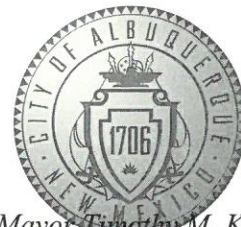


CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor ~~Timothy~~ M. Keller

December 3, 2018

Richard Dourte, P.E.
RHD Engineering LLC
4305 Purple Sage Ave. NW
Albuquerque, New Mexico 87120

RE: **Lot 7 Block 4 Unit 19 SAD 228**
6532 Azor Ln. NW
Volcano Cliffs Subdivision
Grading and Drainage Plan
Engineers Stamp Date; 5/7/18 (D10D003T7)
Pad Certification Date; 6/21/18
C.O. Certification Date; 11/28/18

Dear Mr. Dourte,

PO Box 1293

Based upon the information provided in your submittal received 12/3/18, this plan is approved for Certificate of Occupancy release.

Albuquerque

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

NM 87103

Sincerely,

www.cabq.gov

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

RR/JDH
C: File D10D00T7



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2016)

Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

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

Other Contact: _____ **Contact:** _____

Address: _____

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

diego.candelariahomes@gmail.com

Check all that Apply:

DEPARTMENT:

☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:

☐ ENGINEER/ARCHITECT CERTIFICATION

☐ CONCEPTUAL G & D PLAN

☐ GRADING PLAN

☐ DRAINAGE MASTER PLAN

☐ DRAINAGE REPORT

☐ CLOMR/LOMR

☐ TRAFFIC CIRCULATION LAYOUT (TCL)

☐ TRAFFIC IMPACT STUDY (TIS)

☐ 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

☐ GRADING PERMIT APPROVAL

☐ SO-19 APPROVAL

☐ PAVING PERMIT APPROVAL

☐ GRADING/ ~~PAD~~ CERTIFICATION

☐ WORK ORDER APPROVAL

☐ CLOMR/LOMR

☐ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: ☐ Yes ☒ No

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

DRAINAGE CALCULATION

Project: 6532 Azor NW				
Drainage Calculations - Zone 1				
Total Lot Area (ac) = 0.3214				

Depth (inches) at 100yr Storm					
Zone	P60	P360	P1440	P4days	P10days
1	1.87	2.20	2.66	3.12	3.67

Weighted E = ((Ea*Aa)+(Eb*Ab)+(Ec*Ac)+(Ed*Ad))/(Aa+Ab+Ac+Ad)	
V360=(Weighted E *P360)/12 in/ft	
V1440= V360+Ad*(P1440-P360)/12in/ft	
V4days=V360+Ad*(P4day-P360)/12in/ft	
V10days=V360+Ad*(P10days-P360)/12in/ft	

Excess Precipitation, E(inches) - 6 HR				
Treatment				
Zone	A	B	C	D
1	0.44	0.67	0.99	1.97

Peak Discharge (CFS/ACRE) 100 YR				
Treatment				
Zone	A	B	C	D
1	1.29	2.03	2.87	4.37

*****SAD 228 Permittable Design Conditions*****				
Area		SQ. FT	Acres	
(0%)A=		0	0.000	
(10%)B=		1400	0.032	
(40%)C=		5600	0.129	
(50%)D=		7000	0.161	
Total		14000	0.321	
Weighted E=		1.448		

Design Flows (CFS)			Peak Discharge (100 YR)
Area	SQ. FT	Acres	
A=	0	0.000	0.00
B=	1400	0.032	0.07
C=	5600.1	0.129	0.37
D=	7000.1	0.161	0.70
Total (CFS)			1.14

	V360	V1440	V4days	V10days
Cubic feet	1689.3	1957.7	2226.0	2546.8
Acre-ft	0.04	0.04	0.05	0.06

*****PROPOSED CONDITIONS*****				
Area	SQ. FT	Acres	Design Flows (CFS)	
A=	0	0.000	Area	SQ. FT
B=	1400	0.032	A=	0
C=	7250	0.166	B=	1400
D=	5350	0.123	C=	7250
Total	14000	0.321	D=	5350
Weighted E=		1.333	Total (CFS)	1.08
	V360		V1440	V4days
Cubic feet	1554.6		1759.7	1964.8
Acre-ft	0.04		0.04	0.05
The 100 year peak flows for this developed site is 1.08 CFS and the SAD 228 permissible design flows are 1.14 CFS for an increase of -0.06 CFS.				
First Flush Ponding Requirement = Ao *0.46 in/12in/ft = 205 CF				

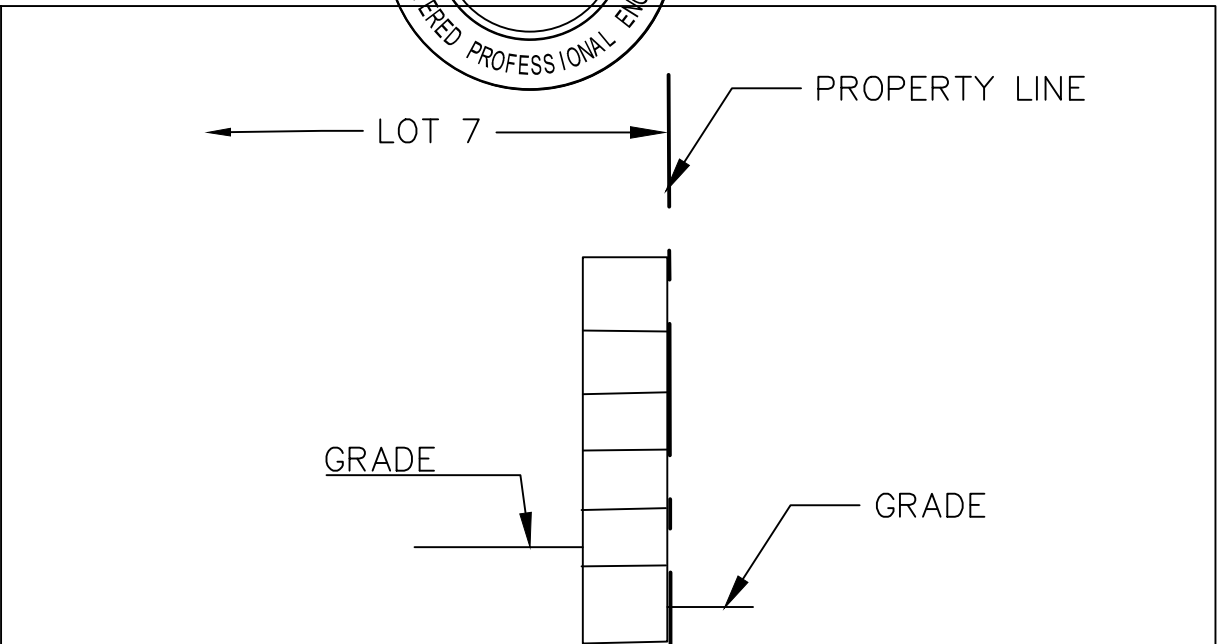
DRAINAGE NARRATIVE:

- THIS SITE IS LOCATED WITHIN THE SAD 228 DRAINAGE MASTER PLAN AREA.
- THIS SITE IS TO DRAIN IN A SOUTH WEST DIRECTION, PER THE SAD 228 DRAINAGE MASTER PLAN.
- THE VOLUMES OF THE FIRST FLUSH POND IS 212CF, THIS IS GREATER THAN THE REQUIRED PONDING OF 205CF.

DRAINAGE CERTIFICATION WITH SURVEY WORK BY PROFESSIONAL SURVEYOR
DRAINAGE CERTIFICATION
I, Richard Dourte, NMPE 10854 OF THE FIRM RHD Engineering, LLC HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 5-07-18. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENTATION HAS BEEN OBTAINED BY Davod Acosta, NMPS 21082 OF THE FIRM Construction Survey Tech. Inc. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 11-28-18 AND HAVE DETERMINEDBY VISUAL INSPECTION THAT THE SURVEY DATA PROVIDED IS REPRESENTATIVE OF ACTUAL SITE CONDITIONS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.
THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF THE REQUEST FOR C.O.
(DESCRIBE ANY EXCEPTIONS AND /OR QUALIFICATIONS HERE IN A SEPARATE PARAGRAPH.)
1. THE OUTLET FOR THE POND HAS BEEN RAISED DUE TO THE GRADE OF THE EXISTING POND.
THE RECORD INFORMATION PRESENTED HEREON 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 DOCUMENTATION ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

Richard Dourte
Richard Dourte, NMPE 10854

11-28-18
Date



- ANY GARDEN WALL/RETAINING WALL IS TO BE BUILT ON-SITE (DESIGN OF THE GARDEN WALL/RETAINING WALL IS BY OTHERS).
- A PERMIT IS REQUIRED FOR THE CONSTRUCTION OF THE RETAINING WALL AND ANY FUTURE GARDEN WALL. THIS IS THE PLAN TO FOLLOW WHEN APPLYING FOR A PERIMETER BLOCK WALL.

GENERAL NOTES:

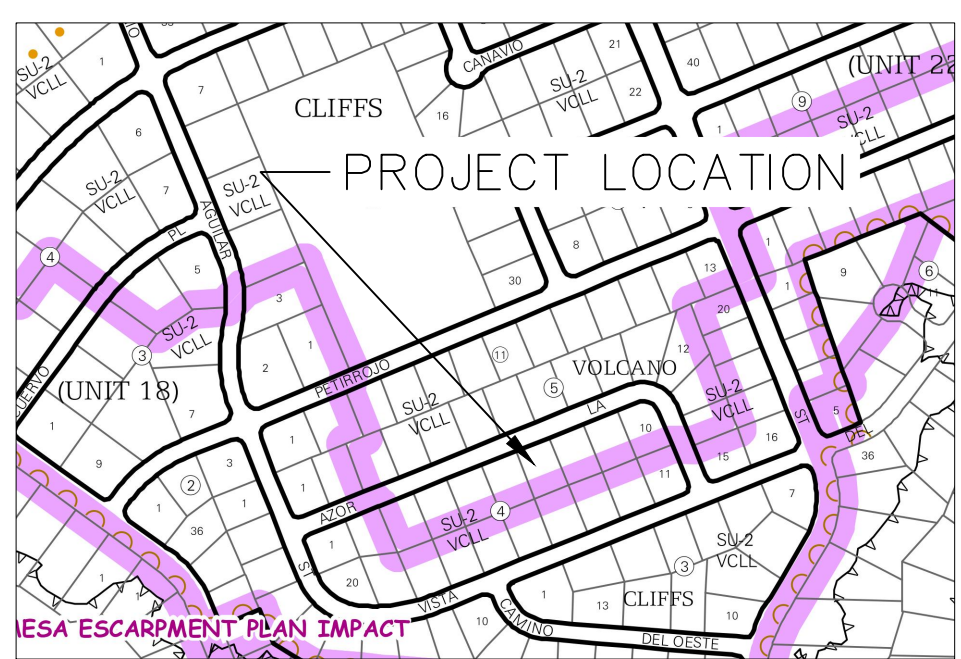
- THIS SITE IS NOT LOCATED IN A FEMA FLOOD HAZARD ZONE (REFER TO THE FIRM MAP 35001C0112G.(EXCERPT ATTACHED).
- RHD ENGINEERING, LLC RECOMMENDS THAT THE OWNER OBTAIN A GEOTECHNICAL REPORT PRIOR TO DESIGN OF BUILDING FOOTING/FOUNDATION.
- SLOPE STABILAZATION SHALL BE USED ON SLOPES GREATER THAN A 3:1 SLOPE, PER MANUFACTURER RECOMMENDATIONS.
- MODIFICATIONS OR ADJUSTMENTS TO EXISTING DRAINAGE STRUCTURES/EROSION MITIGATIONIMPROVEMENTS SHALL BE DONE IN THE SAME MANNER AS THE ORIGINAL IMPROVEMENT.
- ALL SWPPP REQUIREMENTS SHALL BE ADHERED TO.
- ALL WORK ON THIS PLAN SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS. ALL APPLICABLE PERMITS SHALL BE OBTAINED PRIOR TO WORK COMMENCING.
- ALL WORK IN THE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS.
- THIS GRADING PLAN IS TO BE UTILIZED AND A COPY PROVIDED TO THE CITY WHEN APPLYING FOR THE CONSTRUCTION OF ANY GARDEN OR RETAINING WALLS, WITH RESPECT TO THIS SITE.
- THE SURVEY INFORMATION WAS PROVIDED BY CONSTRUCTION SURVEYS TECHNOLOGIES, INC.
- FOR SITE DIMENSIONS, BUILDING AND INFRASTRUCTURE LOCATION REFER TO THE SITE PLAN.

EROSION CONTROL NOTES:

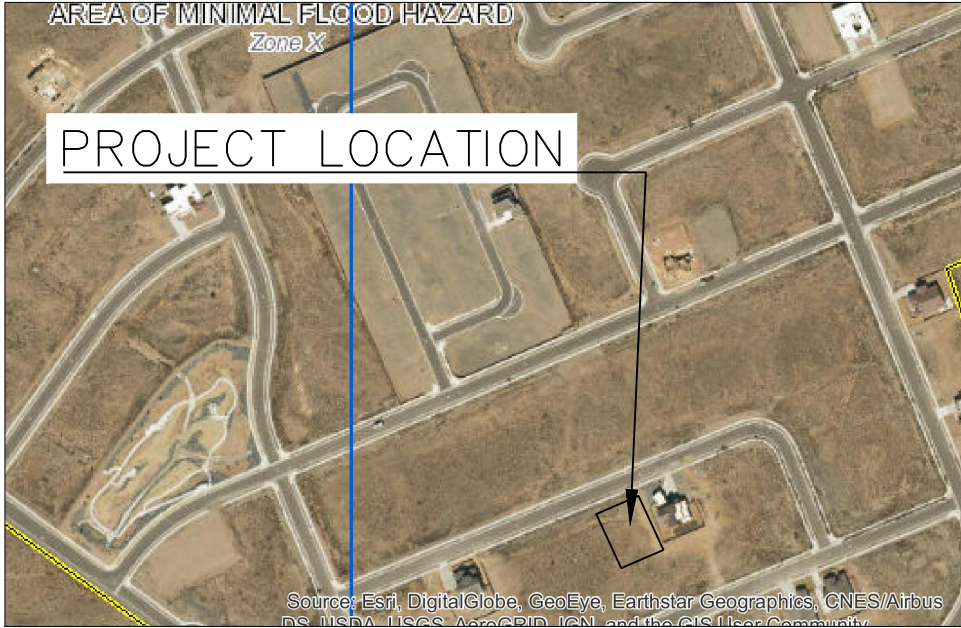
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
- REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

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.



VICINITY MAP: D-10-Z



FIRM MAP: 35001C0112G

LEGAL DESCRIPTION:

LOT 7, BLOCK 4, VOLCANO CLIFF, UNIT 19
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

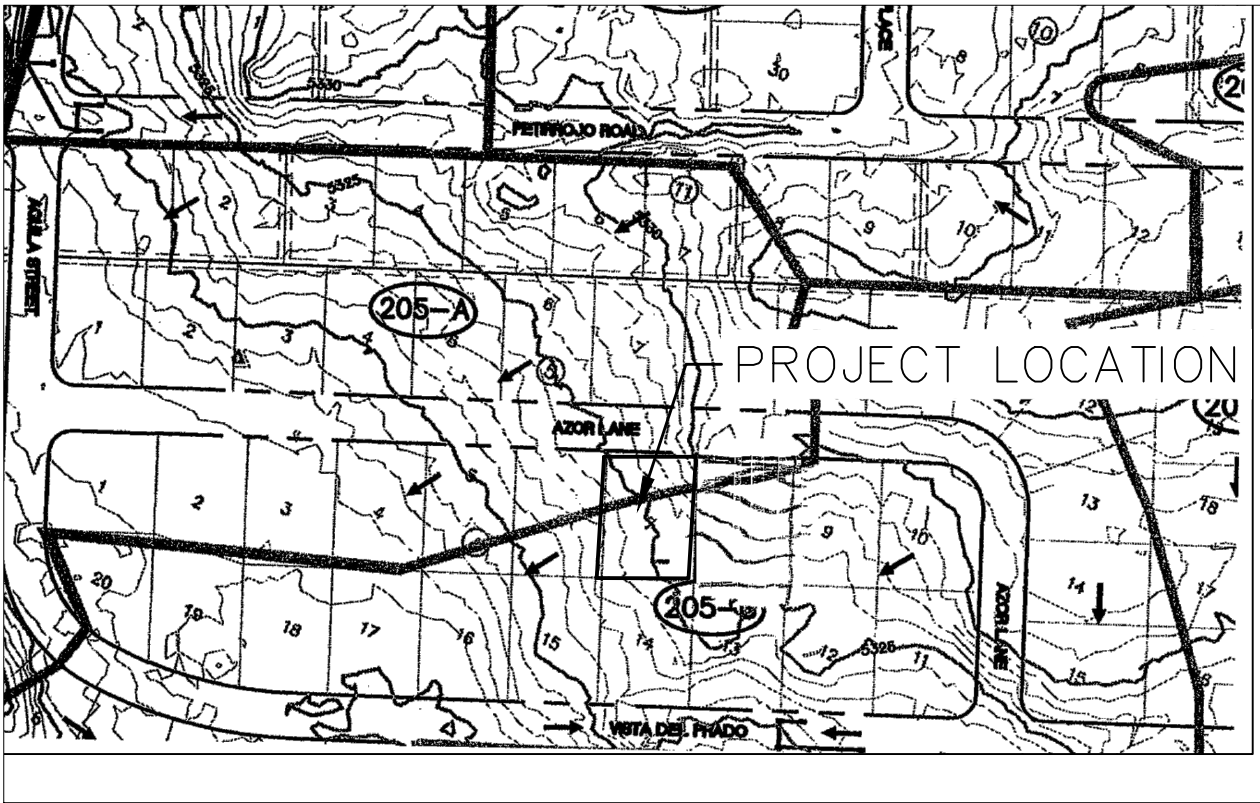
NOTES:

- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- RETAIN THE FIRST .46" OF STORM RUNOFF FROM ENTIRE DEVELOPMENT TO CONFORM TO THE WATER QUALITY REQUIREMENTS

LEGEND

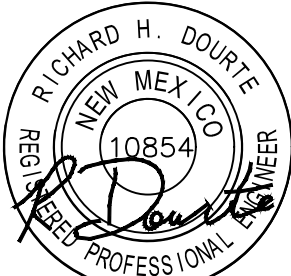
- 46.00
TW=44.00
PROPOSED SPOT ELEVATION
- TOP OF WALL ELEVATION
BOTTOM OF WALL ELEVATION
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- PROPOSED INDEX CONTOUR
- LOT LINE
- RIGHT-OF-WAY
- PROPOSED RETAINING WALL
- PROPOSED ROCK FACE WALL
- EXISTING CURB AND GUTTER
- PROPOSED EDGE OF CONCRETE
- PROPOSED FLOWLINE
- EXISTING WALL
- PROPOSED BASIN BOUNDARY

GRADES IN RED ARE AS-BUILT GRADES.



EXCERPT FROM SAD 228 DRAINAGE REPORT

I, Richard Dourte have personally inspect this site. I hereby certify that the pad has been constructed in sustantial compliance with the approved grading and drainage plan stamp dated 5-07-18.



6-21-18.

I, RICHARD DOURTE HAVE PERSONALLY INSPECTED THE PROPERTY ON MAY 1, 2018. NO EARTHWORK HAS BEEN PERFORMED AND THE SITE IS CONSISTENT WITH THE INFO SHOWN

Richard Dourte
RICHARD DOURTE P.E. #10854
DATE

ENGINEER'S SEAL	Title 6532 AZOR LANE NE	DRAWN BY
		DATE
	GRADING AND DRAINAGE PLAN	Day
	RHD Engineering, LLC 4305 Purple Sage Ave. NW ALBUQUERQUE, NM 87120 (505) 288-1621	SHEET # 1 of 1
Richard Dourte P.E. #10854		JOB #