CITY OF ALBUQUERQUE

Planning Department
Suzanne Lubar, Director

Mayor Timothy M. Keller

December 12, 2017

David Soule, P.E.
Rio Grande Engineering
PO Box 93924
Albuquerque, New Mexico 87199

RE: **Lot 13P1 Block 9B Unit 3**
6340 Pima NW
Grading and Drainage Plan
Engineers Stamp Date 12/1/17 (E10D041)

Dear Mr. Soule,

Based upon the information provided in your submittal received 10/19/17, this plan is approved for Grading Permit.

Please inform the builder/owner to attach a copy of this approved plan and letter to 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 and Pad Certification.

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 924-3695 or Rudy Rael at 924-3977.

Sincerely,

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

RR/JDH
C: File

PO Box 1293
Albuquerque
NM 87103
www.cabq.gov

Weighted E Method

Basin	Area	Area	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E	100-Year, 6-hr. Volume	Flow
	(sf)	(acres)	%	(acres)	%	(acres)	%	(acres)	%	(acres)	(ac-ft)	(ac-ft)	cfs
UPLAND	8976.00	0.206	0%	0	10%	0.021	40%	0.0824	50%	0.103	1.448	0.025	0.73
ALLOWED	7575.00	0.174	0%	0	10%	0.017	40%	0.0696	50%	0.087	1.448	0.021	0.61
PROPOSED	7575.00	0.174	0%	0	21%	0.037	21%	0.0365	58%	0.101	1.491	0.022	0.62
total													

Equations:

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

Volume = Weighted D * 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 Conditons
FIRST FLUSH WATER QUALITY VOLUME

	REQUIRED (CF)	PROVIDED (CF)
WATER QUALITY	124	
FLOOD CONTROL	27	

Narrative

This site is within the SAD 221 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the the adjacent roadway per the master drainage plan. We are ponding the water harvest volume generated by the site we are allowing the neglibable upland flow to pass thru the site. This plan has a shallow water harvest pond in excess of the drainage regulati
This plan is in conformance to the master drainage plan

TURNED BLOCKS

Weir Equation:

$Q=CLH^{3/2}$

wale thru walls

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

$$Q = 2.95*.5*((0.5)^\wedge(3/2))$$

Each opening is 6"x6"
Each block has two openings
Each opening has .52 cfs capacity,
Therefore each turned block has 1.04 cfs capacity

EROSION CONTROL NOTES:

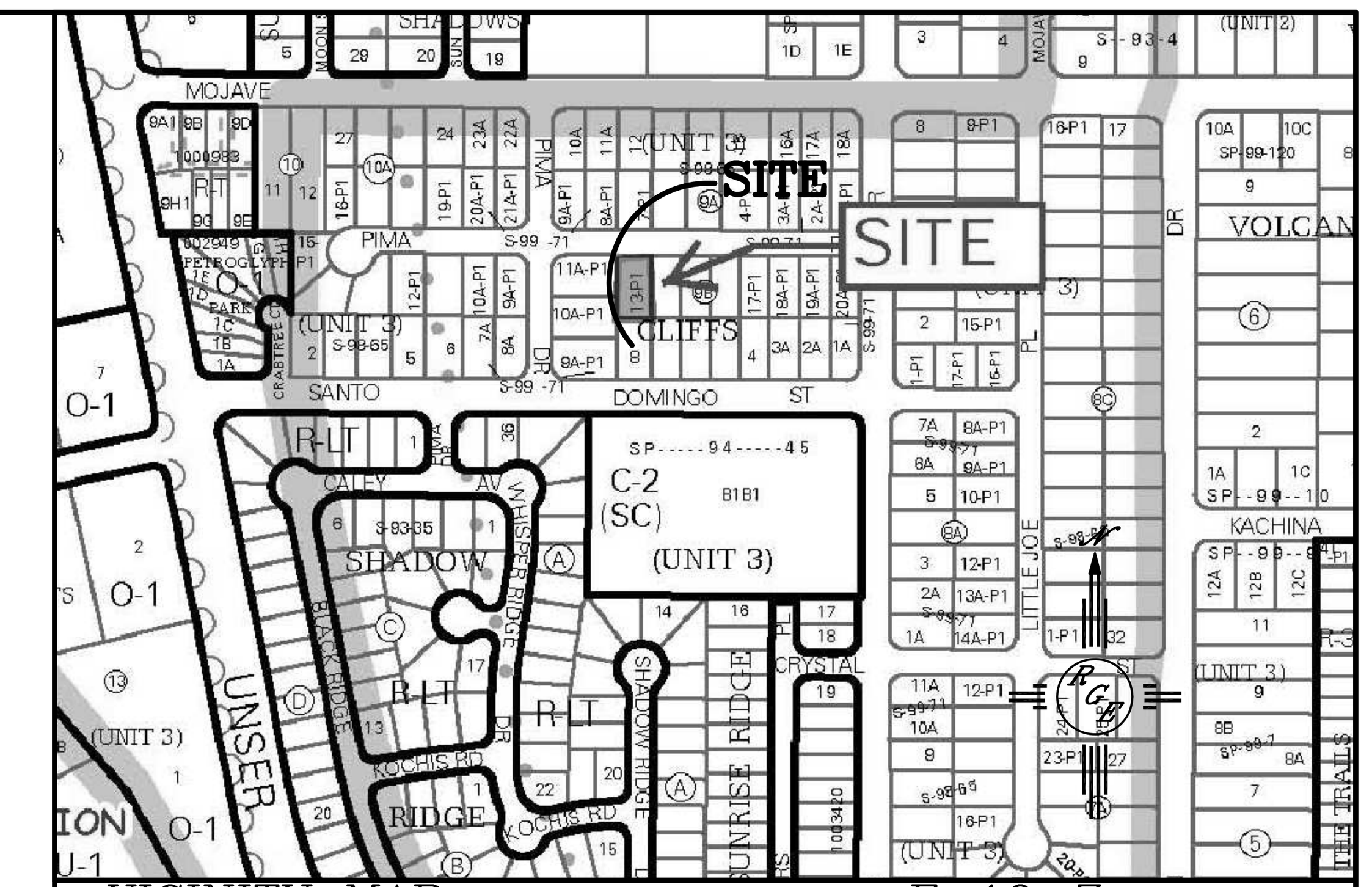
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.

2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.

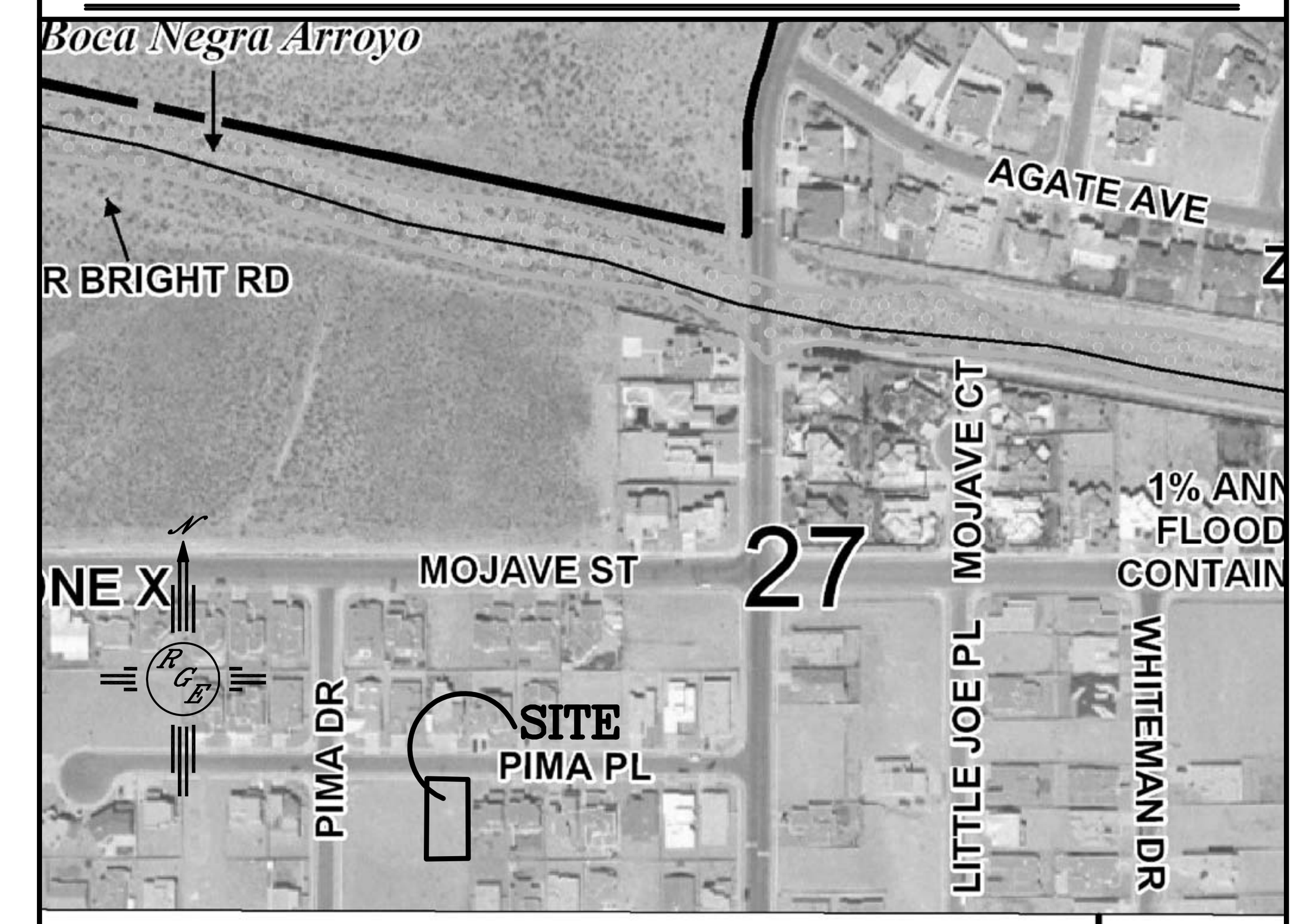
3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.

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

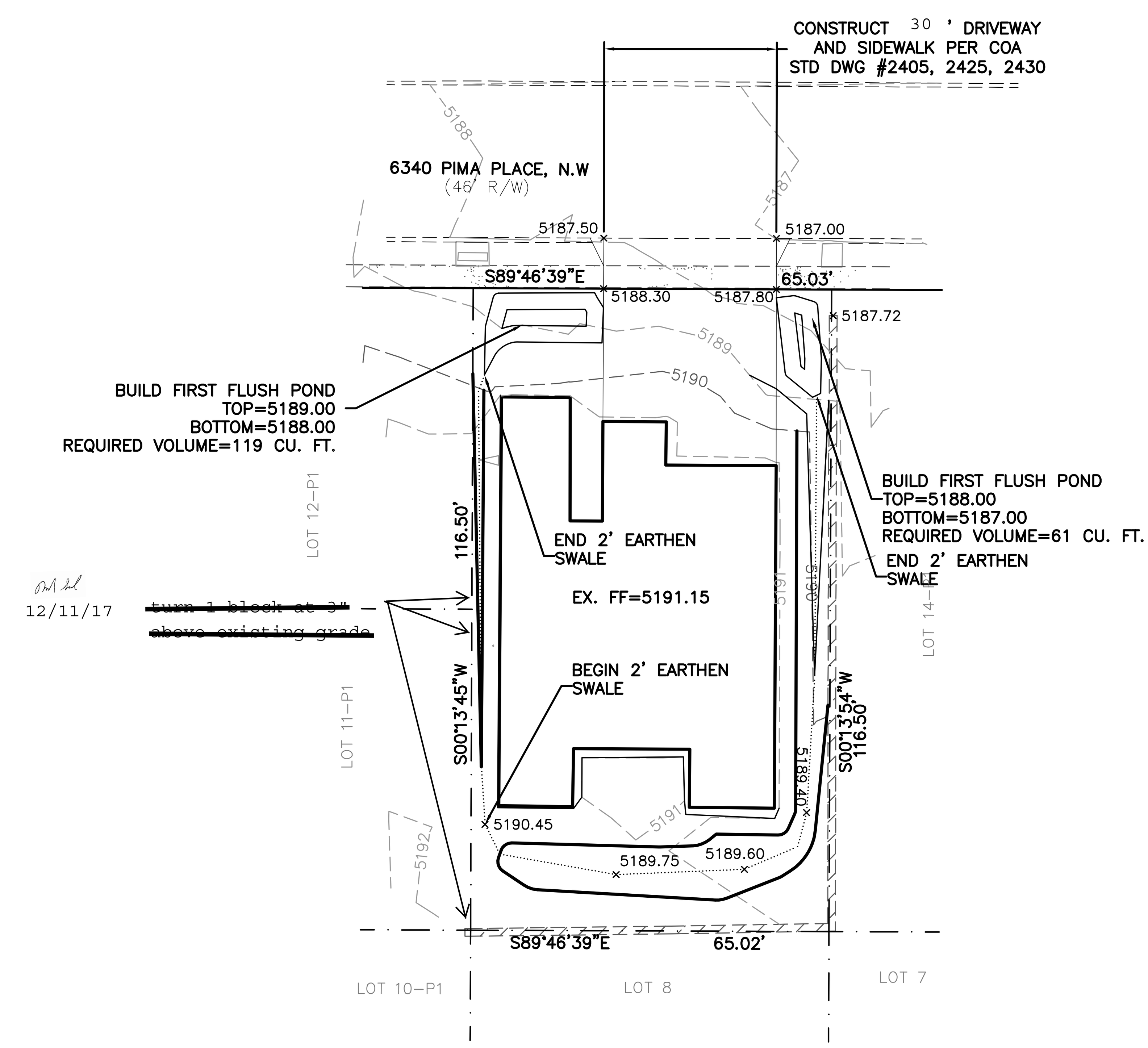
5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



VICINITY MAP: E-10-Z



FIRM MAP: FM35001C0112G



LEGAL DESCRIPTION:

LOT 13-P1, BLOCK 9B, VOLCANO CLIFFS UNIT 3

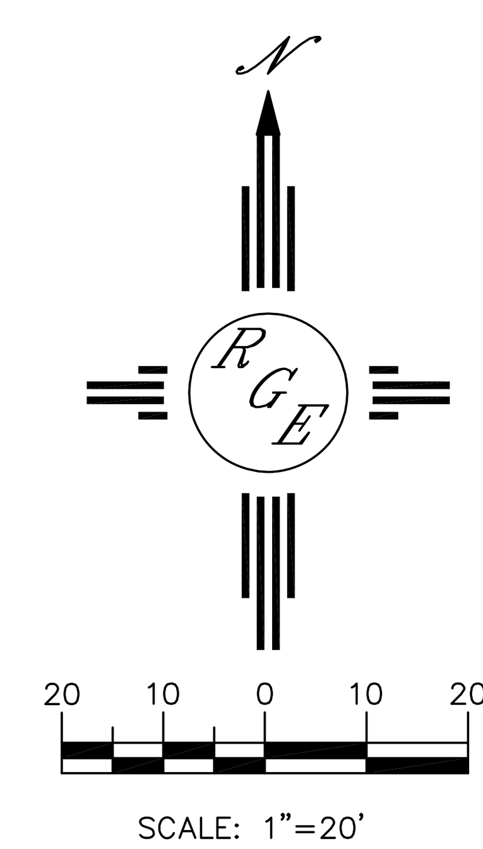
NOTES:

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

2. ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.

LEGEND

------xxxx------	EXISTING CONTOUR
------xxxx------	EXISTING INDEX CONTOUR
——xxxx——	PROPOSED CONTOUR
——xxxx——	PROPOSED INDEX CONTOUR
▶—	SLOPE TIE
× xxxx	EXISTING SPOT ELEVATION
× xxxx	PROPOSED SPOT ELEVATION
	BOUNDARY
	CENTERLINE
	RIGHT-OF-WAY
	EXISTING CURB AND GUTTER
	PROPOSED CMU SCREEN WALL



SCALE: 1"=20'

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.

ENGINEER'S SEAL	6340 PIMA PLACE NW	DRAWN BY WCWJ
DAVID SOULE NEW MEXICO 14522 REGISTERED PROFESSIONAL ENGINEER		DATE 12-01-17
	GRADING AND DRAINAGE PLAN	21828-LAYOUT-12-01-17
12/1/17	Rio Grande Engineering 1606 CENTRAL AVENUE SE SUITE 201 ALBUQUERQUE, NM 87106 (505) 872-0999	SHEET # —
DAVID SOULE P.E. #14522		JOB # 21828