

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

July 18, 2024

David Soule, P.E.
Rio Grande Engineering
P.O. Box 93924
Albuquerque, NM 87199

RE: 8609 Mesa Rain Rd NW
Grading and Drainage Plan
Engineer's Stamp Date: 07/18/24
Hydrology File: H09D017A3

Dear Mr. Soule:

Based upon the information provided in your submittal received 07/16/2024, the Grading & Drainage Plan is approved for Grading Permit (earthwork can get started for the earth pad on the house and retaining walls).

PRIOR TO BUILDING PERMIT:

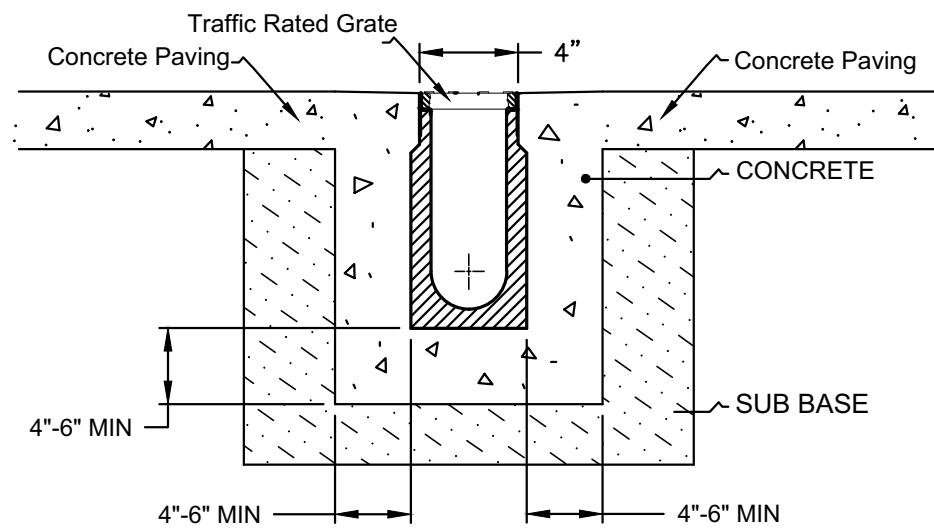
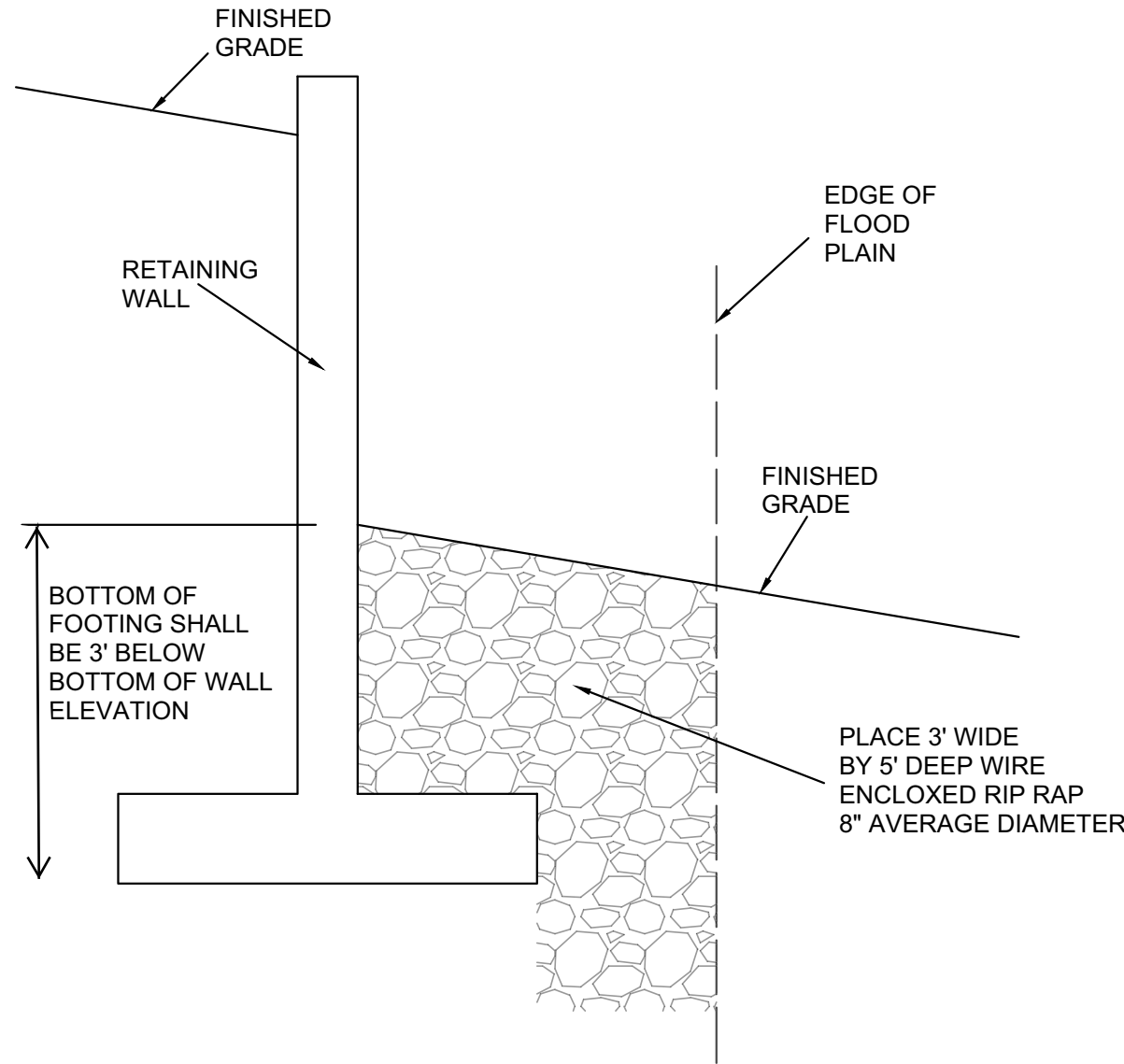
1. Once the grading is complete, a pad certification (meaning that the earthwork and retaining walls are complete) will be required. Please include a site photo with the submittal. Also, at the time of pad certification approval, Hydrology will concurrently approve the Grading & Drainage Plan for Building Permit.

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

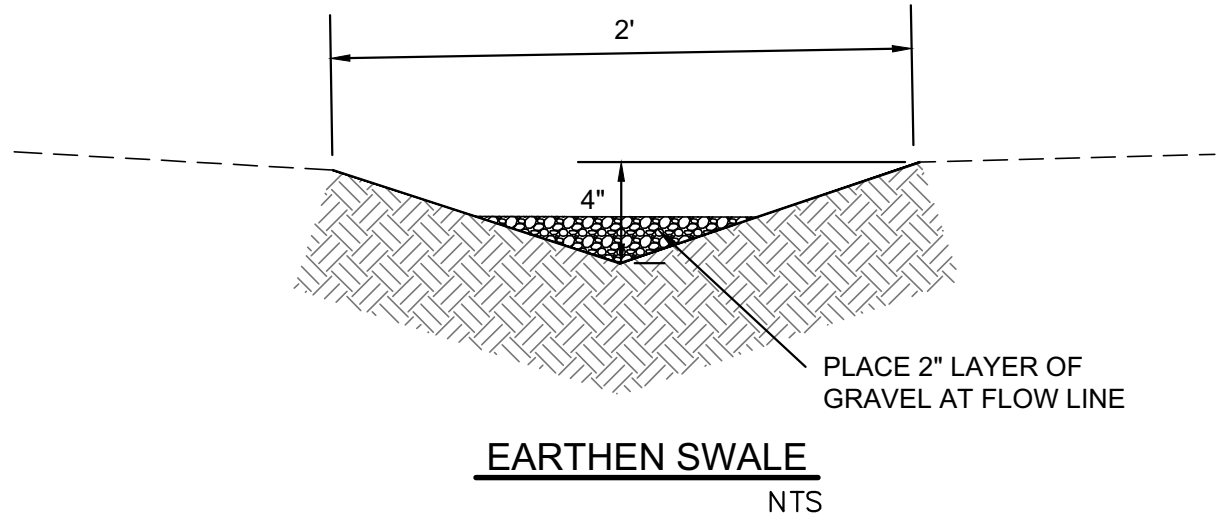
Sincerely,

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department

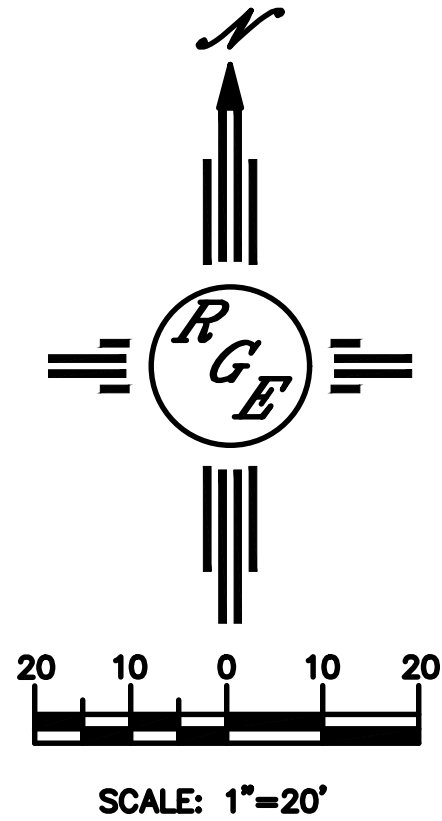
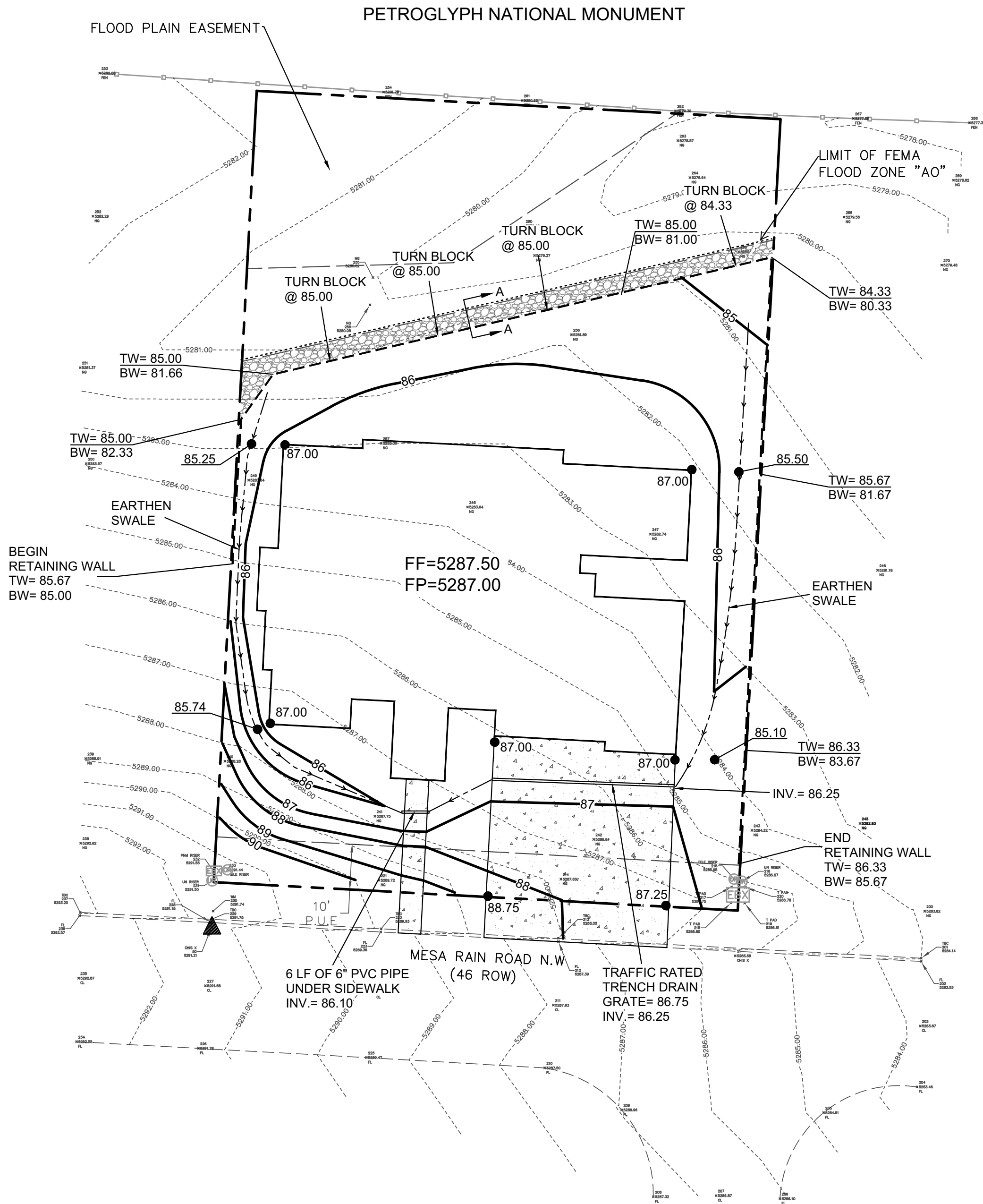
| Weighted E Method | | | | | | | | | | |
|---|-----------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|--------------------|----------------|------------|-------|
| Basin | Area (sf) | Area (acres) | Treatment A % I (acres) | Treatment B % I (acres) | Treatment C % I (acres) | Treatment D % I (acres) | Weighted E (ac-ft) | Volume (ac-ft) | Flow (cfs) | |
| HISTORICAL | 20254.00 | 0.465 | 85% | 0.3952 | 15% | 0.070 | 0.000 | 0% | 0.000 | 0.577 |
| PROPOSED | 20254.00 | 0.465 | 26% | 0.1209 | 20% | 0.093 | 0.112 | 30% | 0.139 | 1.189 |
| ALLOWED | | 0.465 | | | | | | | | 1.45 |
| 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(zone1) | | | | | | | | | | |
| Qa= 1.54 | | | | | | | | | | |
| Ea= 0.55 | | | | | | | | | | |
| Eb= 0.73 | | | | | | | | | | |
| Ec= 0.95 | | | | | | | | | | |
| Ed= 2.24 | | | | | | | | | | |
| Developed Conditions | | | | | | | | | | |
| Peak rate | | | | | | | | | | |
| VOLUME | | | | | | | | | | |
| HISTORICAL DISCHARGE | | | | | | | | | | |
| DEVELOPED DISCHARGE | | | | | | | | | | |
| ALLOWED DISCHARGE | | | | | | | | | | |
| PROVIDED | | | | | | | | | | |
| This site is an development of an existing lot. The lot is located within the Watershed development. The master drainage plan (H9-D017A) is contradictory. I calls for this site to retain the increased flow based upon the development utilizing the 100-year, 6-hour event on the grading plan. The site is also identified as being a portion of basin H-1. This basin is allowed 3.12 cfs per acres. The site is impacted by flood zone AO-1. The site is also impacted by a flood plain easement that was dedicated with the master subdivision, based upon the EGL. This site will generate less that allowed in the master drainage plan proposed basin map. to the historical outfall. | | | | | | | | | | |



CONSTRUCT ALL SWALES AND EROSION PROTECTION (SHOWN HATCHED) BELOW ADJACENT GRADE TO ENSURE RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY.

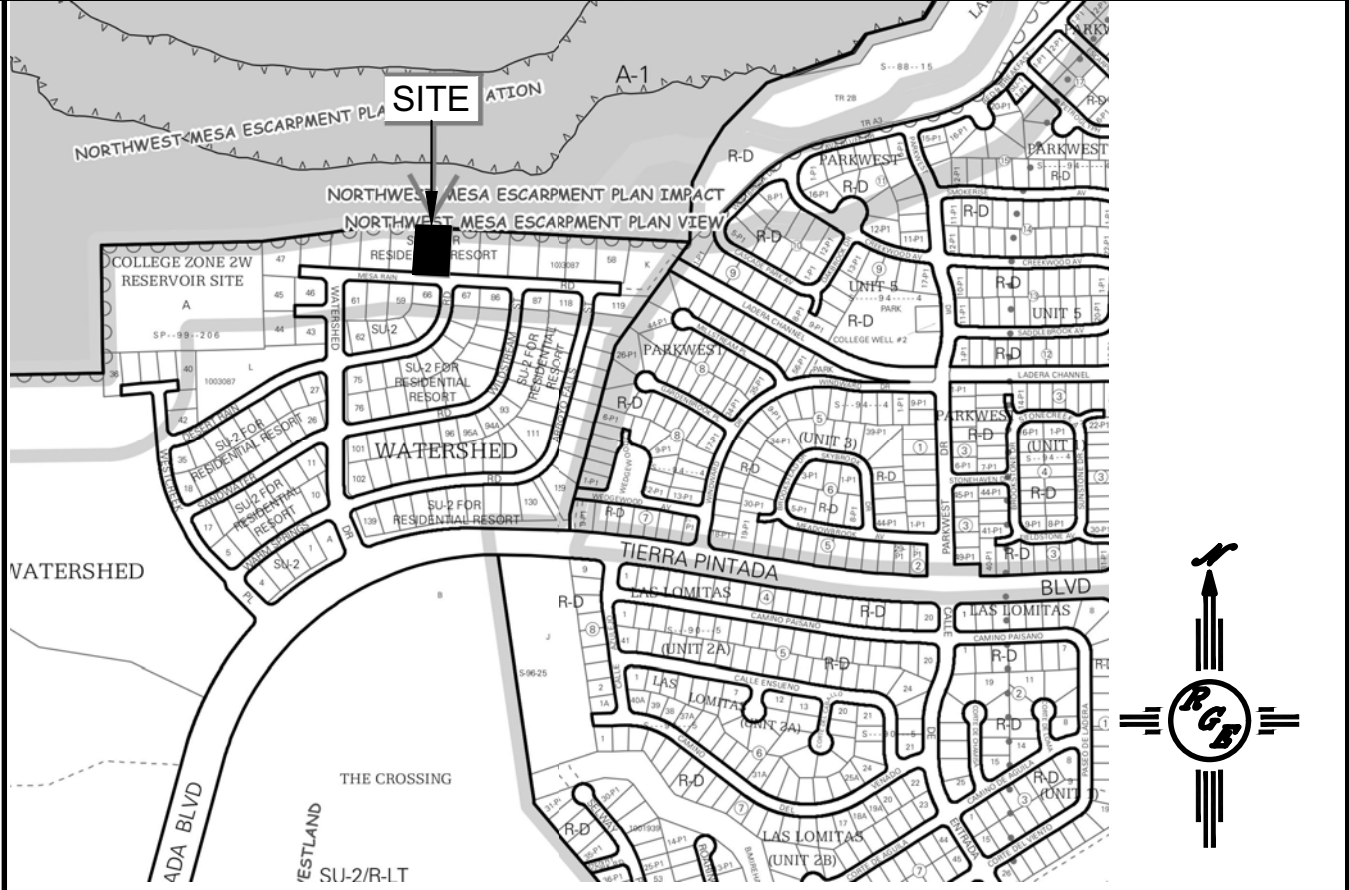


CAUTION:
EXISTING UTILITIES ARE NOT SHOWN. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATION TO DETERMINE THE ACTUAL LOCATION OF UTILITIES & OTHER IMPROVEMENTS.

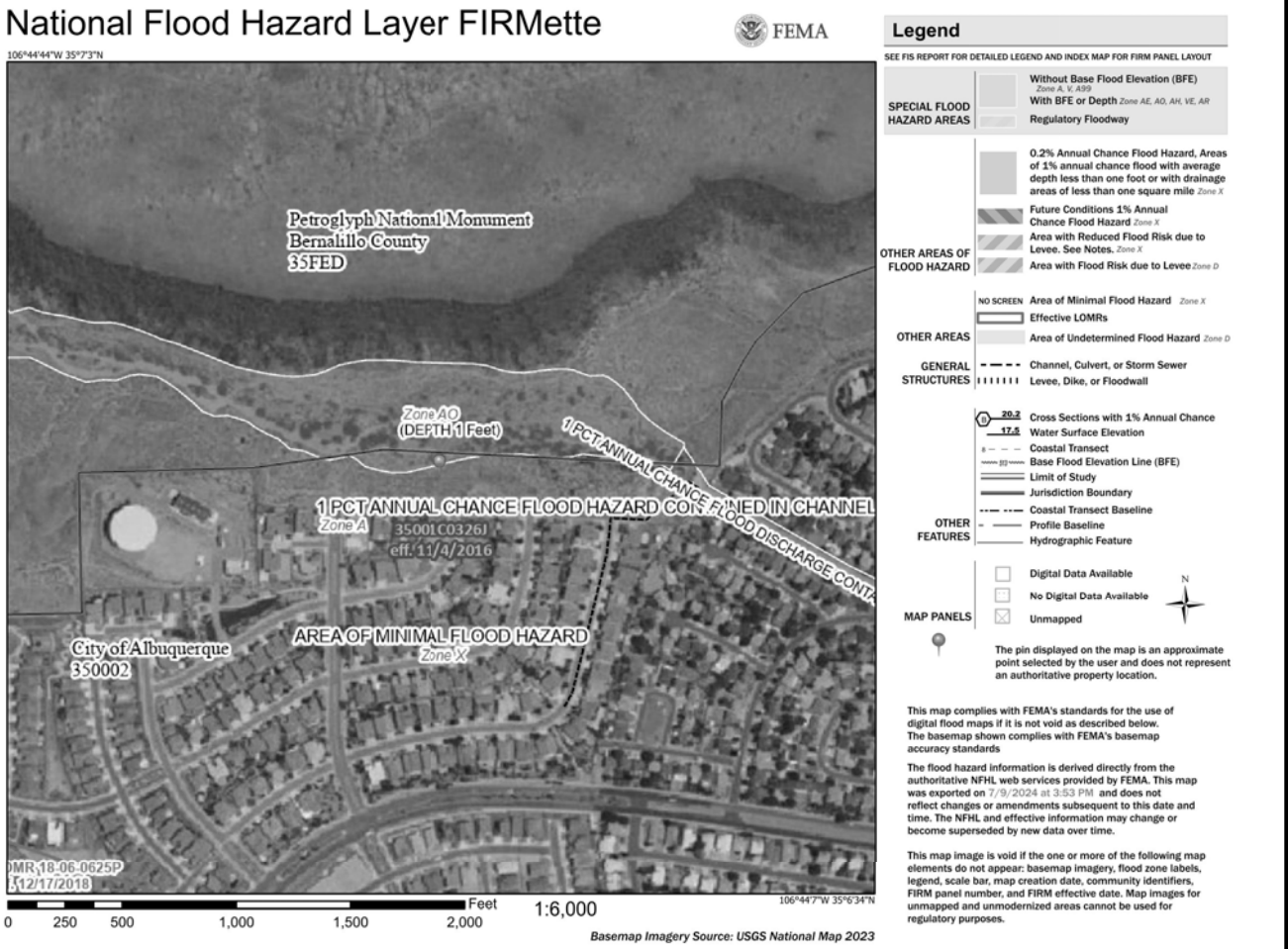


EROSION CONTROL NOTES:

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:



FIRM MAP:

LEGAL DESCRIPTION:

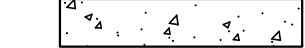
LOT 52 WATERSHED SUBDIVISION
BERNALILLO COUNTY, NEW MEXICO

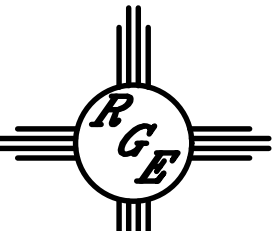
NOTES:

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.
3. ANY PERIMETER WALLS MUST BE PERMITTED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
4. SURVEY INFORMATION PROVIDED BY DYNAMIC CONSTRUCTION AND TECHNOLOGY LLC USING NAVD DATUM 1988.
5. LONG TERM MAINTAINANCE OF ALL PONDS, SWALES AND OVERFLOWS IS REQUIRED
6. A PAD ELEVATION CERTIFICATION SHALL BE REQUIRED PRIOR TO RELEASE OF BUILDING PERMIT.

LEGEND

- XXXX----- EXISTING CONTOUR
- XXXX----- EXISTING INDEX CONTOUR
- XXXX----- PROPOSED CONTOUR
- XXXX----- PROPOSED INDEX CONTOUR
- XXXX EXISTING SPOT ELEVATION
- XXXX PROPOSED SPOT ELEVATION
- BOUNDARY
- ADJACENT BOUNDARY
- ===== EXISTING CURB AND GUTTER
- PROPOSED EARTHEN SWALE
- PROPOSED RETAINING WALL
- PROPOSED CONCRETE



| | | |
|--|--|--|
| ENGINEER'S SEAL DAVID SOULE NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 14522 7/18/24 DAVID SOULE P.E. #14522 | LOT 52 WATERSHED SUB. 8609 MESA RAIN GRADING AND DRAINAGE PLAN  P.O. BOX 53924 ALBUQUERQUE, NM 87199 (505) 321-9099 | DRAWN BY DEM |
| | | DATE 7-10-24 8609 Mesa Rain .DWG SHEET # C1 JOB # |