CITY OF ALBUQUERQUE

Planning Department David Campbell, Director



January 17, 2019

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

RE: Lot 35 Block 6 Unit 2 SAD 227 7904 Kibo NW Volcano Cliffs Subdivision Grading and Drainage Plan Engineers Stamp Date 1/10/19 (E10D056)

Dear Mr. Dourte,

Based upon the information provided in your submittal received 1/10/19, this plan cannot be approved for Grading Permit until the following comments are addressed.

PO Box 1293

Albuquerque

NM 87103

- Provide a scale and the north arrow.
- Provide the property line for the entire site.
- The driveway appears to be entering the site through another property, clarify.
- Provide a benchmark.

Prior to building permit approval a pad certification will be required.

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

www.cabq.gov

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

Sincerely,

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

RR/JDH C: File E10D056



City of Albuquerque

Planning Department Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: Lot35, Bk6, Volcano Cliffs	Building Permit #:	Hydrology File #:
DRB#:	_EPC#:	Work Order#:
Legal Description: Lot 35, Block 6, Volcano	Cliffs no. 2	
City Address: _7904 Kibo Drive NW		
Applicant: RHD Engineering, LLC		Contact: Richard Dourte
Address: 4305 Purple Sage Ave. NW,	Alb. NM, 87120	
Phone#: 505.288.1621	Fax#:	E-mail: rhdengineering@outlook.com
		Contact: Joe Simons
Address: PO Box 67408, Alb. NM 8719		
Phone#:	Fax#:	E-mail: joe@simonsarchitecture.com
TYPE OF DEVELOPMENT: PLAT (# of lots) X RESIDENCE	DRB SITE ADMIN SITE
IS THIS A RESUBMITTAL? Yes	X No	
DEPARTMENT TRANSPORTATION	X HYDROLOGY/DRAINA	GE
Check all that Apply: TYPE OF SUBMITTAL: ENGINEER/ARCHITECT CERTIFICATION PAD CERTIFICATION CONCEPTUAL G & D PLAN	X BUILDING CERTIFICA	ROVAL/ACCEPTANCE SOUGHT: PERMIT APPROVAL ATE OF OCCUPANCY ARY PLAT APPROVAL N FOR SUB'D APPROVAL
X GRADING PLAN DRAINAGE REPORT DRAINAGE MASTER PLAN	SITE PLAN FINAL PLA	FOR BLDG. PERMIT APPROVAL AT APPROVAL
 FLOODPLAIN DEVELOPMENT PERMIT A ELEVATION CERTIFICATE CLOMR/LOMR TRAFFIC CIRCULATION LAYOUT (TCL) TRAFFIC IMPACT STUDY (TIS) STREET LIGHT LAYOUT OTHER (SPECIFY) PRE-DESIGN MEETING? 	SIA/ KELE FOUNDAT GRADING SO-19 APF PAVING P GRADING GRADING CLOMR/LO FLOODPLA OTHER (S	ERMIT APPROVAL / PAD CERTIFICATION DER APPROVAL
DATE SUBMITTED: <u>1-10-19</u>		
COA STAFF:	ELECTRONIC SUBMITTAL RECEIVED: FEE PAID:	

DRAINAGE NARRATIVE:

1. THIS SITE IS LOCATED WITHIN THE SAD 227 DRAINAGE PLAN. AN ALLOTMENT OF 3600SF OF IMPERVIOUS AREA PER LOT IS PERMITTED TO DRAIN TO THE SAD 227 STORM DRAIN SYSTEM. THIS SITE IS PROPOSED TO HAVE 3925SF OF IMPERVIOUS AREA. THE DIFFERENCE IN THE RUNOFF WILL NEED TO BE PONDED ONSITE. THIS SITE WOULD BE REQUIRED TO POND ONLY 26CF, SEE THE DRAINAGE CALCULATIONS BELOW. 2. BASIN N IS REQUIRED TO POND THE 100YR 6HR EVENT =391CF. THIS IS GREATER THAN THE FIRST FLUSH VOLUME OF 26CF. THE TWO PONDS FOR THIS AREA ARE 320CF+80CF= 400CF. THUS THE VOLUME PROVIDED IS GREATER THAN THE VOLUME REQUIRED.

3. BASIN S IS REQUIRED TO POND THE FIRST FLUSH VOLUME OF 86CF, THE POND VOLUME IS 100CF. THUS THE POND VOLUME PROVIDE IS GREATER THAN THE VOLUME REQUIRED.

r			Project: L	-	-		5 no. 2				
L			Dra	iinage Calo	culations -	zone 1					l
	Depth (inches) at 100yr Storm						Excess Precipiation, E(inch Treatmen) - 6 HR
Zone	P60	P360	P1440	P4days	P10days	1	Zone	A	В	C	D
1	1.87	2.20	2.66	3.12	3.67]	1	0.44	0.67	0.99	1.97
2	2.01	2.35	2.75	3.30	3.95		2	0.53	0.78	1.13	2.12
3	2.14	2.60	3.10	3.95	4.90	4	3	0.66	0.92	1.29	2.36
4	2.23	2.90	3.65	4.70	5.95		4	0.80	1.08	1.46	2.64
Weighted E= ((EA*AA)+(EB*AB)+(Ec*Ac)+(ED*AD))/(AA+AB+Ac+AD) V360=(Weighted E *P360)/12 in/ft]	Peak Discharge (CFS/ACRE) 100 YR Treatment					
V1440= V360+AD*(P1440-P360)/12in/ft							Zone	Α	В	С	D
V4days=V360+AD*(P4day-P360)/12in/ft							1	1.29	2.03	2.87	4.37
V10days=V360	+AD*(P10days	-P360)/12in/	/ft				2	1.56	2.28	3.14	4.70
							3	1.87	2.60	3.45	5.02
	****	*****	******	**DESIGN	CRITERIA	*****	4	2.20	2.92 *****	3.73	5.25
Area	SQ.		Acres	% Total]				Flows (CFS)	
A=	0		0.000	0%		Area	SQ. FT		Peak D	Discharge	(100 YR)
B=	0		0.000	0%	4	A=		0.000		0.00	
C=	840		0.193	70%	4	B=		0.000		0.00	
D=	360		0.083	30%	4	C=		0.193		0.55	
Total	120		0.275	100%	4	D=		0.083		0.36	
Weigh	ted E=	1.2	284		J		otal (CFS)		0.91	
	V3	50	V14	40		V4days			V10day	s	
Cubic feet	1284	4.0	142	2.0		1560.0			1725.0		
Acre-ft	0.0)3	0.0)3		0.04			0.04		
	*****	****	****				******	*****	*****	*****	
Area	SQ.		Acres	% Total		ASIN S					
Area A=	<u> </u>		0.000	0%	4	Area			Flows (CFS) Peak Discharge (100 YF		
B=	0		0.000	0%	1	Area A=		0.000	0.00		
C=	512		0.118	63%	1	B=		0.000	0.00		
D=	302	25	0.069	37%	1	C=	5125	0.118	0.34		
Total	815	50	0.187	100%		D=	3025	0.069		0.30	
Weigh	ted E=	1.3	354			Т	otal (CFS	5)		0.64	
	Va	-0	V14	40		V4days			V10day	c	I
Cubic feet	919		1035.4			1151.3	-		1290.0		
Acre-ft	0.0		0.0			0.03			0.03	5	
Firs	t Flush Pond	ing Require	ment for Ba	sin S = A _D '	*0.34 in/1	2in/ft =	86 CF				
	*****	*****	****PROP(OSED CON	DITIONS B		*****	*****	*****	****	
Area	SQ.	FT	Acres	% Total				Design	Flows (CFS)	
A=	0		0.000	0%		Area	SQ. FT	Acres	Peak D	Discharge	(100 YR)
B=	0		0.000	0%	1	A=		0.000		0.00	
C=	295		0.068	77%	4	B=		0.000		0.00	
D=	90		0.021	23%	4	C=		0.068		0.19	
Total	385		0.088	100%	4	D=		0.021		0.09	
Weigh		1.2					otal (CFS	5)		0.28	
Cubi- fr - t	V36				V4days			V10day			
Cubic feet	391		411		466.1				501.4		
Acre-ft	0.0)1	0.0	1		0.01			0.01		
The 100 ye	ar peak flow	s for this d	eveloped site	e is 0.64CF	-S +.28CFS	=.92CF	S and the	design	flows a	re 0.91	

REPORT PRIOR TO DESIGN OF BUILDING FOOTING/FOUNDATION.

