CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



January 31, 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 Rd. NW
Unser Cliffs Subdivision
Grading and Drainage Plan
Engineers Stamp Date 1/25/19 (E10D056)

Dear Mr. Dourte,

Based upon the information provided in your submittal received 1/31/19, 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.

Albuquerque

PO Box 1293

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.

NM 87103

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)

-	~	mit #: Hydrology File #: E10D056 Work Order#:	
	ck 6, Volcano Cliffs no. 2	work order	
Applicant: RHD Engineering, Address: 4305 Purple Sage	LLC	Contact: Richard Dourte	
Phone#: 505.288.1621	Fax#:	E-mail: rhdengineering@outlook.com	
Other Contact: _Joe Simons Arc	Contact: Joe Simons		
Address: PO Box 67408,			
Phone#:	Fax#:	E-mail: joe@simonsarchitecture.co	
TYPE OF DEVELOPMENT: IS THIS A RESUBMITTAL? DEPARTMENT TRANSPO	X YesNo	RESIDENCE DRB SITE ADMIN SITE ROLOGY/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: 1-28-19	By: Rich	ard Dourte	
COA STAFF:		SUBMITTAL RECEIVED:	

FEE PAID:_____

RHD Engineering, LLC

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

January 25, 2019

Mr. James D. Hughes, PE Principal Engineer, 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

Dear Mr. Hughes,

Thank you for your letter dated January 24, 2019 (enclosed) regarding the above referenced project. The following is in response to your item(s):

- 1. Ponding was increased to provide capacity for the 100yr, 10 day event.
- 2. The easement on the west side of the site, along with the 5' and 7' utility easements on the east and south have been included.

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

Sincerely,

Richard Dourte, PE

Richard Doute

RHD Engineering, LLC

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



January 24, 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 1/22/19 (E10D056)

Dear Mr. Dourte,

Based upon the information provided in your submittal received 1/23/19, this plan cannot be approved for Grading Permit until the following comments are addressed.

PO Box 1293

- Provide a section of the NE corner showing how the flows will drain to Kibo Ave. or a pond which will hold the 100 year 10 day volume.
- Provide the easement on the west side of the property.

Albuquerque

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

NM 87103

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

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.

Project: Lot 35, block 6, Vocano Cilffs no. 2

Drainage Calculations - Zone 1

Depth (inches) at 100yr Storm

 Zone
 P60
 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

eighted E= $((E_A*A_A)+(E_B*A_B)+(E_C*A_C)+(E_D*A_D))/(A_A+A_B+A_C+A_D)$

0.000 0%

0.000 0%

0.083 30%

0.275 100%

1422.0

0.03

0.118 63%

0.069 37%

0.187 100%

1035.4

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

Acres % Total 0.000 0%

0.021 23%

411.8

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

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.

V360=(Weighted E *P360)/12 in/ft

V₁₄₄₀= V₃₆₀+A_D*(P₁₄₄₀-P₃₆₀)/12in/ft

 $V_{4days}=V_{360}+A_{D}*(P_{4day}-P_{360})/12in/ft$

V10days=V360+AD*(P10days-P360)/12in/ft

12000

1284.0

0.03

8150

919.4

Weighted E= 1.284

Excess Precipiation, E(inches) - 6 HR

 Zone
 A
 B
 C
 D

 1
 0.44
 0.67
 0.99
 1.97

 2
 0.53
 0.78
 1.13
 2.12

Peak Discharge (CFS/ACRE) 100 YR

Zone A B C D

 3
 1.87
 2.60
 3.45
 5.02

 4
 2.20
 2.92
 3.73
 5.25

ea SQ. FT Acres Peak Discharge (100 YR)

1725.0

0.04

1290.0

Area | SQ. FT | Acres | Peak Discharge (100 YR)

501.4

Total (CFS)

Total (CFS)

1560.0

0.04

1151.3

466.1

 1.29
 2.03
 2.87
 4.37

 1.56
 2.28
 3.14
 4.70

Treatment

0.00

0.36

0.91

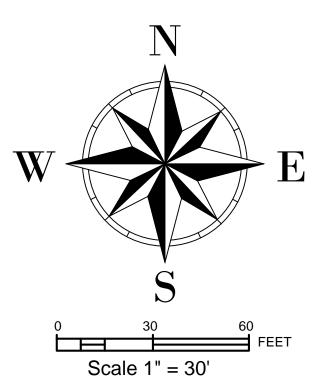
0.00

0.34

0.30

0.64

0.19



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:

RESPONSIBILITY OF THE CONTRACTOR.

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

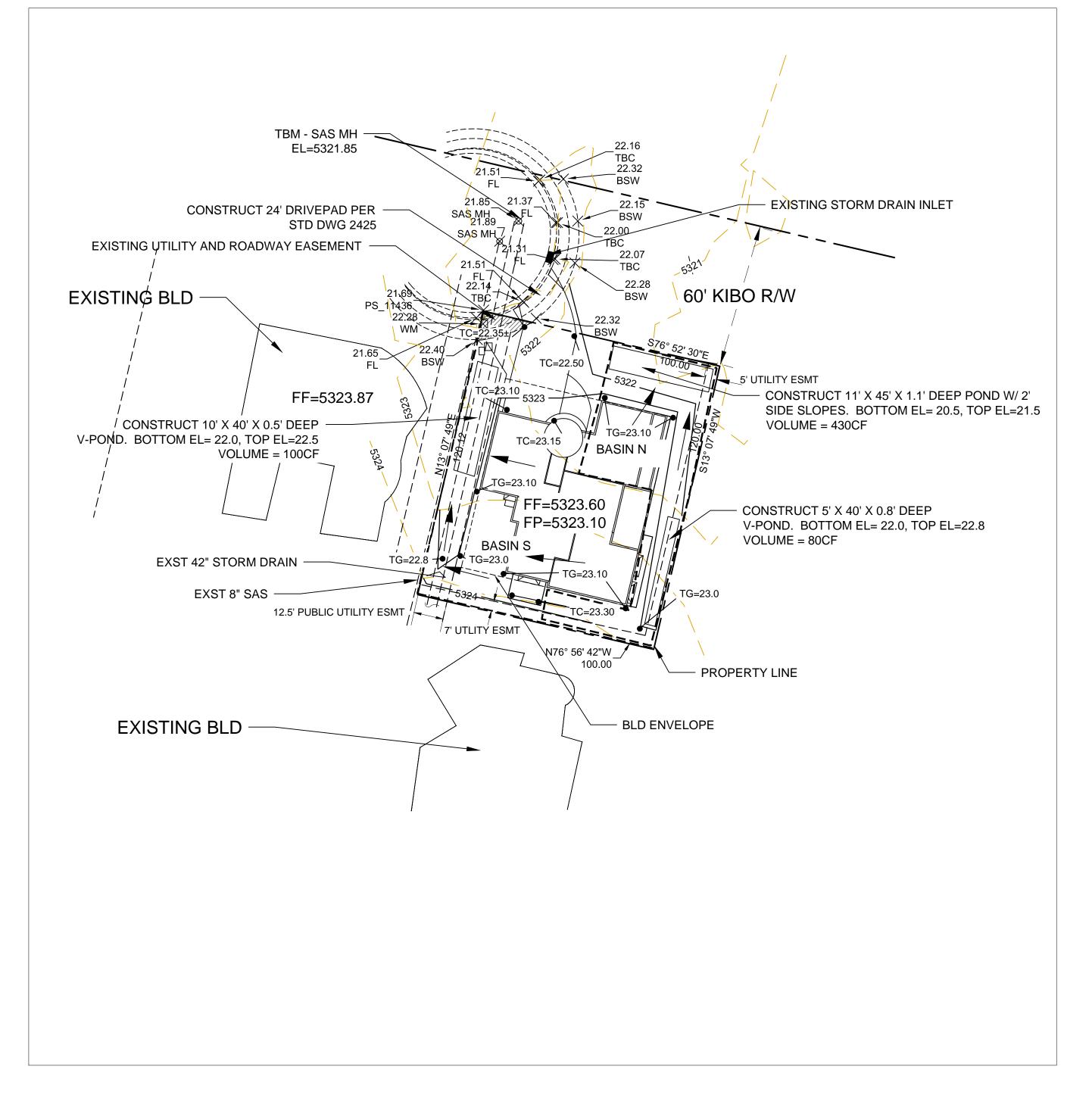
ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE

5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND

CAUTION:

WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.

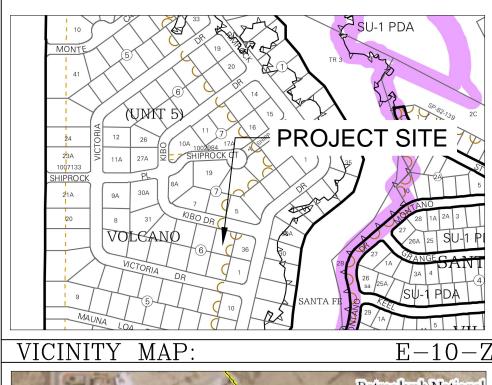
EXISTING UTILITIES ARE NOT SHOWN.
IT SHALL BE THE SOLE RESPONSIBILITY
OF THE CONTRACTOR TO CONDUCT ALL
NECESSARY FIELD INVESTIGATIONS PRIOR
TO ANY EXCAVATION TO DETERMINE THE
ACTUAL LOCATION OF UTILITIES & OTHER
IMPROVEMENTS.





CONSISTEND .WITH THE TOPO SHOWN.

RICHARD DOURTE P.E. #10854





35001C0113G

LEGAL DESCRIPTION:
LOT 35, BLOCK 6, VOLCANO CLIFFS NO. 2
CITY OF ALBUQUERQUE

FIRM MAP

BERNALILLO COUNTY, NEW MEXICO

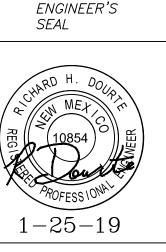
NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE

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

LEGEND

PROPOSED SPOT ELEVATION TOP OF WALL ELEVATION BOTTOM OF WALL ELEVATION ----- EXISTING CONTOUR ----- EXISTING INDEX CONTOUR 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 PROPOSED BASIN BOUNDARY



Title: LOT 35, BLOCK 6, BY

VOLCANO CLIFFS NO. 2

CONCEPTUAL GRADING AND DRAINAGE PLAN

SHEET #

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

Richard Dourte
P.E. #10854

JOB #

X of X