CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director

Mayor Timothy M. Keller

March 10, 2020

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

RE: **Lot 35 Block 6 SAD 227**
7904 Kibo NW
Unser Cliffs Subdivision
Grading and Drainage Plan
Engineers Stamp Date 3/6/20 (E10D056)

Dear Mr. Dourte,

Based upon the information provided in your submittal received 3/9/20, this plan is approved for Grading Permit. Please inform the builder/owner to attach a copy of this approved plan and letter into the construction sets in the permitting process prior to sign-off by Hydrology.

Reiterate to the Owner/Contractor that a separate permit for a garden/retaining wall must be obtained, with the approved G&D plan. Also inform the contractor to use lumber, asphalt millings or any type of material other than dirt, to ramp over the curb stone.

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.

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

Sincerely,

Ernest Armijo, P.E.
Principal Engineer, Hydrology
Planning Department

RR/EA
C: File E10D056

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: Lot35,Bk6,Volcano Cliffs Building Permit #: _____ Hydrology File #: E10D056

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

Other Contact: Joe Simons Architecture Contact: Joe Simons

Address: PO Box 67408, Alb. NM 87193-7048

Phone#: _____ Fax#: _____ E-mail: joe@simonsarchitecture.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:

____ 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:

__X__ 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
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 3-06-20 By: Richard Dourte

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

RHD Engineering, LLC

Richard H. Dourte
4305 Purple Sage Ave. NW
Albuquerque, NM 87120
(505)288-1621
rhdengineering@outlook.com

March 6, 2020

Hydrololgy, Planning Department
Development Review Services
600 Second Street
City of Albuquerque, NM 87102

RE: Lot 35, Block 6, Volcano Cliffs No. 2 Subd, SAD 227 (E10D056)
7904 Kibo dr NW

This is a revision to the approved plan stamp dated 1-25-19, approval letter dated January 31, 2019. The purpose for this revision is to raise the pad elevation by 1.5ft in order to help avoid the problematic rock that is typical in this area.

Thank you for your consideration.

If you have any questions, please feel free to call me at 288-1621.

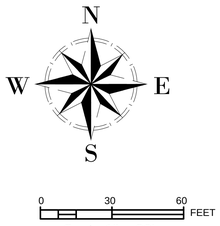
Sincerely,

Richard Dourte

Richard Dourte, PE
RHD Engineering, LLC

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 10 DAY EVENT =501CF. THIS IS GREATER THAN THE FIRST FLUSH VOLUME OF 26CF. THE TWO PONDS FOR THIS AREA ARE 430CF+80CF= 510CF. 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.



GENERAL NOTES:

1. THIS SITE IS NOT LOCATED IN A FEMA FLOOD HAZARD ZONE (REFER TO THE FIRM MAP 35001C0113G, EXCERPT ATTACHED).

2. RHD ENGINEERING, LLC RECOMMENDS THAT THE OWNER OBTAIN A GEOTECHNICAL REPORT PRIOR TO DESIGN OF BUILDING FOOTING/FOUNDATION.

3. SLOPE STABILAZATION SHALL BE USED ON SLOPES GREATER THAN A 3:1 SLOPE, PER MANUFACTURER RECOMMENDATIONS.

4. ALL SWPPP REQUIREMENTS SHALL BE ADHERED TO.

5. 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.

6. ALL WORK IN THE RIGHT-OF-WAY SHALL BE DONE IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARDS.

7. THE SURVEY INFORMATION WAS PROVIDED BY MR. DAVID ACOSTA, NMPS 21082, CONSTRUCTION SURVEY TECHNOLGIES, INC.

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.

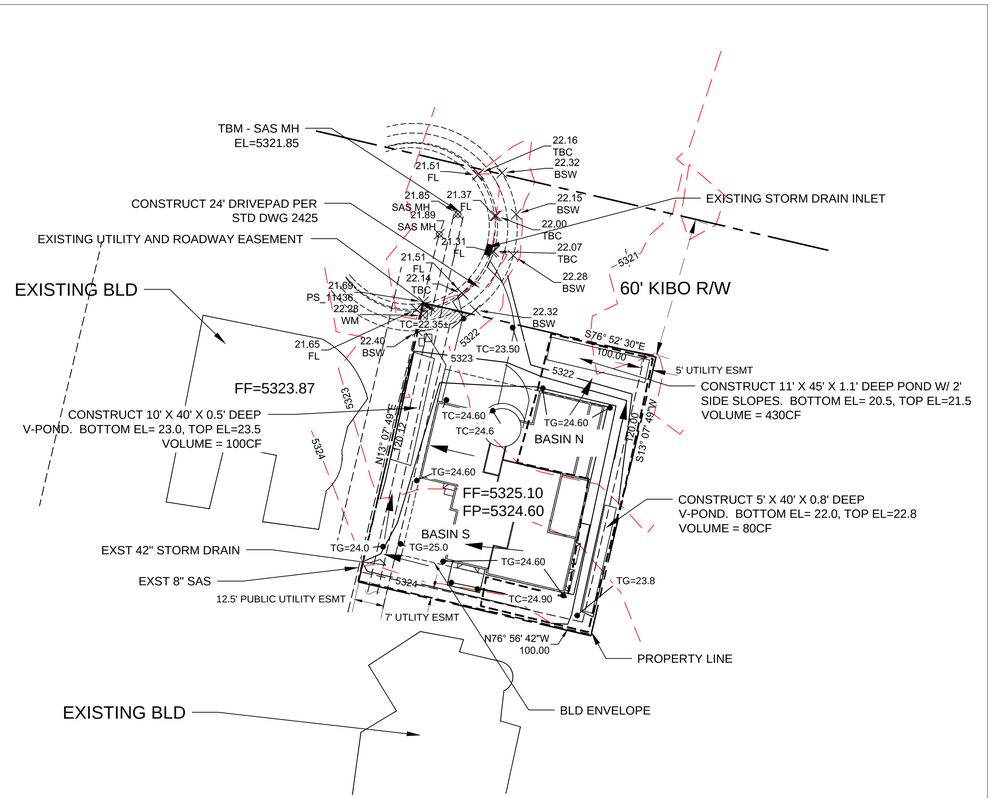
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

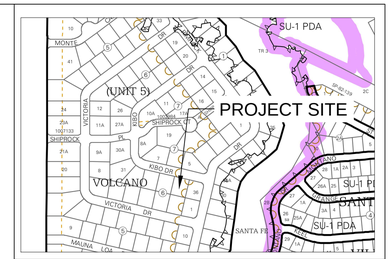
4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.

5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

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: E-10-Z

FIRM MAP: 35001C0113G

LEGAL DESCRIPTION:

LOT 35, BLOCK 6, VOLCANO CLIFFS NO. 2
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.

2. RETAIN THE FIRST .34" OF STORM RUNOFF FROM IMPERVIOUS AREA OF DEVELOPMENT TO CONFORM TO THE WATER QUALITY REQURIEMENTS.

LEGEND

- 46.00 — PROPOSED SPOT ELEVATION
- TW=44.00 — TOP OF WALL ELEVATION / BOTTOM OF WALL ELEVATION
- 5601 — EXISTING CONTOUR
- 5600 — EXISTING INDEX CONTOUR
- 5601 — PROPOSED CONTOUR
- 5600 — 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
- EXISITING WALL
- PROPOSED BASIN BOUNDARY

Project: Lot 35, block 6, Vocano Cliffs no. 2
Drainage Calculations - Zone 1

Depth (inches) at 100yr Storm

Zone	P100	P360	P1440	P4days	P10days
1	1.87	2.20	2.66	3.12	3.67
2	2.01	2.35	2.75	3.30	3.95
3	2.14	2.60	3.10	3.95	4.90
4	2.23	2.90	3.65	4.70	5.95

Excess Precipiation, E(inches) - 6 HR

	Treatment			
Zone	A	B	C	D
1	0.44	0.67	0.99	1.97
2	0.53	0.78	1.13	2.12
3	0.66	0.92	1.29	2.36
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
V1440= V360+Ad*(P1440-P360)/12in/ft
V4days=V360+Ad*(P4day-P360)/12in/ft
V10days=V360+Ad*(P10days-P360)/12in/ft

Peak Discharge (CFS/ACRE) 100 YR

	Treatment			
Zone	A	B	C	D
1	1.29	2.03	2.87	4.37
2	1.56	2.28	3.14	4.70
3	1.87	2.60	3.45	5.02
4	2.20	2.92	3.73	5.25

**********DESIGN CRITERIA**********

Area	SQ. FT	Acres	% Total
A=	0	0.000	0%
B=	0	0.000	0%
C=	8400	0.193	70%
D=	3600	0.083	30%
Total	12000	0.275	100%
Weighted E=	1.284		

Design Flows (CFS)

Area	SQ. FT	Acres	Peak Discharge (100 YR)
A=	0	0.000	0.00
B=	0	0.000	0.00
C=	8400	0.193	0.55
D=	3600	0.083	0.36
Total (CFS)			0.91

	V360	V1440	V4days	V10days
Cubic feet	1284.0	1422.0	1560.0	1725.0
Acre-ft	0.03	0.03	0.04	0.04

**********PROPOSED CONDITIONS BASIN S**********

Area	SQ. FT	Acres	% Total
A=	0	0.000	0%
B=	0	0.000	0%
C=	5125	0.118	63%
D=	3025	0.069	37%
Total	8150	0.187	100%
Weighted E=	1.354		

Design Flows (CFS)

Area	SQ. FT	Acres	Peak Discharge (100 YR)
A=	0	0.000	0.00
B=	0	0.000	0.00
C=	5125	0.118	0.34
D=	3025	0.069	0.30
Total (CFS)			0.64

	V360	V1440	V4days	V10days
Cubic feet	919.4	1035.4	1151.3	1290.0
Acre-ft	0.02	0.02	0.03	0.03

First Flush Ponding Requirement for Basin S = Ab *0.34 in/12in/ft = 86 CF

**********PROPOSED CONDITIONS BASIN N**********

Area	SQ. FT	Acres	% Total
A=	0	0.000	0%
B=	0	0.000	0%
C=	2950	0.068	77%
D=	900	0.021	23%
Total	3850	0.088	100%
Weighted E=	1.219		

Design Flows (CFS)

Area	SQ. FT	Acres	Peak Discharge (100 YR)
A=	0	0.000	0.00
B=	0	0.000	0.00
C=	2950	0.068	0.19
D=	900	0.021	0.09
Total (CFS)			0.28

	V360	V1440	V4days	V10days
Cubic feet	391.1	411.8	466.1	501.4
Acre-ft	0.01	0.01	0.01	0.01

The 100 year peak flows for this developed site is 0.64CFS + 28CFS=.92CFS and the design flows are 0.91 CFS for an increase of .01 CFS. The 100 year 6 hr volume increase is (919CF+391CF)-1284CF=26CF.

First Flush Ponding Requirement for Basin N = Ab *0.34 in/12in/ft = 26 CF

I, RICHARD DOURTE HAVE PERSONALLY INSPECTED THE PROPERTY ON _____. NO EARTHWORK HAS BEEN PERFORMED AND THE SITE IS CONSISTENT WITH THE GRADING SHOWN.

Richard Dourte

RICHARD DOURTE P.E. #10854
DATE

ENGINEER'S SEAL

RICHARD H. DOURTE — NEW MEXICO — 10854 — REGISTERED PROFESSIONAL ENGINEER

3-6-20

Richard Dourte
P.E. #10854

Title: LOT 35, BLOCK 6, VOLCANO CLIFFS NO. 2

CONCEPTUAL GRADING AND DRAINAGE PLAN

DRAWN BY

DATE

D.Dourte

SHEET # X of X

JOB #

RHD Engineering, LLC
4305 Purple Sage Ave. NW
ALBUQUERQUE, NM 87120
(505) 288-1621