

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

July 17, 2024

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

RE: 4904 Cresta Del Sur Ct NE
Grading and Drainage Plan
Engineer's Stamp Date: 04/19/24
Hydrology File: F23D007B

Dear Mr. Soule:

Based upon the information provided in your submittal received 07/16/2024, the Grading and Drainage Plans are approved for Building Permit and Grading Permit. **Since this site has stem walls, a pad certification is not needed for this project.** Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter.

PRIOR TO CERTIFICATE OF OCCUPANCY:

1. Engineer's Certification, per the DPM Part 6-14 (F): Engineer's Certification Checklist For Non-Subdivision is required.

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

Sincerely,

Renée C. Brissette

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

SITE HYDROLOGY

Weighted E Method
per city of Albuquerque Development Process Manual- chapter 22

Existing Developed Basins										
Basin	Area (sf)	Area (acres)	Treatment A % (acres)	Treatment B % (acres)	Treatment C % (acres)	Treatment D % (acres)	100-Year, 6-hr Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs	10-day Volume (ac-ft)
EXISTING	12134.00	0.278	50%	0.1393	50%	0.139	0%	0	0%	0.000
ALLOWED	12134.00	0.278	0%	0.0000	26.0%	0.072	26.0%	0.07243	48%	0.134
PROPOSED	12134.00	0.278	0%	0.0000	22.0%	0.061	34.0%	0.09471	44%	0.123
COMPARISON								2.087	0.048	1.08
								2.087	0.048	1.08

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 4)

Ea= 0.76
Eb= 0.95
Ec= 1.2
Ed= 3.34

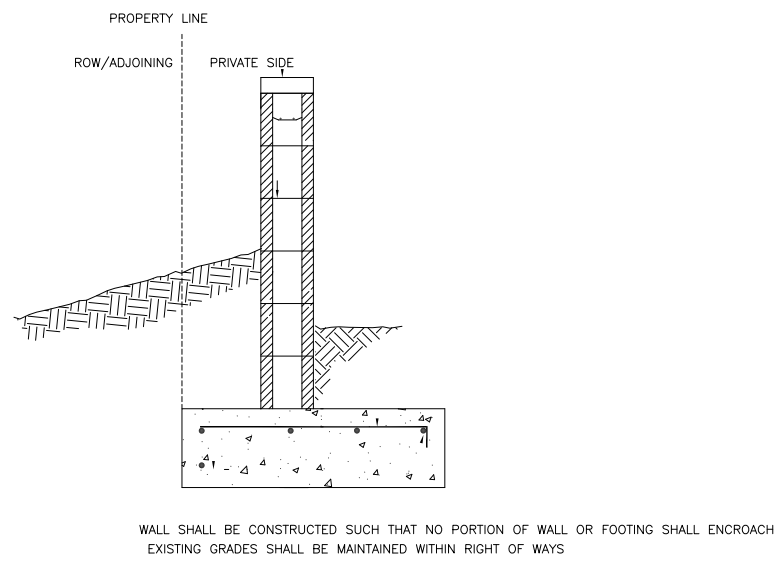
Qa= 2.09
Qb= 2.73
Qc= 3.41
Qd= 4.78

ALLOWED DISCHARGE 0.068 CFS
PROPOSED DISCHARGE 0.065 CFS

DRAINAGE NARRATIVE
THIS SITE IS COVERED BY THE TRAIL HEAD SUBDIVISION(F23-D7) THE DOWN STREAM IMPROVEMENTS ARE IN PLACE. THE PROPOSED PROJECT WILL BE A SINGLE FAMILY RESIDENTIAL HOUSE. PER THE APPROVED MASTER PLAN, THE SITE MUST MATCH THE PROPOSED 100-YEAR, 6-HOUR PEAK DISCHARGE RATE ASSIGNED IN THE MASTER PLAN. THE APPROVED BASIN MAP WAS NOT IN DRAINAGE FILE, THEREFOR WE TOOK THE AVERAGE OF BASIN 2.3.5 TO DETERMINE FLOW FOR LOTS

4904 CRESTA DEL SUR

RIM=02.89
INV=93.89
TEMPORARY BENCHMARK
C.O.A. CL MONUMENT "LS 6544"
ELEV=6202.00

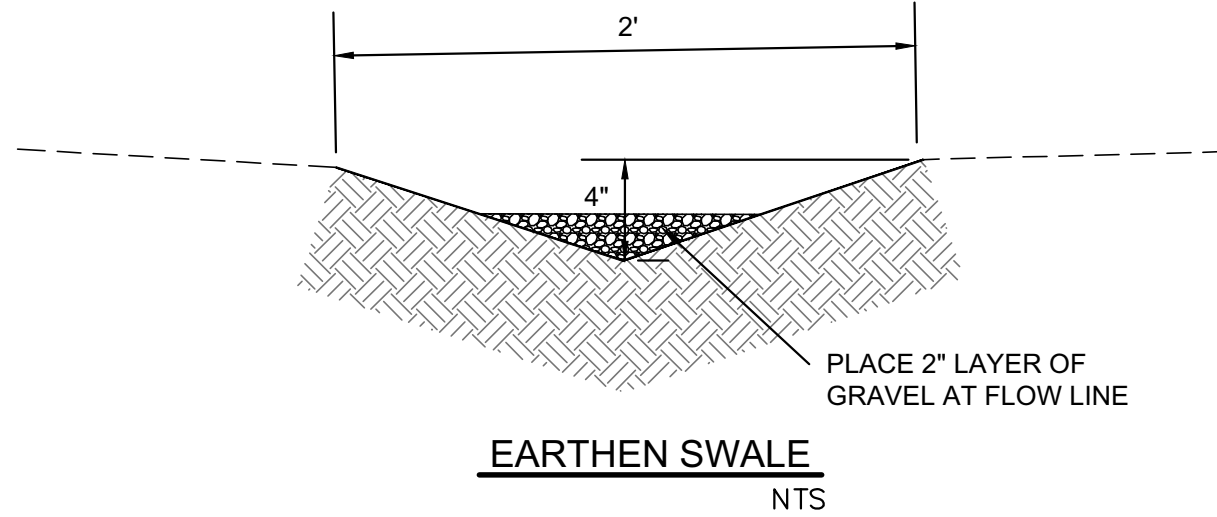


WALL DETAILS AT ALL PROPERTY BOUNDARIES

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.

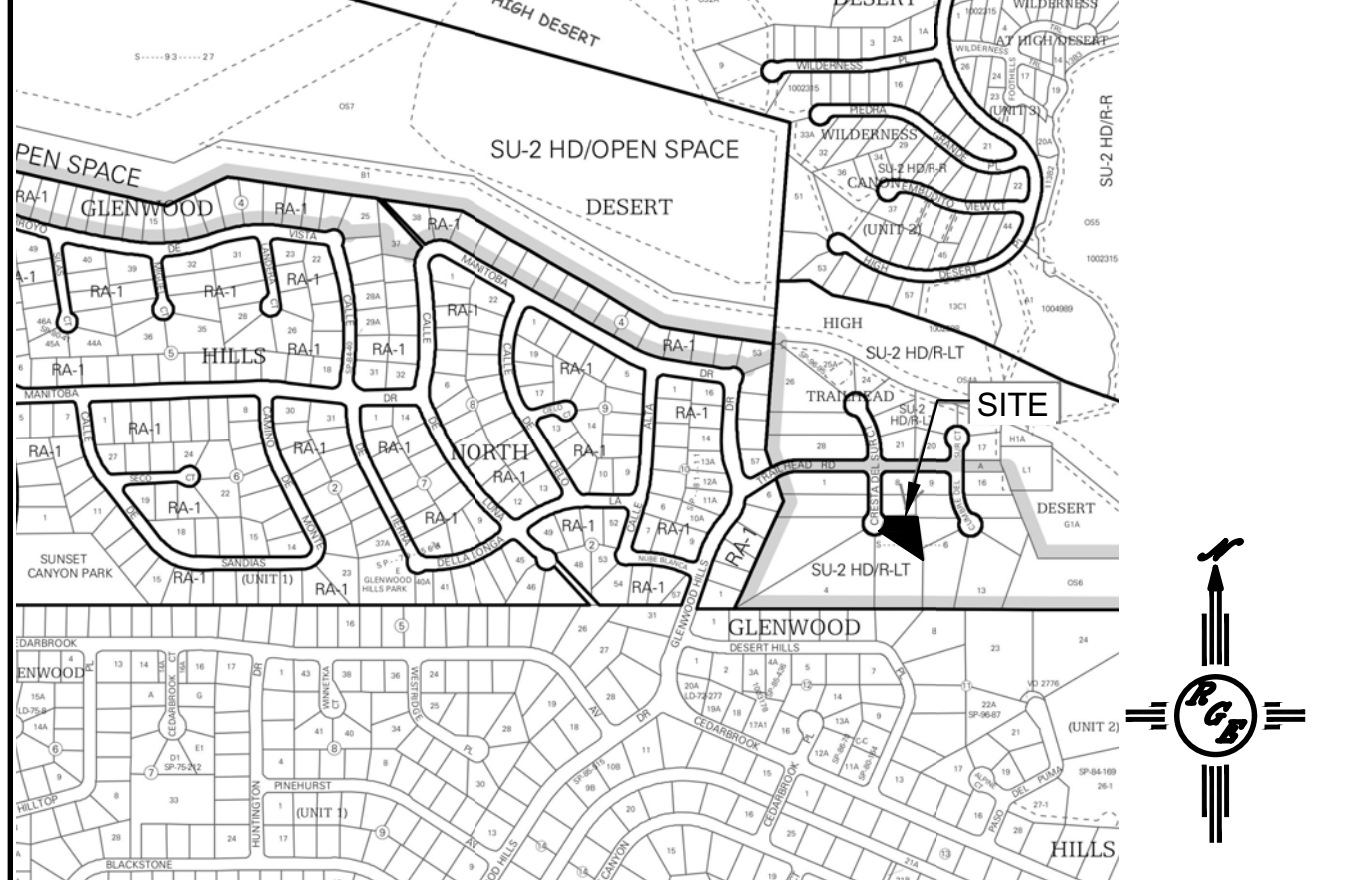
CONSTRUCT ALL SWALES AND EROSION PROTECTION
(SHOWN HATCHED) BELOW ADJACENT GRADE TO ENSURE
RUNOFF CAN BE CAPTURED AND CONVEYED PROPERLY.



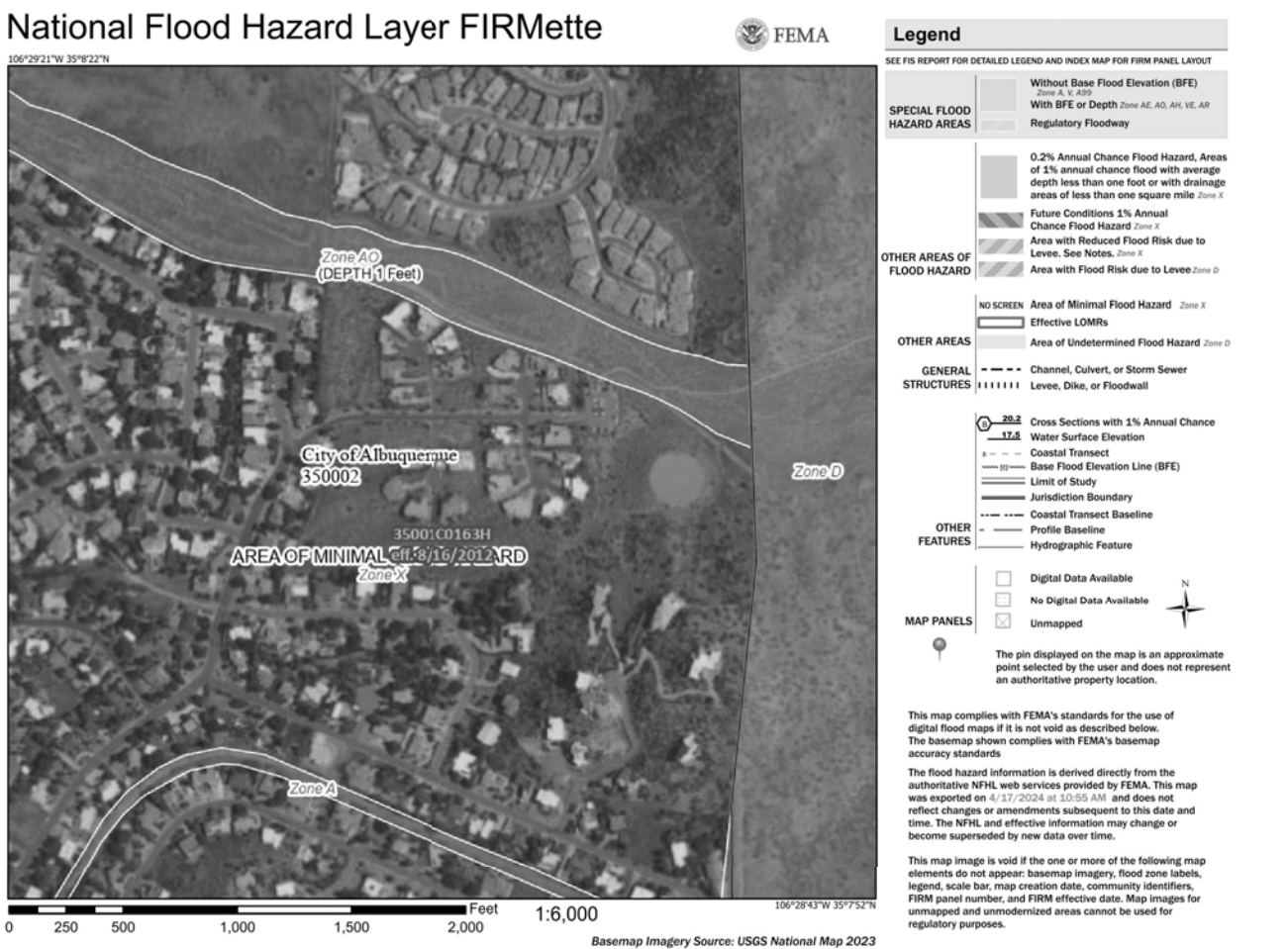
EARTHEN SWALE
NTS

EROSION CONTROL NOTES:

- CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
- REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



VICINITY MAP: F-23-Z



FIRM MAP:

LEGAL DESCRIPTION:

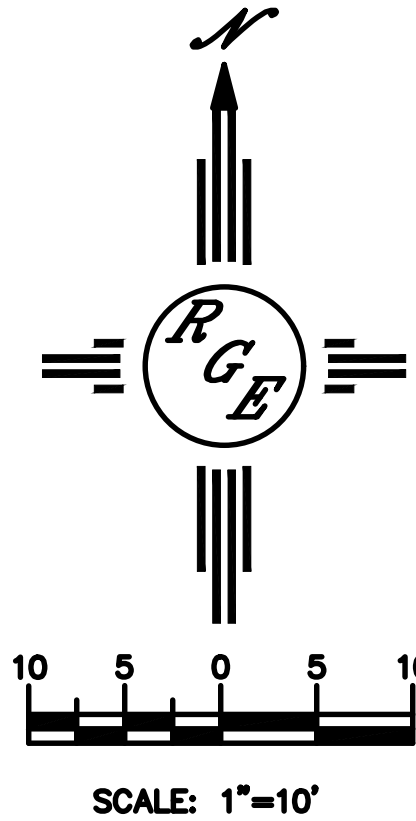
LOT 6 TRAILHEAD SUBDIVISION
CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

NOTES:

- ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
- ALL SLOPES SHALL BE 3:1 MAX. AND GRAVEL OR NATIVE SEEDING PRIOR TO CO.
- ANY PERIMETER WALLS MUST BE PERMITTED SEPARATELY ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.
- SURVEY INFORMATION PROVIDED BY COMMUNITY SCIENCES CORPORATION USING NAVD DATUM 1988.
- 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	LOT 6 TRAILHEAD SUB. 4904 CRESTA DEL SUR CT NE	DRAWN BY DEM
DAVID SOULE NEW MEXICO PROFESSIONAL ENGINEER 14522	GRADING AND DRAINAGE PLAN	DATE 4-18-24
4/19/24	Rio Grande Engineering	4904 Cresta Del Sur Ct.DWG
DAVID SOULE P.E. #14522		SHEET # C1
		JOB #