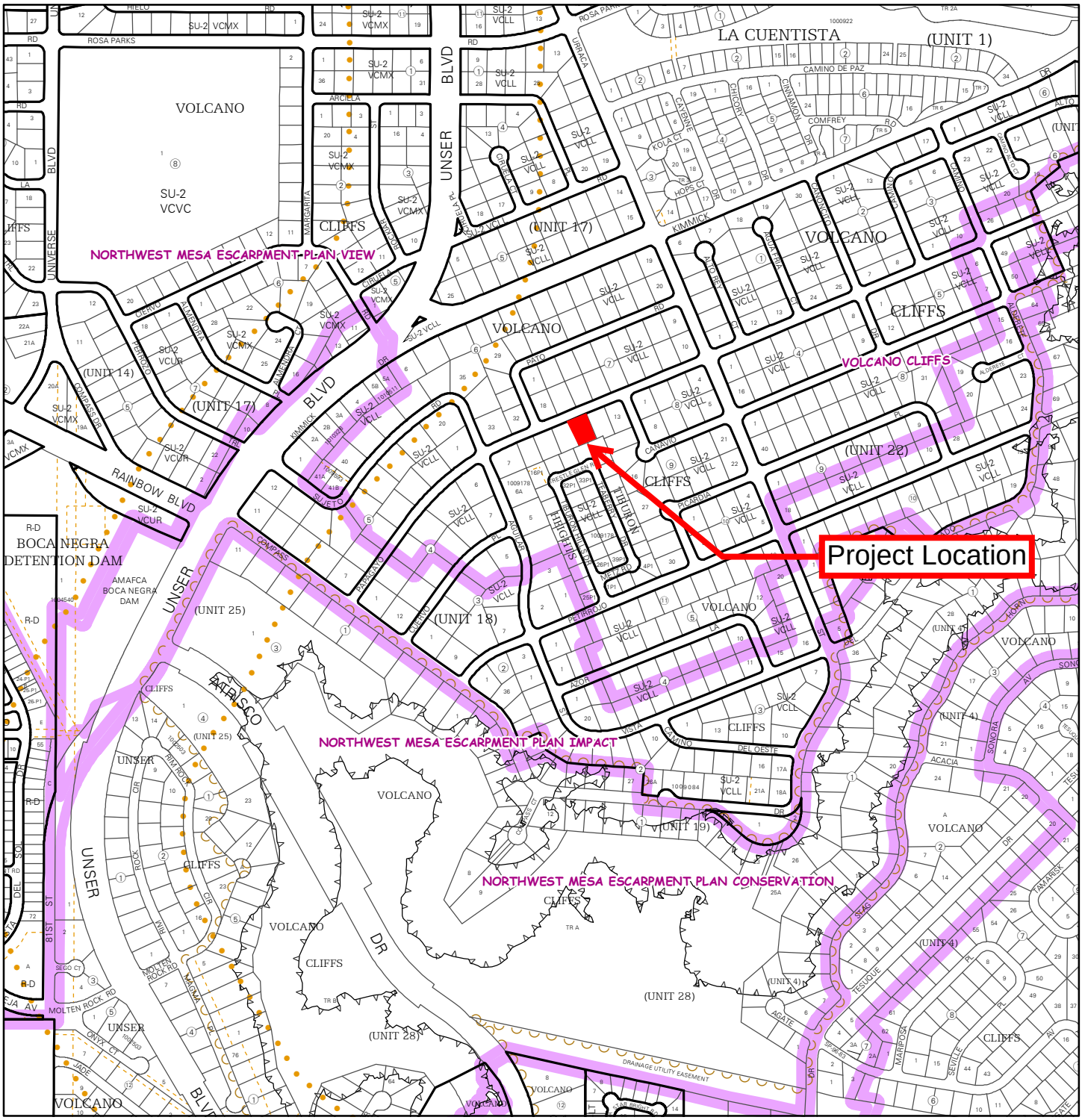
Note that the record information presented herewith is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of the property. Those relying on this record document are advised to obtain independent verification of its accuracy.

Very Respectfully,

Jesse Luehring, PE

Attached: Revised Plan reflecting actual site conditions

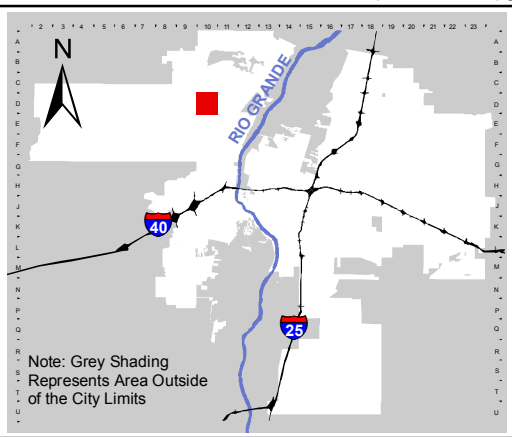
10-18-22



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

Albuquerque Geographic Information System

Map amended through: 1/28/2016



Zone Atlas Page:

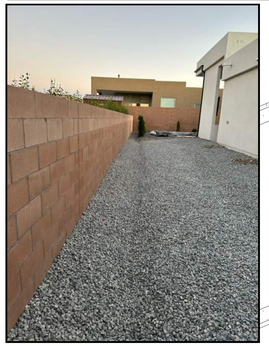
D-10-Z

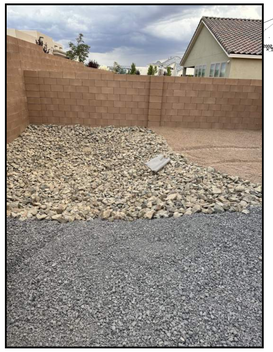
Selected Symbols

- SECTOR PLANS
- Design Overlay Zones
- City Historic Zones
- H-1 Buffer Zone
- Petroglyph Mon.
- Escarpment
- 2 Mile Airport Zone
- Airport Noise Contours
- Wall Overlay Zone

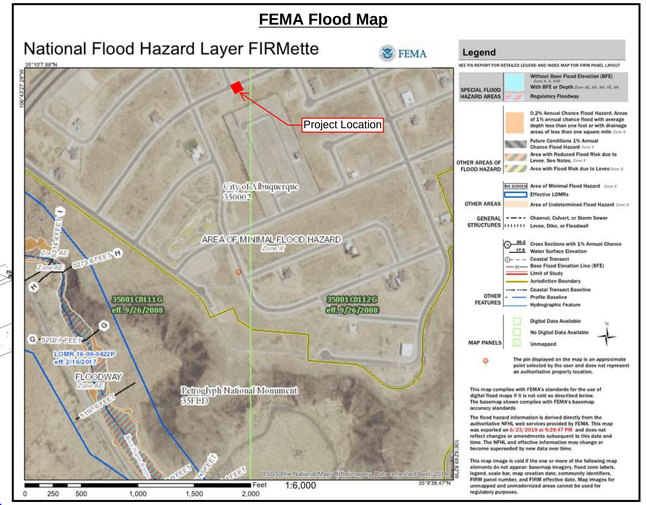
0 750 1,500 Feet

Engineer Certification Photos

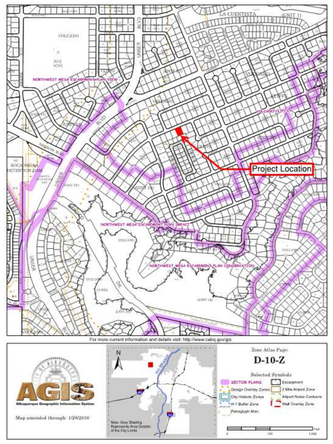




FEMA Flood Map



Vicinity/Zone Atlas Map



General Notes

1. All perimeter walls shall be permitted separately
2. No grading shall be allowed on adjacent properties
3. A pad certification is required before the building permit is issued
4. An as-built certification is required before certificate of occupancy is issued.
5. All disturbed areas shall be stabilized with concrete, gravel, asphalt, or native seed mix
6. It is recommended to contract with a licensed geotechnical engineer for all aspects of earthwork and engineered fill material
7. Driveway cutout shown in concept form only, and shall comply with NM Standard Specs for Public Works Construction, specifically Std Detail 2425
8. Any sideyard gates shall allow drainage conveyance to the front of the property as shown

Narrative:

This is a grading and drainage Plan for the construction of the building pad for the Lot at address 6524 Papagayo Rd (Lot #11, Block #9, Volcano Cliffs Subdivision Unit 18, a part of Special Assessment District 228)

The purpose of this plan is to establish the first 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 latest revision to the City of Albuquerque Development Process Manual, and in accordance with the SAD 228 Drainage Report dated November 2011. There are negligible offsite flows entering this property. The site is located in rainfall 'Zone 1' per the DPM.

Drainage Intent:

Existing Conditions: This lot is an 0.33 acre vacant land property, that is bound on the South, East, and West by developed lots, with street frontage to Papagayo Rd. to the North. The lot is lower than the elevation of the road, and generally drains to the West, with negligible offsite flows entering the property. The SAD 228 DMP places this property in drainage basin 201-H, and assumes that onsite will drain West or North to the street, eventually discharging into Pond 5 at the West end of SAD 228 development.

Proposed Conditions: Improvements to the lot include a new residence, pool, and concrete driveway that will add approximately 6700 SF of impervious area (note pool is assumed to be land treatment 'D'), or 46% of the property area (SAD 228 DMP allows up to 50%). The lot is designed to drain to the street, in accordance with the SAD 228 DMP.

A water quality detention pond with a volume of 240 Cu. Ft. is designed to capture the 'first flush' of approximately 235 Cu. Ft. The existing sandy loam soils at the site are well drained (hydrologic soil group 'B') which will ensure a short retention time. Larger storm event flows will discharge from the NW edge of the pond by overflowing the existing sidewalk.

Additional improvements will include the construction of approximately 100 LF of 6 ft tall garden wall. These walls may retain up to 2' of soil. Drainage will traverse through any location of gates on the sideyard, and gates will be a minimum of 6" above grade.

First Flush:

The initial 'First Flush' to be managed on this lot is 0.44" less 0.10" initial abstraction, resulting in a net of 0.34" rainfall, or 202 cubic feet of detention storage for this property. The initial storage on site will be collected and held in the 228 cubic foot capacity landscape pond near the street as shown on the Plan.

Engineer's Certification

I, Jesse Luehring, hereby certify that I have inspected the site, and that all existing grades are accurately reflected in the topographic survey obtained to develop this grading and drainage plan.

Jesse Luehring, PE #21684

Drainage Calculations

Land Type	Area Lot (SF)	Property Area %	SAD 228 DMP %	100-Yr Storm Inch Depth (6 hr)	Excess Precip (In)	Peak Discharge CFS/AC	Peak Rate of Discharge (CFS)	100-Yr Storm Volume (Ac-Ft)	First Flush Volume (Ac-Ft)
Type D	6695	46%	50%	2.20	1.97	4.37	0.67	0.025	0.004355
Type C	6105	42%	40%	2.20	0.99	2.87	0.40	0.012	0.001051
Type B	1700	12%	10%	2.20	0.67	2.03	0.08	0.002	-
	14500	*100%*	*100%*				*1.15*	*0.039*	*0.005406*

ALLOWED Peak Discharge:	1.18 CFS
ACTUAL Peak Discharge:	1.15 CFS
First Flush Volume:	235 Cubic Ft
100-Yr Storm Volume	1698 Cubic Ft

Total Drainage Basin Area:	14500 SF
	0.333 AC

Legend:

- Existing Min. Contour
- 5532 Existing Maj. Contour
- 5333.5 Proposed Min. Contour
- 5333 Proposed Maj Contour
- 5328.18 Existing Spot Elev.
- FG 32.7 Proposed Spot Elev.
- Flow Direction

0 5 feet
2.5 10

Contour Interval is 0.5'

NOTES:

- Date of Survey – May 8, 2020
- Coordinates are modified NM State Plane ground surface coordinates. Central Zone, NAD83, using a combined factor of 1.000328829 applied at origin (0,0).
- BenchMark Reference – National Geodetic Survey CORS Station 'ZAB1'. Static GPS observations post–processed to ZAB1 to obtain NAVD88 elevations
- This is not a boundary survey. Property lines shown hereon are for reference only, and are based on previous surveys by others.

Rio Grande Surveying Co. PC
PO Box 7155
Albuquerque, NM 87194
(505) 379-4579 m
rgsc360@gmail.com

May 14, 2020

A Revision A: 10/3/20
Modified to reflect actual Pad Elevation

B Revision B: 10/18/22
COO As-built Info

Grading and Drainage Plan

6524 Papagayo Rd NW
Lot #11, Block #9, Volcano Cliffs Unit #18

Critical View Engineering, LLC
11501 Modesto Ave NE
Albuquerque NM, 87122
505-321-5917

JESSE J. LUEHRING NEW MEXICO 21684 PROFESSIONAL ENGINEER

Drawn: 8/11/20
Rev: B

CRITICAL VIEW ENGINEERING