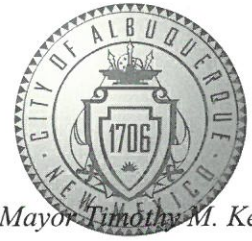


CITY OF ALBUQUERQUE

Planning Department

Brennon Williams, Interim Director



Mayor Timothy M. Keller

August 19, 2019

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

**RE: Lot 17 Block 4 Unit 19 SAD 227
6815 Rim Rock NW
Volcano Cliffs Subdivision
Grading and Drainage Plan
Engineers Stamp Date; 12/11/18 (E10D015)
Pad Certification Date; 1/29/19
C.O. Certification Date; 8/14/19**

Dear Mr. Briggs,

PO Box 1293

Based upon the information provided in your submittal received 8/14/19, this plan is approved for Certificate of Occupancy release.

Albuquerque

If you have any questions, please contact me at 924-3999 or Rudy Rael at 924-3977.

NM 87103

Sincerely,

www.cabq.gov

Shahab Biazar, P.E.
City Engineer, Division Manager
Planning Department

RR/JDH
C: File E10D015



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

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

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

Legal Description: _____

City Address: _____

Applicant: _____ **Contact:** _____

Address: _____

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

Owner: _____ **Contact:** _____

Address: _____

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

TYPE OF SUBMITTAL: _____ PLAT (____# OF LOTS) _____ RESIDENCE _____ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes _____ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION _____ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- _____ ENGINEER/ARCHITECT CERTIFICATION
- _____ PAD CERTIFICATION
- _____ CONCEPTUAL G & D PLAN
- _____ GRADING PLAN
- _____ DRAINAGE MASTER PLAN
- _____ DRAINAGE REPORT
- _____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- _____ ELEVATION CERTIFICATE
- _____ 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
- _____ FLOODPLAIN DEVELOPMENT PERMIT
- _____ OTHER (SPECIFY) _____

DATE SUBMITTED: _____ **By:** _____

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

DRAINAGE NARRATIVE:

1. THIS SITE IS LOCATED WITHIN THE SAD 227 DRAINAGE MASTER PLAN AREA.
2. THIS SITE IS TO DRAIN INTO A POND THEN OVERFLOW INTO THE STREET.
3. THE VOLUME OF THE POND IS 325CF. THIS IS GREATER THAN THE REQUIRED PONDING OF 280CF OR FIRST FLUSH REQUIREMENT OF 173CF.
4. WEIR EQUATION FOR EACH CELL OF A 8' CMU BLOCK:

$Q=C\sqrt{H}(H+1)^{1.5}$
 $C=3.21$
 $H=8'$

THIS Q=0.36CFS, OR .72CFS PER BLOCK.

Project: Lot 17, Block 1, Volcanso Cliffs Unit 12 (6815 Rim Rock Rd. NW) Drainage Calculations - Zone 1									
Depth (inches) at 100-yr Storm		Pond		Pond		Pond		Pond	
Zone	1	2	3	4	5	6	7	8	9
1	1.87	2.20	2.66	3.12	3.57	4.02	4.47	4.92	5.37
2	2.01	2.35	2.75	3.20	3.65	4.10	4.55	5.00	5.45
3	2.15	2.50	2.90	3.35	3.80	4.25	4.70	5.15	5.60
4	2.30	2.65	3.05	3.50	3.95	4.40	4.85	5.30	5.75
Weighted E = $\frac{(C_1A_1 + C_2A_2 + C_3A_3 + C_4A_4 + C_5A_5 + C_6A_6 + C_7A_7 + C_8A_8 + C_9A_9)}{(A_1 + A_2 + A_3 + A_4 + A_5 + A_6 + A_7 + A_8 + A_9)}$									
Volume (Weighted E * Pond Area) / 12 in/ft									
Volume (Weighted E * Pond Area) / 12 in/ft									
Volume (Weighted E * Pond Area) / 12 in/ft									

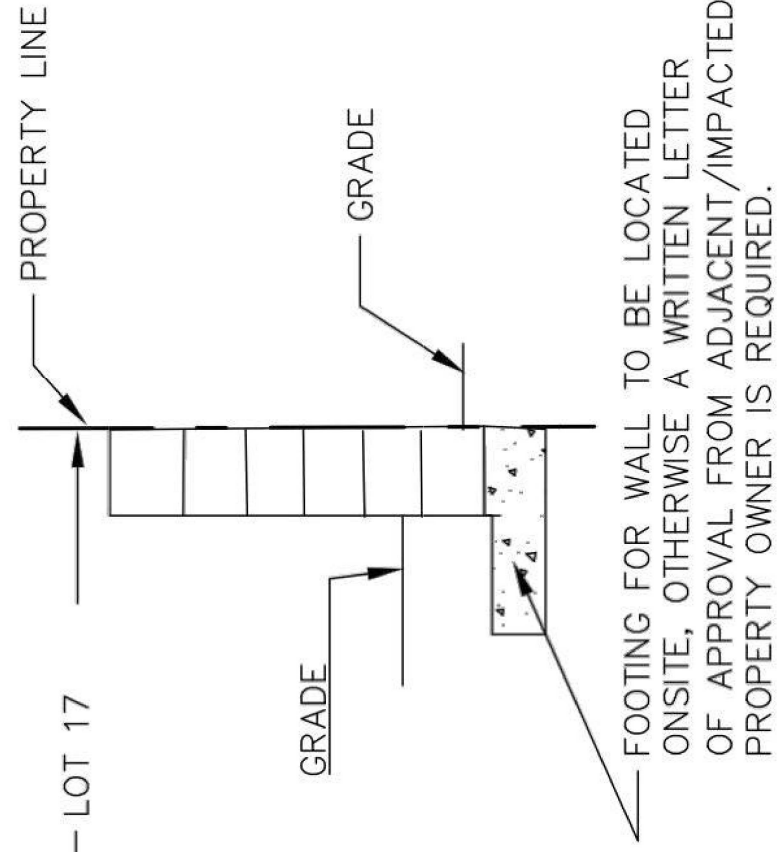
*****ALLOWABLE SAD 227 DESIGN FLOW*****									
Area		SQ. FT		Acres		% Total		Design Flow (CFS)	
A=	0	0	0	0.000	0%	0	0	0.000	0.00
B=	0	0	0	0.000	0%	0	0	0.000	0.00
C=	0	0	0	0.000	0%	0	0	0.000	0.00
D=	0	0	0	0.000	0%	0	0	0.000	0.00
Total	0	0	0	0.000	0%	0	0	0.000	0.00
Weighted E = 1.232									
Volume (Weighted E * Pond Area) / 12 in/ft									
Volume (Weighted E * Pond Area) / 12 in/ft									
Volume (Weighted E * Pond Area) / 12 in/ft									

*****PROPOSED CONDITIONS*****									
Area		SQ. FT		Acres		% Total		Design Flow (CFS)	
A=	0	0	0	0.000	0%	0	0	0.000	0.00
B=	0	0	0	0.000	0%	0	0	0.000	0.00
C=	0	0	0	0.000	0%	0	0	0.000	0.00
D=	0	0	0	0.000	0%	0	0	0.000	0.00
Total	0	0	0	0.000	0%	0	0	0.000	0.00
Weighted E = 1.394									
Volume (Weighted E * Pond Area) / 12 in/ft									
Volume (Weighted E * Pond Area) / 12 in/ft									
Volume (Weighted E * Pond Area) / 12 in/ft									

*****PROPOSED CONDITIONS*****									
Area		SQ. FT		Acres		% Total		Design Flow (CFS)	
A=	0	0	0	0.000	0%	0	0	0.000	0.00
B=	0	0	0	0.000	0%	0	0	0.000	0.00
C=	0	0	0	0.000	0%	0	0	0.000	0.00
D=	0	0	0	0.000	0%	0	0	0.000	0.00
Total	0	0	0	0.000	0%	0	0	0.000	0.00
Weighted E = 1.394									
Volume (Weighted E * Pond Area) / 12 in/ft									
Volume (Weighted E * Pond Area) / 12 in/ft									
Volume (Weighted E * Pond Area) / 12 in/ft									

The 100 year peak flow for this developed site is 1.1 CFS and the design flow area 1 CFS for an increase of 0.1 CFS. The 100 year 24 hr volume increase is 1844-1544 = 300CF.

First Flush Ponding Requirement = $40 \times 0.34 \times (1200/ft) = 173 CF$



GARDEN WALL/RETAINING WALL DETAIL

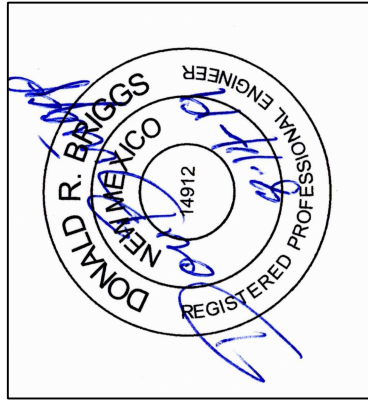
1. ANY GARDEN WALL/RETAINING WALL IS TO BE BUILT ON-SITE (DESIGN OF THE GARDEN WALL/RETAINING WALL IS BY OTHERS).
2. A PERMIT IS REQUIRED FOR THE CONSTRUCTION OF THE RETAINING WALL AND ANY FUTURE GARDEN WALL. THIS IS THE PLAN TO FOLLOW WHEN APPLYING FOR A PERIMETER BLOCK WALL.

DRAINAGE CERTIFICATION

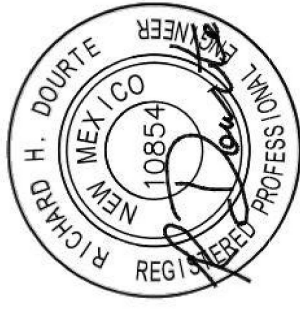
I, David P. Acosta, N.M.P.S. 21082, of the firm David Acosta, Inc., hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 12/11/2018. THE RECORD INFORMATION, EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY David Acosta, N.M.P.S. 21082, OF THE FIRM DSI INC.

I HEREBY CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 04/20/18 AND HAVE DETERMINED BY 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 A REQUEST FOR CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND IS 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 ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.



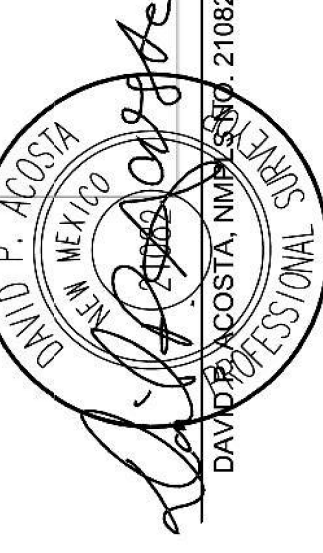
I, Richard Dourte have personally inspect this site. I hereby certify that the pad has been constructed in substantial compliance with the approved grading and drainage plan stamp dated 12-11-18 (per survey information from David Acosta, Construction Survey Technologies, Inc, NMPS 21082).



1-29-19

SURVEYOR'S CERTIFICATE:

I, DAVID P. ACOSTA, NEW MEXICO PROFESSIONAL SURVEYOR NO. 21082, DO HEREBY CERTIFY THAT THIS AS-BUILT SURVEY WAS PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.



08-02-19

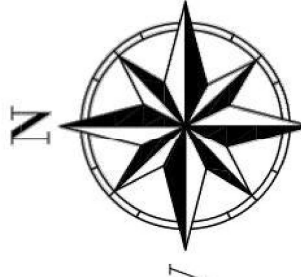
DATE

EROSION CONTROL NOTES:

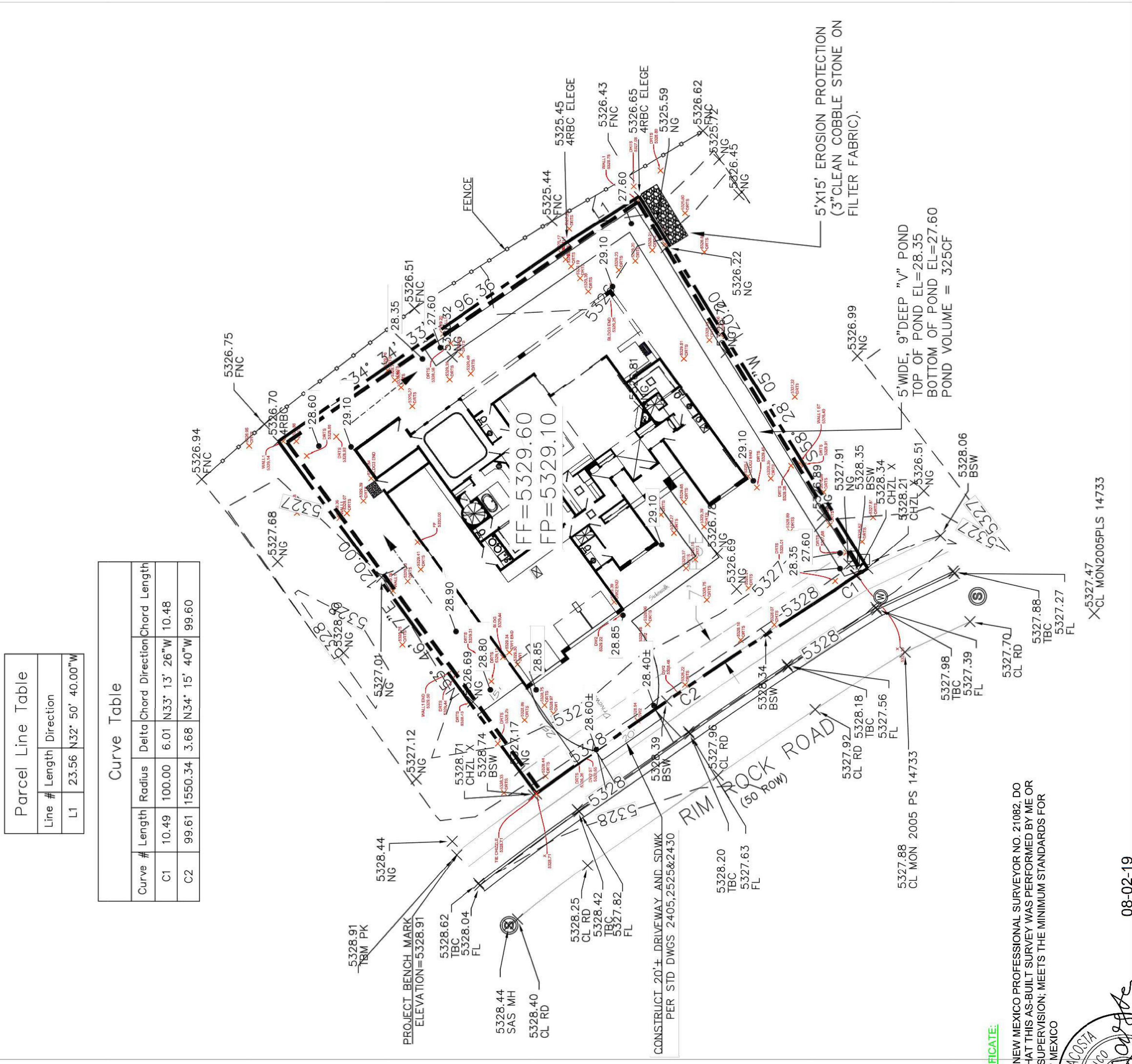
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
4. REPAIR OF DAMAGED FACILITIES 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:

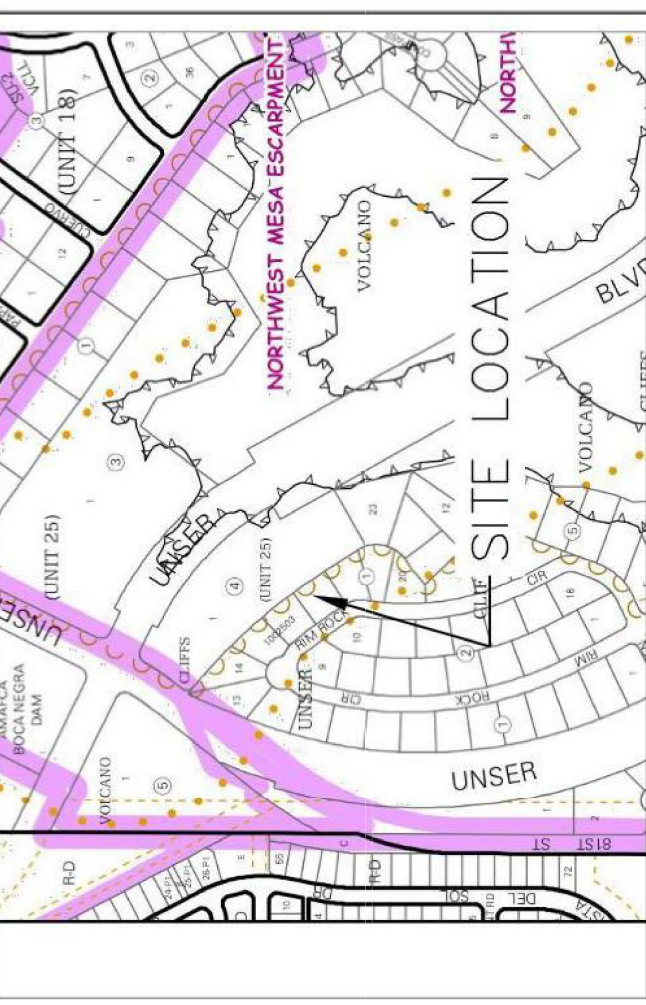
EXISTING UTILITIES ARE NOT SHOWN. OF SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.



0 5 10 20 40 FEET
Scale 1" = 20'



CL MON 2005 PLS 14733



VICINITY MAP: E-10-2



FIRM MAP: 35001C0111G

LEGAL DESCRIPTION:

Lot 17, Block 4, Unit 13, Volcano Cliffs Sub'd
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. RETAIN THE FIRST .34" OF STORM RUNOFF FROM ENTIRE DEVELOPMENT TO CONFORM TO THE WATER QUALITY REQUIREMENTS

PROPOSED SPOT ELEVATION	29.10
TOP OF WALL ELEVATION	29.10
BOTTOM OF WALL ELEVATION	29.10
EXISTING CONTOUR	29.10
EXISTING INDEX CONTOUR	29.10
PROPOSED CONTOUR	29.10
PROPOSED INDEX CONTOUR	29.10
LOT LINE	29.10
RIGHT-OF-WAY	29.10
PROPOSED GARDEN/RETAINING WALL	29.10
PROPOSED ROCK FACE WALL	29.10
EXISTING CURB AND GUTTER	29.10
PROPOSED EDGE OF CONCRETE	29.10
PROPOSED FLOWLINE	29.10
EXISTING WALL	29.10
PROPOSED BASIN BOUNDARY	29.10

I HAVE PERSONALLY INSPECTED THE PROPERTY ON 12-04-18. NO EARTHWORK HAS BEEN PERFORMED AND THE SITE IS CONSISTENT WITH THE TOPO SHOWN.
Richard Dourte
P.E. #10854

ENGINEER'S SEAL

Richard H. Dourte
P.E. #10854

Drawn By

DATE

Grading and Drainage Plan

12/11/18

Richard Dourte
P.E. #10854

Richard Dourte
P.E. #10854

Richard H. Dourte
P.E. #10854

Richard H. Dourte
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Grading and Drainage Plan

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