### CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

May 13, 2022

David Soule, PE Rio Grande Engineering 1606 Central SE Suite 201 Albuquerque, NM 87106

Re: Lot 2 Block 2

**Volcano Cliffs Subdivision Unit 18** 

6612 Petirrojo Rd. NW Grading and Drainage Plan

Engineers Stamp Date 4/27/2021 (D10D003G2P)

Pad Certification Date 6/8/2021 CO Certification Dated: 5/11/2022

PO Box 1293

Mr. Soule

Albuquerque

Based on the Certification received on 5/11/2022, the site is acceptable for release of Certificate of Occupancy by Hydrology.

NM 87103

Sincerely,

www.cabq.gov

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: 6612 Petirrojo NW	_ Building Permit #	<u> </u>	Hydrology File #:			
			Work Order#:			
DRB#: Logal Description:	VOLCANO CLI	FFS UNIT 18				
City Address: 6612 Petirrojo NW						
Applicant:		Co	ontact:			
Address:						
Phone#:			-mail:			
Other Contact: RIO GRANDE ENGIN						
Address: PO BOX 93924 ALB NM				<del></del>		
Phone#: 505.321.9099		)999 <b>E</b> -	-mail: <sup>david@riogr</sup>	andeengineering.com		
TYPE OF DEVELOPMENT:PLAT						
Check all that Apply:						
DEPARTMENT:  X HYDROLOGY/ DRAINAGE TRAFFIC/ TRANSPORTATION  TYPE OF SUBMITTAL:  XX ENGINEER/ARCHITECT CERTIFICATION PAD CERTIFICATION CONCEPTUAL G & D PLAN GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN FLOODPLAIN DEVELOPMENT PERMIT A ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING?  IS THIS A RESUBMITTAL?: XX YesN	APPLIC	FYPE OF APPROVAL/ BUILDING PERMI CERTIFICATE OF  PRELIMINARY PL SITE PLAN FOR S SITE PLAN FOR B FINAL PLAT APP  SIA/ RELEASE OF FOUNDATION PEL GRADING PERMI SO-19 APPROVAL PAVING PERMIT RADING/ PAD C WORK ORDER APP CLOMR/LOMR FLOODPLAIN DEV OTHER (SPECIFY	T APPROVAL OCCUPANCY  LAT APPROVAL SUB'D APPROVAL SLDG. PERMIT APP ROVAL T FINANCIAL GUAR RMIT APPROVAL T APPROVAL CAPPROVAL SERTIFICATION PROVAL VELOPMENT PERMIT	PROVAL  CANTEE		
DATE SUBMITTED:	*					
COA STAFF:	ELECTRONIC SUBM	ITTAL RECEIVED:				

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

#### Weighted E Method

						100-Year, 6-hr.			24 hour				
Basin	Area	Area	Treatment A	Treat	ment B	Treat	ment C	Treatr	ment D	Weighted E	Volume	Flow	Volume
	(sf)	(acres)	% (acres	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs	(ac-ft)
ALLOWED	14096.00	0.324	0% 0	20%	0.065	46%	0.1489	34%	0.110	1.259	0.034	1.04	0.038
PROPOSED	14096.00	0.324	0% 0	20%	0.065	43%	0.1391	37%	0.120	1.289	0.035	0.71	0.039
COMPARISON											0.001		#REF!

#### **Equations:**

Weighted  $E = Ea^*Aa + Eb^*Ab + Ec^*Ac + Ed^*Ad / (Total Area)$ 

Volume = Weighted D \* Total Area

Flow = Qa \* Aa + Qb \* Ab + Qc \* Ac + Qd \* Ad

Where for 100-year, 6-hour storm-zone 1

Qa= 1.29 Eb= 0.67 Qb= 2.03 Qc= 2.87 Ec=0.99Qd= 4.37

ONSITE Conditions DRAINAGE SUMMARY

REQUIRED PROVIDED (CF) (CF)

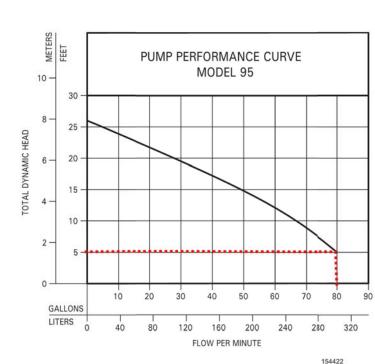
WATER QUALITY FLOOD CONTROL(ENTIRELOT) 1714 (24-hour)

Narrative

This site is within the SAD 228 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the south per the master drainage plan. The site does exceed the SAD 228 developed conditions assumptions, therefore ponding of 66 cfs is required Based upon height restrictions, the pad can not be built to drain to the roadway, therefore the yard will retain the entire 198 cf generated. A sump pump will be installed to drain the yard to the street. The pump will discarche at . 17 cf to the front discharging to the roadway. Existing wall appears to prevent cross lot drainage. This plan is in conformance to the master drainage plan

#### PRODUCT SPECIFICATIONS

	Horse Power	1/2		
	Voltage	115		
~	Phase	1 Ph		
MOTOR	Hertz	60 Hz		
0	RPM	3450	6 7/32"	
Σ	Туре	Permanent split capacitor	(158 mm)	
	Insulation	Class B	3 7/8" (98 mm) 4 5/8" (117 mm)	
	Amps	10.5		
	Operation	Automatic		3 7/
	Auto On/Off Points	9-1/2" (24 cm) / 2-1/2" (6.4 cm)		
	Discharge Size	1-1/2" NPT		
	Solids Handling	1/2" (12 mm) spherical solids		4" (
₽	Cord Length	15' (4.6 m)		1
PUMP	Cord Type	UL listed, 3-wire, grounded plug		
4	Max. Head	26' (7.9 m)		
	Max. Flow Rate	80 GPM (303 LPM)		
	Max. Operating Temp.	130° F (54° C)		
	Cooling	Oil filled		
	Motor Protection	Auto reset thermal overload		
	Сар	Cast iron		
	Motor Housing	Cast iron	12 1/8" (308 mm)	
	Pump Housing	Cast iron		
S	Base	Cast iron		
AL	Upper Bearing	Sleeve bearing	5 3/8"	(13
8	Lower Bearing	Ball bearing		
MATERIALS	Mechanical Seals	Carbon and ceramic	<u>, crea</u> -com	
\\	Impeller Type	Non-clogging vortex		
2	Impeller	Engineered thermoplastic		S
	Hardware	Stainless steel		
	Motor Shaft	AISI 1215 cold rolled steel		
	Gasket	Neoprene		



HIGHEST NATURA GRADE = 5324.36

EARTHEN SWALE

5323.70

5324.05

END RETAINING WALL

FG = 5323.00

© Copyright 2020 Zoeller® Co. All rights reserved. 502-778-2731 | 800-928-7867 | 3649 Cane Run Road | Louisville, KY 40211-1961 | zoellerpumps.com I, DAVID SOULE HAVE PERSONALLY INPECTED THE SITE. I HEREBY CERTIFY THE PAD HAS BEEN CONSTRUCTED SUCH THAT IT IS IN SUBSTANTIAL CONFORMANCE TO THE APPROVED GRADING PLAN DATED 4/27/21



**5323**.99FF = 5323.55

FP = 5323.05

AVERAGE EXISTING\*\*

GRADE AT PAD=5324.18

TERMINATE DISCHARGE PIPE

**ON-SITE RETENTION POND** 

INV=5318.50

INSTALL: ZOELLER N95 SUMP PUMP

ROADWAY AT BACK OF SIDEWALK

IN 18" DIAMETER CULVERT WITH GRATE

INSTALL:110LF OF 2 "DISCARGE LINE TO

\_TURN 1 BLOCK @ 5323.00

TOP = 5323.00BOTTOM = 5322.00

TURN 1 BLOCK @ 5323.00

5323.67

LOWEST NATURAL

GRADE = 5319.73

5324.60

VOLUME = 1,804 CF MWSEL = 2322.69

5322.35

RETAINING WALL FG = 5323.00

# **EROSION CONTROL NOTES:**

- 1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
- 2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
- 3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
- 4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

05/06/2022

I <u>David Soule</u>, NMPE 14522, of the firm <u>Rio Grande Engineering</u>, hereby certify that

submitted in support of a request for <u>PERMANENT CERTIFICATE OF OCCUPANCY</u>. The record information presented heron is not necessarily complete and intended only to

verify substantial compliance of the grading and drainage aspects of this project. Those relying on this record document are advised to obtain independent verification of its

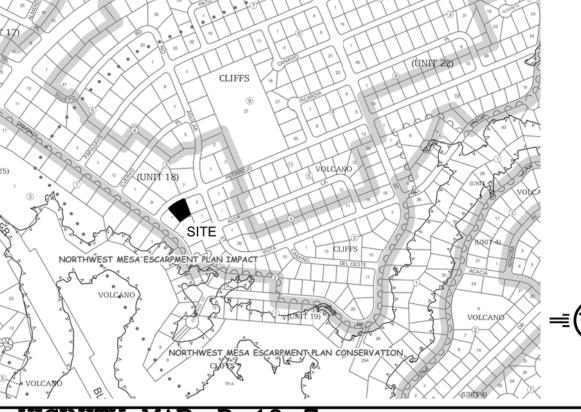
this project has been graded and will drain in substantial compliance with and in accordance with the design intend of the approved plan dated  $\frac{4}{27}$ . The record information edited on the original design document has performed by me or under my

1' FROM SIDEWALK, INSTALL BERMdirect supervision and is true and correct to the best of my knowledge and belief. The as-TO FORCE DISCHARGE TO RIGHT OF builty survey was provided by Lorenzo Dominguez 10461 . The certification is

accuracy before using it for any other purpose

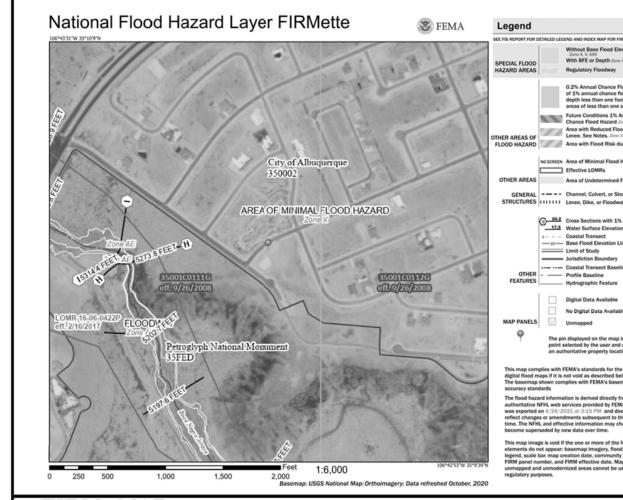
DATE

"AS-BUILT"





### VICINITY MAP: D-10-Z



### FIRM MAP:

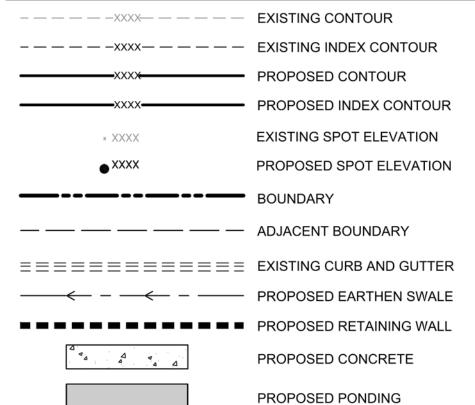
### LEGAL DESCRIPTION:

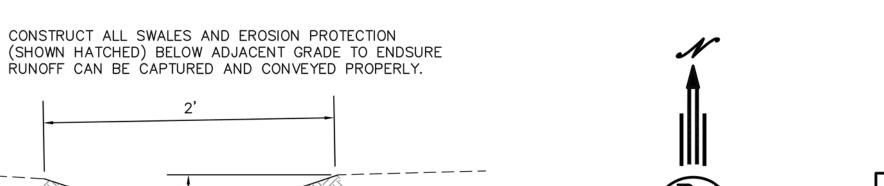
LOT 2 BLOCK 2 UNIT 18 VOLCANO CLIFFS SUBIDIVSION CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

### NOTES:

- 1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
- 3. ANY PERIMETER WALLS MUST BE PERMITED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
- 4. SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.
- 5. A PAD ELEVATION CERTIFICATION SHALL BE REQUIRED PRIOR TO RELEASE OF BUILDING

### **LEGEND**





SCALE: 1"=20'

# **ENGINEER'S** SEAL 14522)

P.E. #14522

6612 PETTIROJO ROAD GRADING AND

DRAINAGE PLAN

Lot 2 Blk 2 Un 18 VC



4/27/21 DAVID SOULE

Rio Grande Engineering .

DRAWN

 $^{BY}$   $_{DEM}$ 

DATE 4-26-21

Lot 2 Blk 2 Un 18 VC .dwg

SHEET#

C1

JOB#

(SHOWN HATCHED) BELOW ADJACENT GRADE TO ENDSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY. \_\_\_\_\_ 2" GRAVEL LINNING AT INVERT \*\* CALCULATED AVERAGE GRADE OF EXISTING PAD TO DETERMINE AVERAGE NATURAL GRADE PER CITY COMMENT **EARTHEN SWALE** 

## **CAUTION:**

EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.