

Weighted E Method

| Basin | Area (sf) | Area (acres) | Treatment | | | | | | | | 100-Year, 6-hr. | | 24 hour |
|------------|--------------|-----------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-----------------------|-------------------|-------------|
| | | | Treatment A (%) | Treatment B (%) | Treatment C (%) | Treatment D (%) | Treatment E (%) | Treatment F (%) | Treatment G (%) | Treatment H (%) | Weighted E (ac-ft) | Volume (ac-ft) | Flow cfs |
| ALLOWED | 13924.00 | 0.320 | 0% | 0 | 20% | 0.064 | 46% | 0.147 | 34% | 0.109 | 1.259 | 0.034 | 1.03 |
| PROPOSED | 13924.00 | 0.320 | 0% | 0 | 20% | 0.064 | 38% | 0.1215 | 42% | 0.134 | 1.338 | 0.036 | 1.07 |
| COMPARISON | | | | | | | | | | | | 0.002 | 0.003 |

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
Eb= 0.67
Ec= 0.99
Ed= 1.97

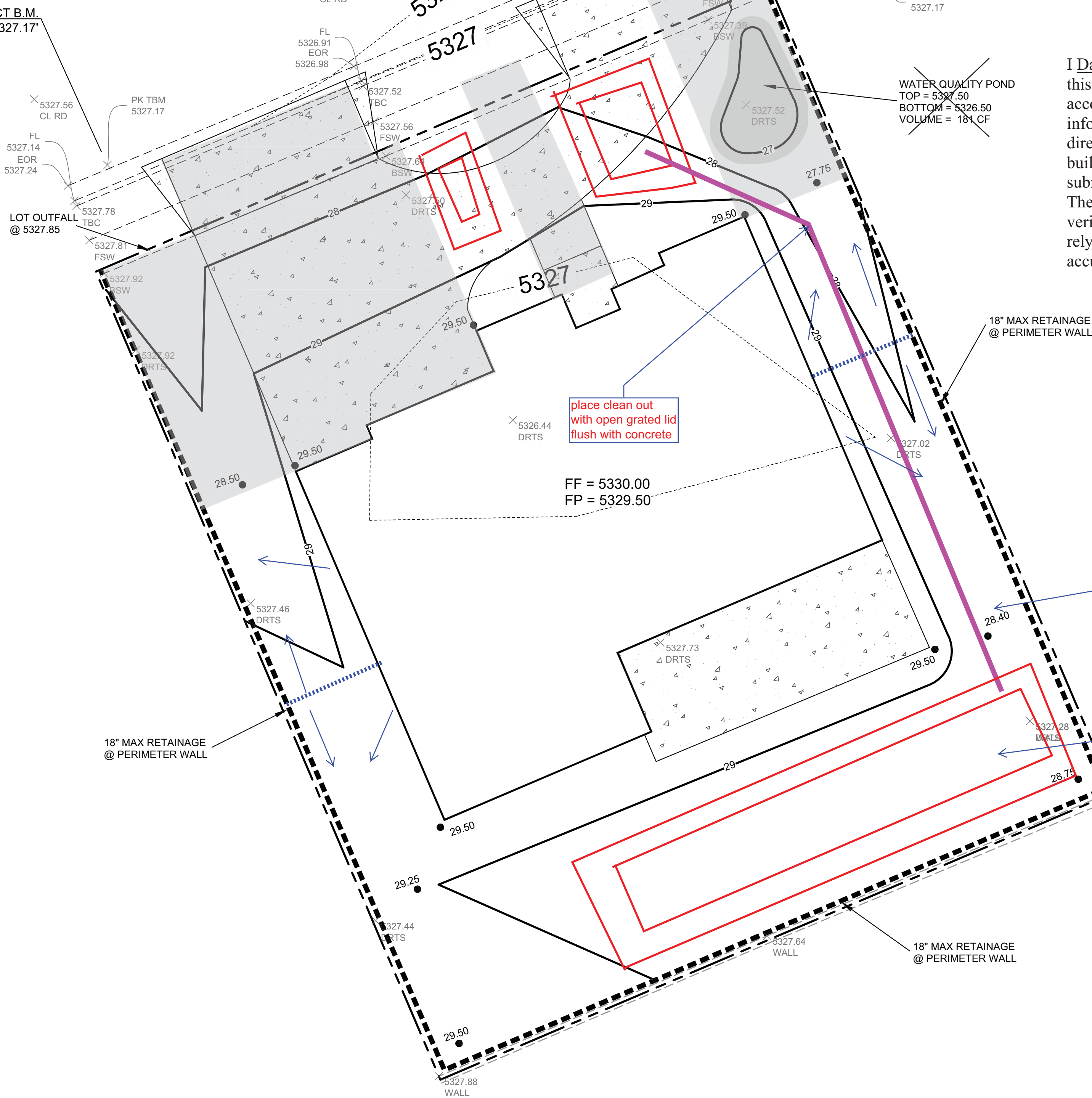
Qa= 1.29
Qb= 2.03
Qc= 2.87
Qd= 4.37

ONSITE Conditions
DRAINAGE SUMMARY

| | REQUIRED (CF) | PROVIDED (CF) |
|---|------------------|------------------|
| WATER QUALITY FLOOD CONTROL Narrative | 0 134 | 181 181 |

This site is within the SAD 228 Master Drainage plan boundaries. The site is to maintain existing patterns and drain to the roadway to the north per the master drainage plan. The site does exceed the SAD 228 developed conditions assumptions, therefore ponding 134 CF is required

PROJECT B.M.
ELEV. = 5327.17'



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.

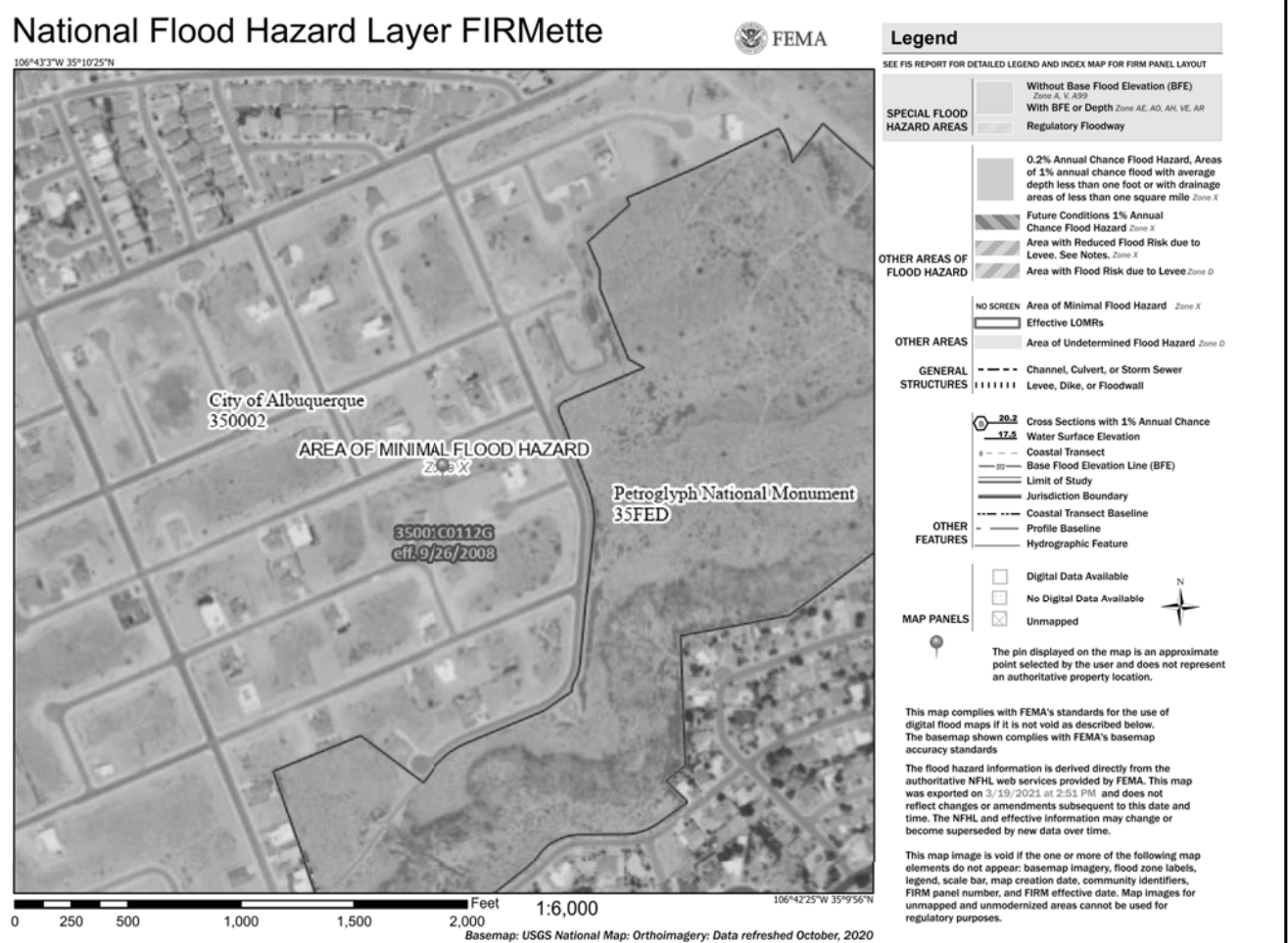
I, DAVID SOULE HAVE PERSONALLY INSPECTED THE SITE. I HEREBY CERTIFY THE PAD HAS BEEN CONSTRUCTED SUCH THAT IT IS IN SUBSTANTIAL CONFORMANCE TO THE APPROVED GRADING PLAN DATED 8/30/21



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 8/30/21. 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



VICINITY MAP:



FIRM MAP:

LEGAL DESCRIPTION:

LOT 12 BLOCK 8 UNIT 22 VOLCANO CLIFFS SUBDIVISION
CITY OF ALBUQUERQUE, 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 COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.
5. 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 GRAVEL |
| --- | | --- | PROPOSED CONCRETE |
| --- | | --- | PROPOSED 2' WIDE COBBLE SWALE |

ENGINEER'S SEAL

DAVID SOULE
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER
14522

8/30/21

DAVID SOULE
P.E. #14522

LOT 12 BLK 8 UN 22 VC
6312 CANAVIO RD NW

GRADING AND DRAINAGE PLAN

Rio Grande Engineering

P.O. BOX 53924
ALBUQUERQUE, NM 87199
(505) 321-9099

DRAWN BY DEM

DATE 8-27-21

Lot 12 Blk 8 Un 22 VC.DWG

SHEET # C1

JOB #