

CITY OF ALBUQUERQUE

Planning Department

Brennon Williams, Director



Mayor Timothy M. Keller

February 27, 2020

David Soule, PE
Rio Grande Engineering
1606 Central SE Suite 201
Albuquerque, NM 87106

**Re: Lot 16 Block 4 Unit 19 Volcano Cliffs SAD 228
6527 Vista Del Prado NW
Request Permanent C.O. – Accepted
Engineer's Stamp dated: 6-11-19 (D10D003T16)
Pad Certification dated: 2/27/19
Certificate of C.O. dated: 2/26/20**

Dear Mr. Soule,

Based on the Certification received on 2/26/2020, the site is acceptable for release of Certificate of Occupancy by Hydrology.

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

RR/SB
C: File D10D003T16



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

6527 vista del prado
Project Title: _____ **Building Permit #:** _____ **Hydrology File #:** _____
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: LOT 16, BLOCK 4 VOLCANO CLIFFS UNIT 19
City Address: 6527 vista del prado

Applicant: twighlght homes _____ **Contact:** _____
Address: _____
Phone#: _____ **Fax#:** _____ **E-mail:** _____

Other Contact: RIO GRANDE ENGINEERING _____ **Contact:** DAVID SOULE
Address: PO BOX 93924 ALB NM 87199
Phone#: 505.321.9099 **Fax#:** 505.872.0999 **E-mail:** david@riograndeengineering.com

TYPE OF DEVELOPMENT: _____ PLAT ☒ RESIDENCE _____ DRB SITE _____ ADMIN SITE

Check all that Apply:

DEPARTMENT:
☒ HYDROLOGY/ DRAINAGE
☐ TRAFFIC/ TRANSPORTATION

TYPE OF SUBMITTAL:
☒ ENGINEER/ARCHITECT CERTIFICATION
☐ PAD CERTIFICATION
☐ CONCEPTUAL G & D PLAN
☐ 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?

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

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: _____

Weighted E Method

Basin	Area (sf)	Area (acres)	Treatment A (% (acres))	Treatment B (% (acres))	Treatment C (% (acres))	Treatment D (% (acres))	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
upland	37113.00	0.852	0%	0%	20% 0.170	48% 0.3919	34% 0.290	1.259	0.089
ALLOWED	13875.00	0.321	0%	0%	20% 0.064	46% 0.1476	34% 0.109	1.259	0.034
PROPOSED	13875.00	0.321	0%	0%	20% 0.064	39% 0.1251	41% 0.132	1.328	0.035
COMPARISON								0.002	

Equations:

Weighted E = Ea * Aa + Eb * Ab + Ec * Ac + Ed * Ad / (Total Area)

Volume = Weighted E * Total Area

Flow = Qa * Aa + Qb * Ab + Qc * Ac + Qd * Ad

Where for 100-year, 6-hour storm-zone 1
 Ea= 0.44 Qa= 1.29
 Eb= 0.67 Qb= 2.03
 Ec= 0.99 Qc= 2.87
 Ed= 1.97 Qd= 4.37

ONSITE Conditions	FIRST FLUSH WATER QUALITY VOLUME	REQUIRED (CF)	PROVIDED (CF)
WATER QUALITY FLOOD CONTROL	162	162	205
	80	80	205

Narrative

This site is within the SAD 226 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the the adjacent roadway to the south per the master drainage plan. We are ponding the water harvest volume generated by the site there is 2.74 CFS of future upland flow. This plan does exceed the allowed impervious area therefore we are required to retain 80 cubic feet This plan is in conformance to the master drainage plan

TURNED BLOCKS

Weir Equation:

$$Q = CLH^{3/2}$$

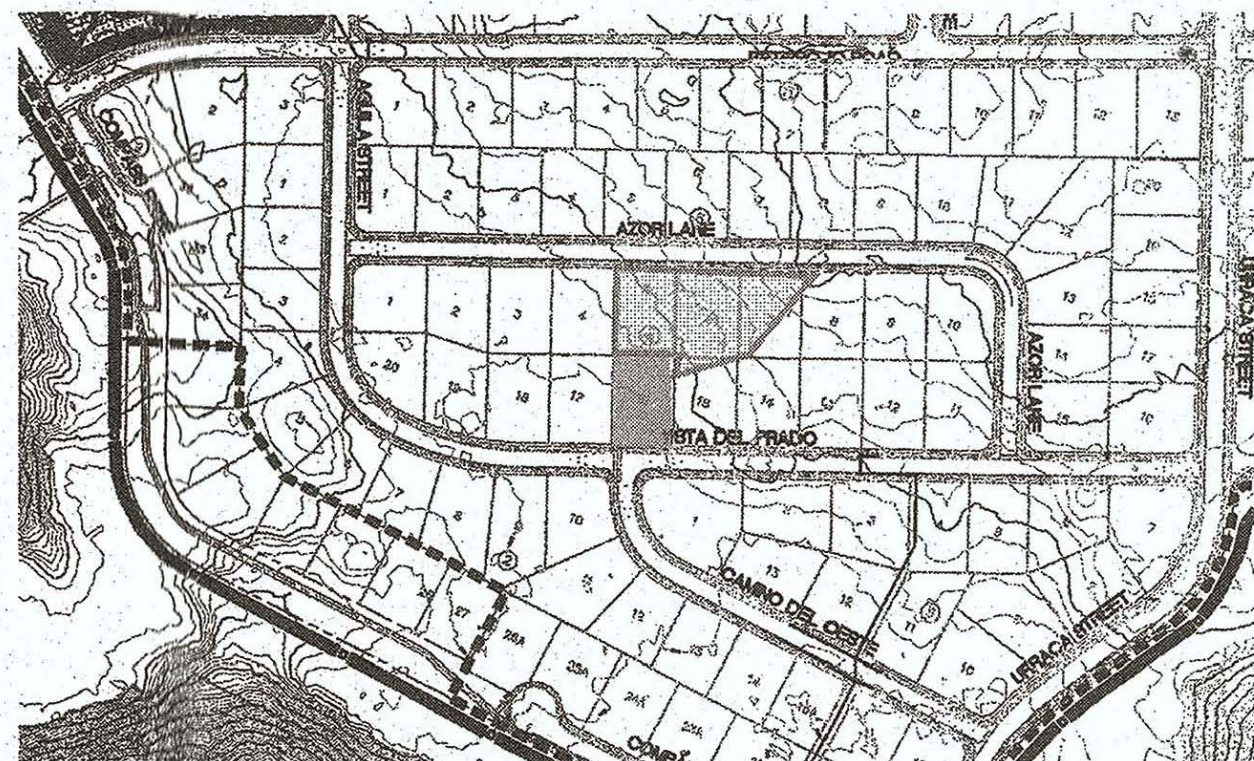
West drainage swale thru walls

Q= 2.92 cfs
 C= 2.95
 H= 0.5 ft
 L= Length of weir

$$Q = 2.95 * 5 * ((0.5)^{3/2})$$

Each opening is 6"x6"
 Each block has two openings
 Each opening has .52 cfs capacity

For phase 3 lots
 Therefore 2.74 cfs requires 6 openings and 3 turned blocks

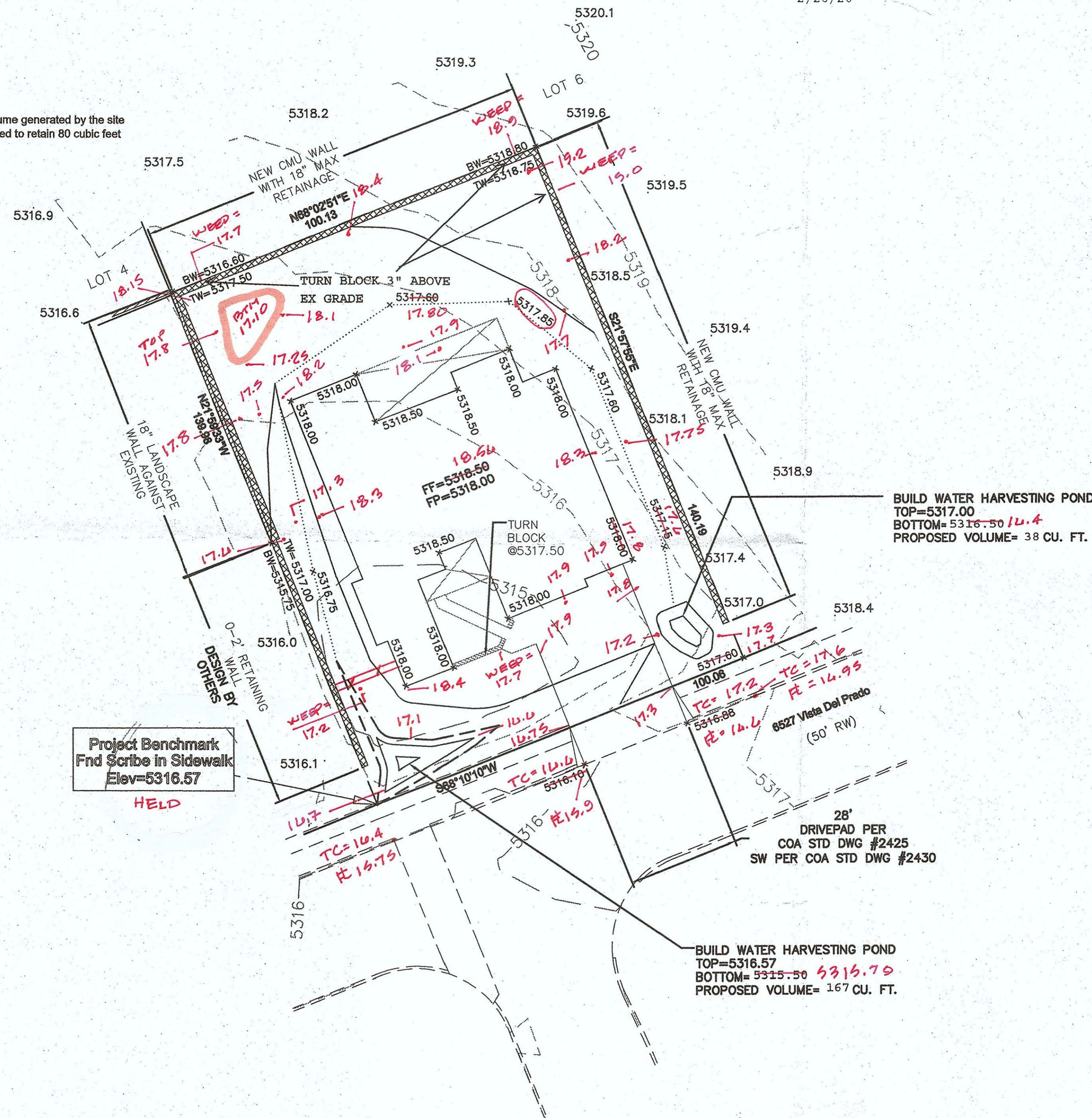


CAUTION:
 EXISTING UTILITIES ARE NOT SHOWN.
 IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.

I David Soule, NMPE 14522, of the firm Rio Grande Engineering, hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intend of the approved plan dated 6/11/19. The record information edited on the original design document has performed by me or under my direct supervision and is true and correct to the best of my knowledge and belief. The as-built survey was provided by THOMAS PATRICK NMPS 12651. The certification is submitted in support of a request for PERMANENT CERTIFICATE OF OCCUPANCY. The record information presented heron 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 document are advised to obtain independent verification of its accuracy before using it for any other purpose

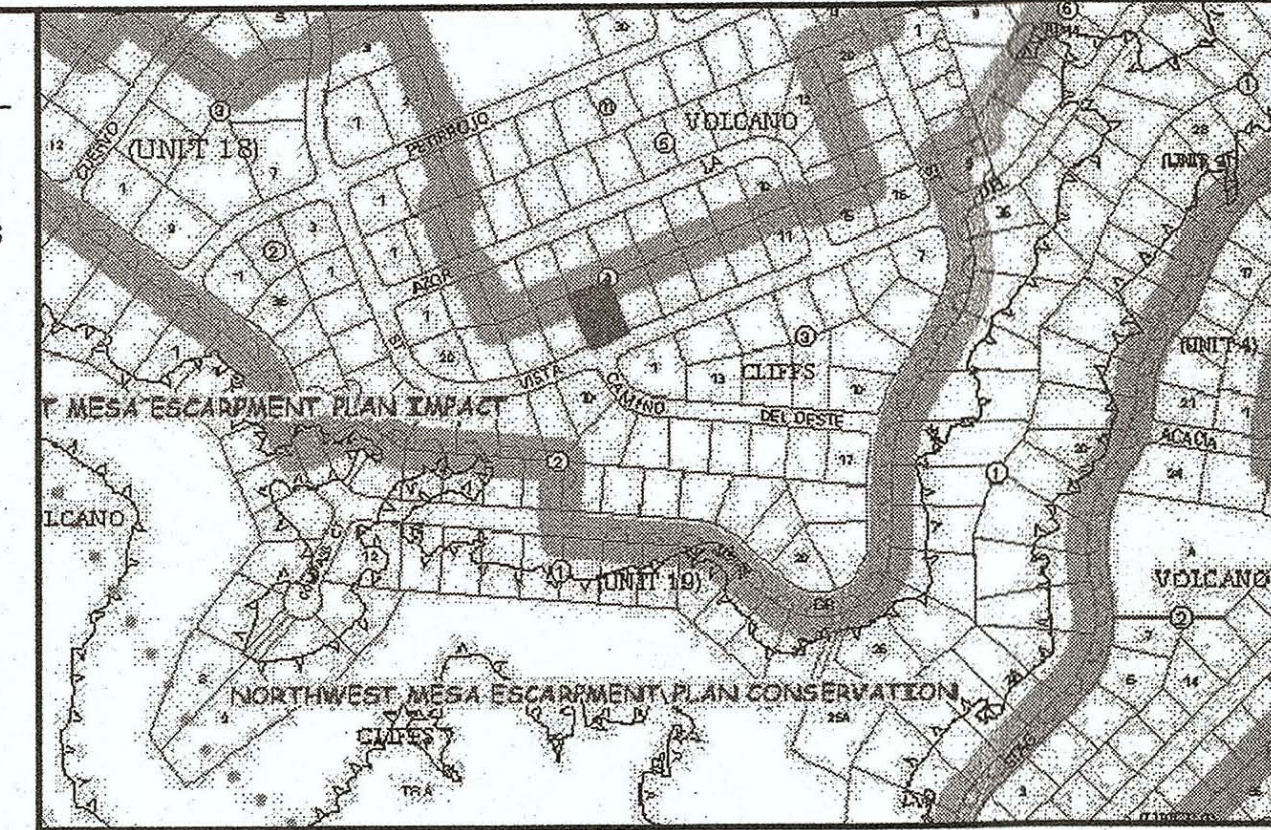


2/26/20

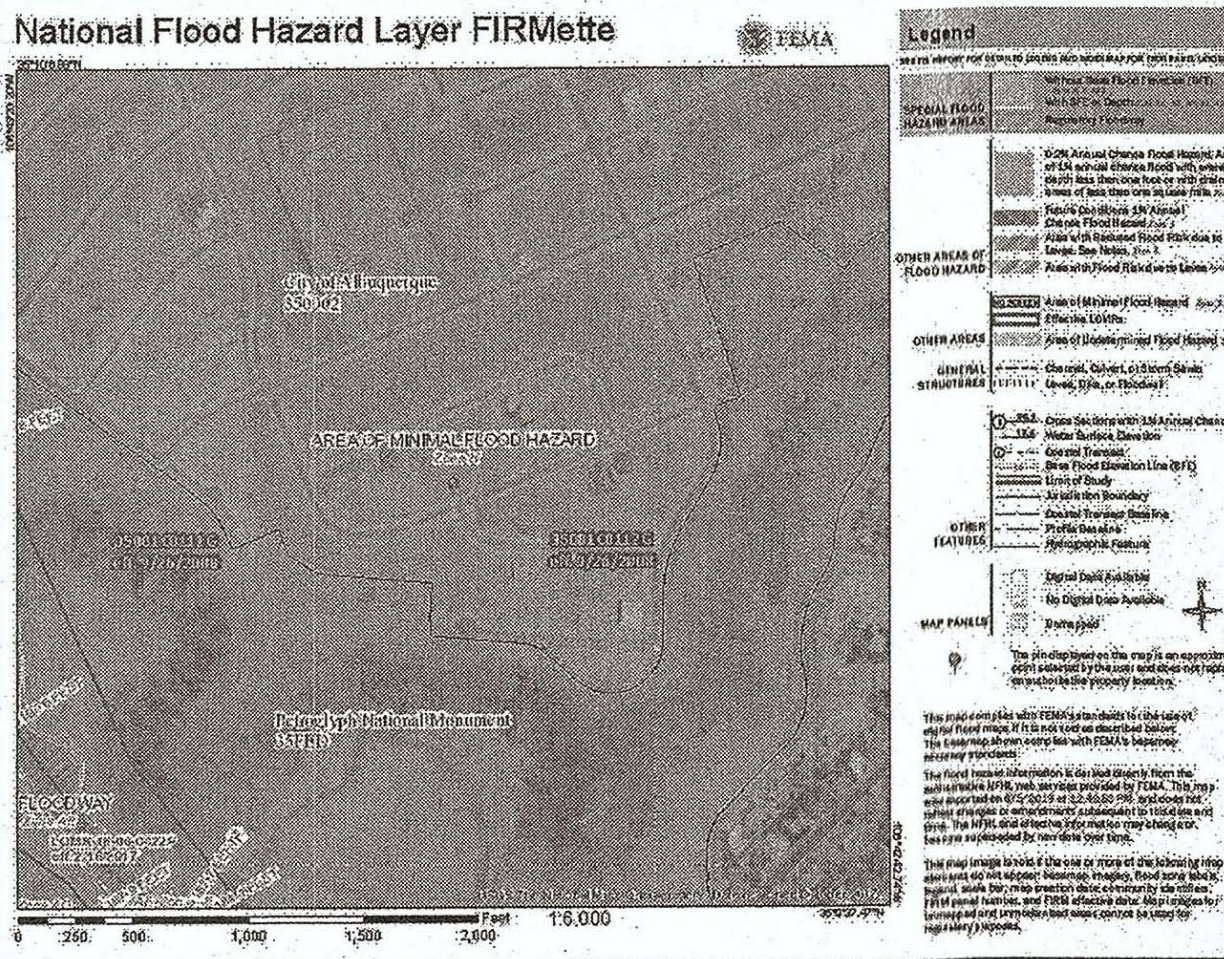


EROSION CONTROL NOTES:

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.



VICINITY MAP: D-10-Z



FIRM MAP:

LEGAL DESCRIPTION:

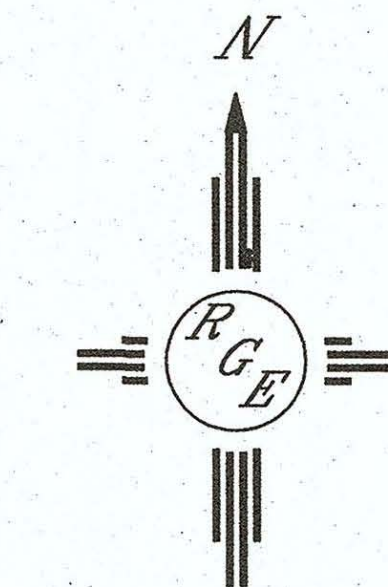
LOT 7, BLOCK 13, PARADISE HEIGHTS UNIT 1

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL CURB AND GUTTER TO 6" HEADER UNLESS OTHERWISE NOTED.
3. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
4. ANY CURBS OR PAVEMENT NEGATIVELY IMPACTED BY CONSTRUCTION ACTIVITY SHALL BE REPLACED TO MATCH EXISTING CONDITIONS.
5. ALL SITE WORK SHALL CONFORM TO BERNALILLO COUNTY STANDARDS FOR PUBLIC WORKS CONSTRUCTION EDITION 9

LEGEND

---	EXISTING CONTOUR
---	EXISTING INDEX CONTOUR
---	PROPOSED CONTOUR
---	PROPOSED INDEX CONTOUR
---	SLOPE TIE
x 4048.25	EXISTING SPOT ELEVATION
x 4048.25	PROPOSED SPOT ELEVATION
---	BOUNDARY
---	CENTERLINE
---	RIGHT-OF-WAY
---	PROPOSED CURB
---	EXISTING CURB AND GUTTER
---	EXISTING SIDEWALK
---	PROPOSED RETAINING WALL DESIGN BY OTHERS
---	FLOW LINE



GRAPHIC SCALE

20 10 0 10 20

SCALE: 1"=60'

ENGINEER'S SEAL	6527 VISTA DEL PRADO	DRAWN BY WCV
DAVID SOULE NMPE 14522 PROFESSIONAL ENGINEER	GRADING AND DRAINAGE PLAN	DATE 6-10-19
6/11/19	Rio Grande Engineering 1806 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	2109053-LAYOUT-6-10-19
DAVID SOULE P.E. #14522		SHEET #
		JOB # 2109053