

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

May 15, 2025

Mahmoud Taha
AIMT Engineering Service
632 Cedar St. NE
Albuquerque, NM 87106

RE: 2540 Alamo Ave NE
Grading & Drainage Plan
Engineer's Stamp Date: 04/15/2025
Hydrology File: M16D045
Case # HYDR-2025-00136

Dear Mr. Taha:

Based upon the information provided in your submittal received 05/12/2025, the Grading & Drainage Plan is **approved** for Grading Permit, Paving Permit, and Building Permit. 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.

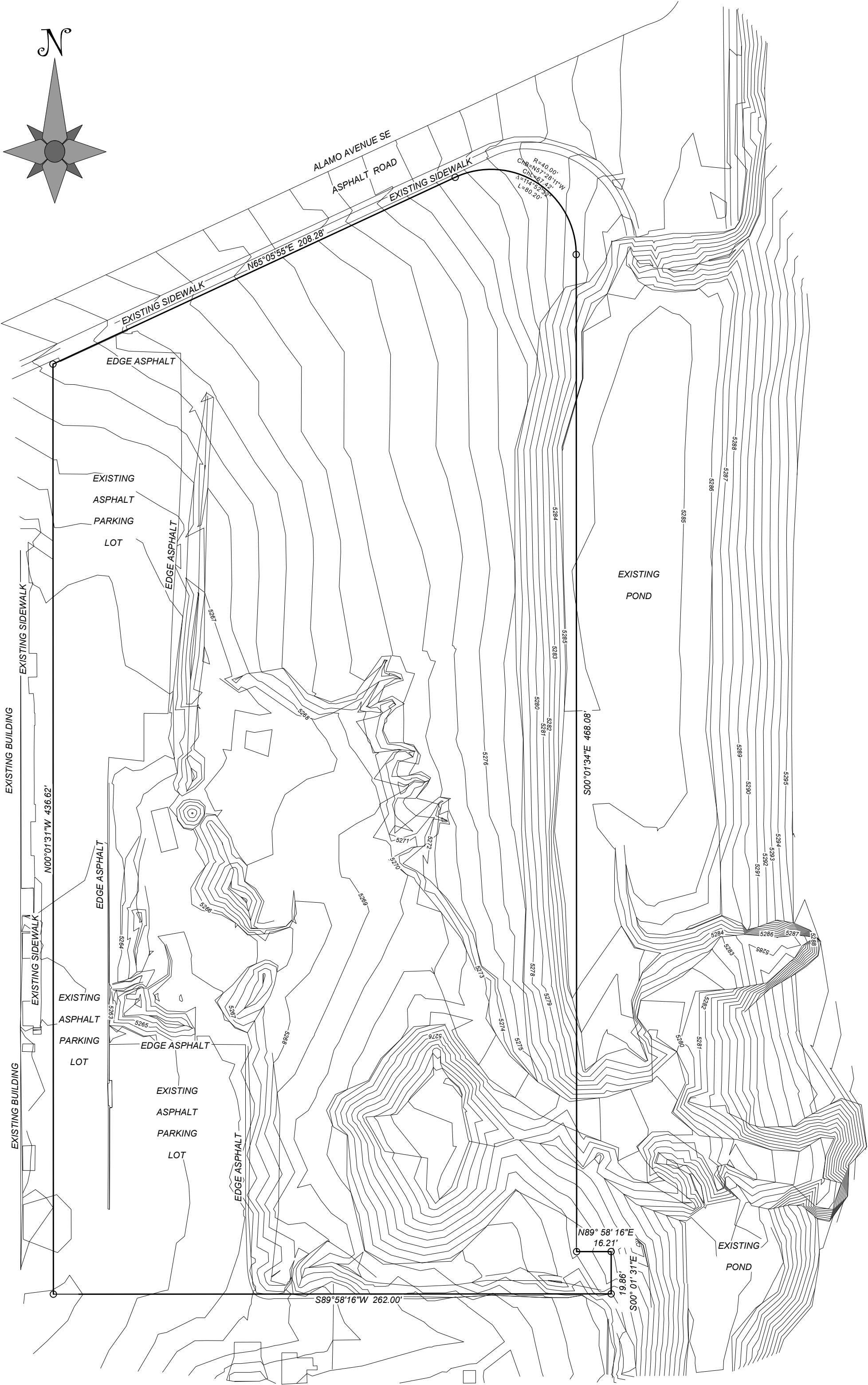
As a reminder, if the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Doug Hughes, PE, jhughes@cabq.gov, 505-924-3420) 14 days prior to any earth disturbance.

If you have any questions, please contact me at 505-924-3314 or amontoya@cabq.gov.

Sincerely,

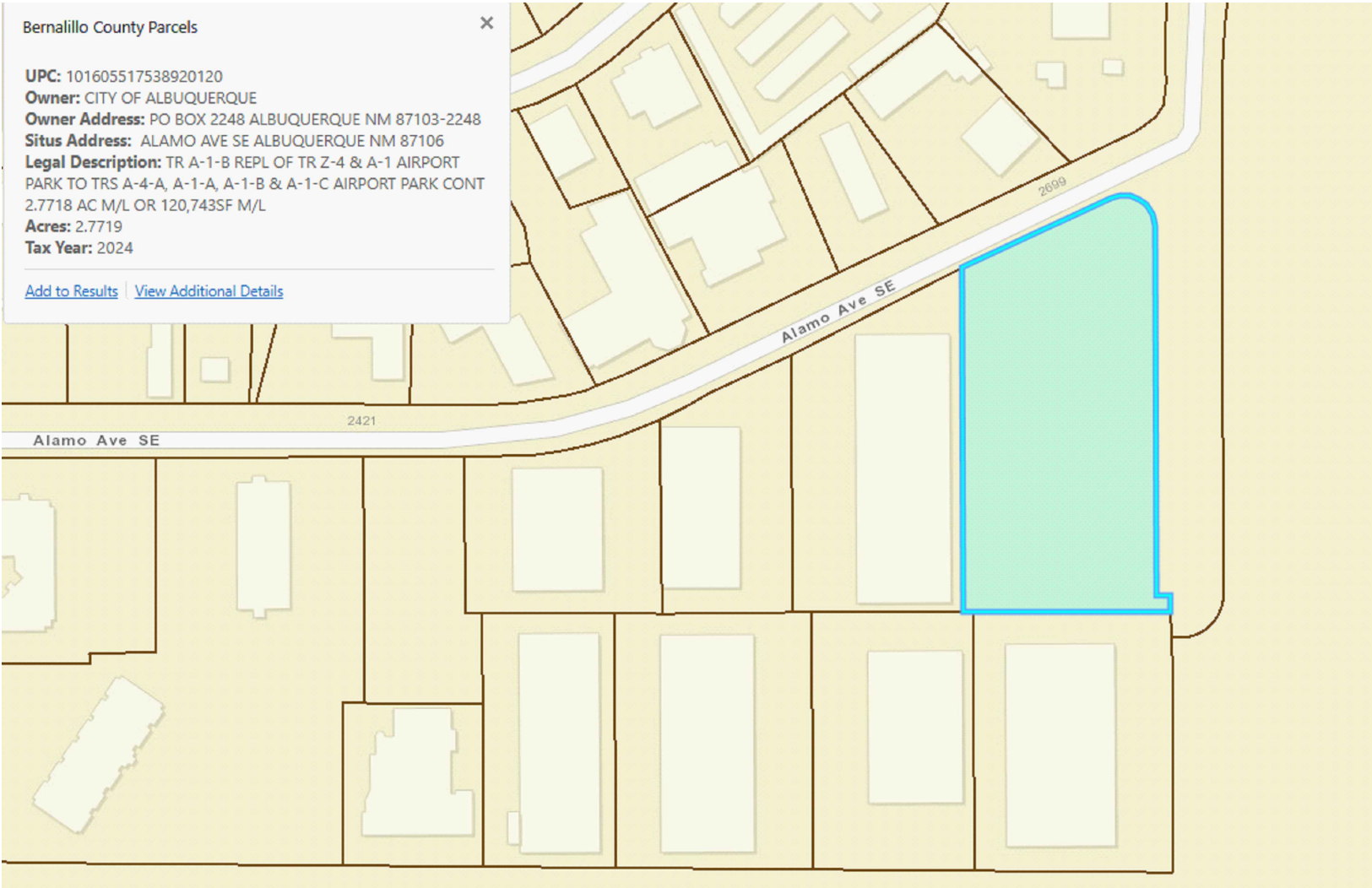
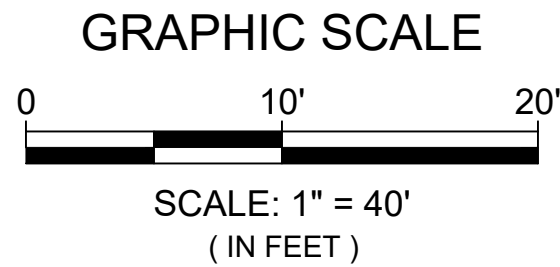
Anthony Montoya, Jr., P.E., CFM
Senior Engineer, Hydrology
Planning Department, Development Review Services

LEGAL DESCRIPTION: TR A-1-B REPL OF TR Z-A & A-1 AIRPORT PARK TO TRS
A-4-A, A-1-A, A-1-B & A-1-C AIRPORT PARK CONT 2.7718
AC M/L OR 120,743 SF M/L.



EXISTING CONDITIONS

SCALE: 1" = 40'



VICINITY MAP

NTS

EROSION CONTROL NOTES:

- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION; HE SHALL ENSURE THAT THE FOLLOWING MEASURES ARE TAKEN:
1. ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.
 2. INSTALL TEMPORARY SILT FENCE AT LOW POINT AROUND THE PROPERTY DURING CONSTRUCTION.
 3. ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.
 4. THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON.

CONSTRUCTION NOTES:

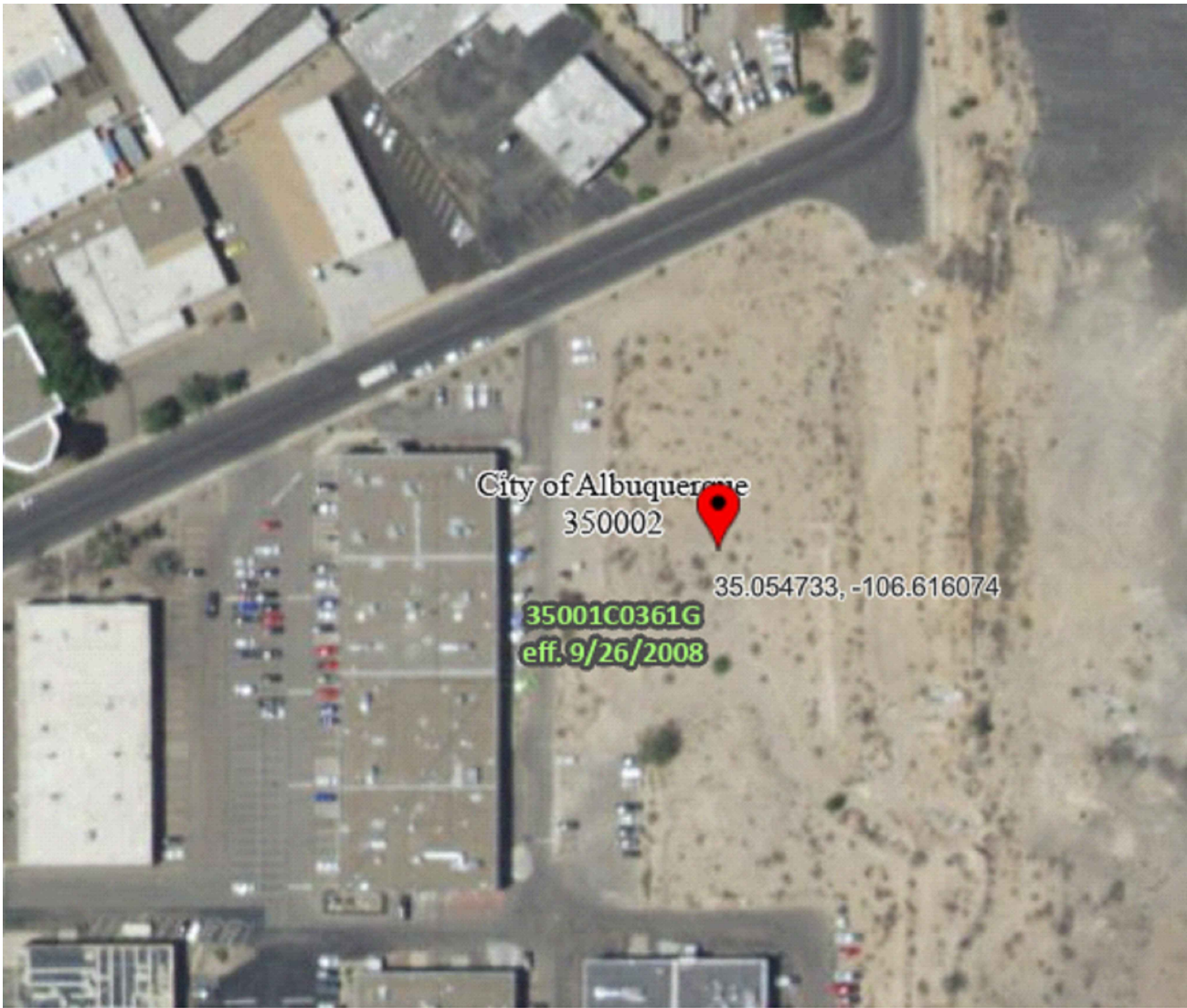
1. CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENT CONTROL (ECS) PLAN AND OWNER'S CERTIFIED NOTICE OF INTENT (NOI) TO THE CITY OF ALBUQUERQUE STORMWATER QUALITY ENGINEER 14 DAYS PRIOR TO ANY EARTH DISTURNABCE.
2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICES FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OF SUB-SURFACE UTILITIES.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS; SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
4. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
5. ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/ BERNALILLO COUNTY STANDARDS AND PROCEDURES.
6. ADJUST ALL CLEAN OUT RIMS, MANHOLE COVERS, AND VALVE AND METER BOXES TO FINISHED GRADE.
7. CONTRACTOR SHALL NOTIFY ENGINEER IF EXISTING GROUND CONDITIONS VARY FROM THOSE SHOWN ON PLANS.
8. THE CONTRACTOR SHALL GRADE ALL AREAS TO POSITIVELY DRAIN AWAY FROM BUILDINGS.
9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DEWATER AND STABILIZE ANY SOFT SOILS AS NEEDED TO REACH OPTIMUM SOIL CONDITIONS.
10. ALL DISTURBED AREAS SHALL BE SODDED. CONTRACTOR SHALL BE RESPONSIBLE UNTIL GROWTH IS ESTABLISHED.
11. THE EARTHWORK CONTRACTOR IS ULTIMATELY RESPONSIBLE TO IMPORT OR EXPORT MATERIAL AS NECESSARY TO ACHIEVE THE GRADES SHOWN ON THE CIVIL ENGINEER'S DOCUMENTS.
12. ANY FILL MATERIAL SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEED 6" AND SHALL BE COMPACTED TO 95% STANDARD PROCTOR DENSITY.

EXISTING CONDITIONS:

THE SUBJECT SITE, 2540 ALAMO AVE SE., ALBUQUERQUE, NM (LEGAL DESCRIPTION: TR A-1-B REPL OF TR Z-4 & A-1 AIRPORT PARK TO TRS A-4-A, A-1-A, A-1-B & A-1-C AIRPORT PARK CONT 2.7718 AC), IS NOT LOCATED WITHIN A FLOOD PLAIN. THE PROJECT SITE IS CURRENTLY UNDEVELOPED WITH AN ASPHALT PARKING ARE ON THE WEST SIDE OF THE LOT.

PROPOSED CONDITIONS:

25'x10'x8" REINFORCED CONCRETE SLAB TO SUPPORT 20'x8'x8' CONDITIONED CONNEX AND 8'x8'x8" REINFORCED CONCRETE SLAB TO SUPPORT FIRE RISER IS PROPOSED TO BE CONSTRUCTED. IN ADDITIONAL, THE DEVELOPMENT OF NEW GRAVEL PARKING AREA, A 14' WIDE GRAVEL ROAD, AND FLAT AREAS FOR 4 BATTERY STEERAGES, AND 2 ENERGETICS STORAGES IS PROPOSED. THE REMAINING AREA OF THE LOT WILL REMAIN UNDEVELOPED WITH UNIFORM GRADING.



FIRM MAP

NTS

THE SUBJECT SITE DOES NOT LIE WITHIN A DESIGNATED FLOODPLAIN, (RE: F.E.M.A. FIRM PANEL 35001C0361G, EFFECTIVE SEPTEMBER 26, 2008),

TOPOGRAPHIC SURVEY NOTES:

1. THIS TOPOGRAPHIC SURVEY WAS CONDUCTED BY OTHERS.
2. THIS IS NOT A BOUNDARY SURVEY. THE BOUNDARY SHOWN HEREON IS FOR ORIENTATION ONLY.
3. SUBJECT PROPERTY IS LOCATED WITHIN SECTION 34, TOWNSHIP 10 NORTH, RANGE 3 EAST, NEW MEXICO PRINCIPAL MERIDIAN (N.M.P.M.), ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.
4. SURVEY IS BASED ON NEW MEXICO STATE PLANE COORDINATE SYSTEM (NAD 83, CENTRAL ZONE). UNITES ARE US SURVEY FOOT (USFT).
5. PROJECT COMBINED FACTOR FOR GROUND GRID TRANSFORMATION OF THE HORIZONTAL COORDINATES (SCALED ABOUT N = 0, E = 0) IS 0.999664746.
6. ALL DISTANCES SHOWN ARE GROUND DISTANCE.

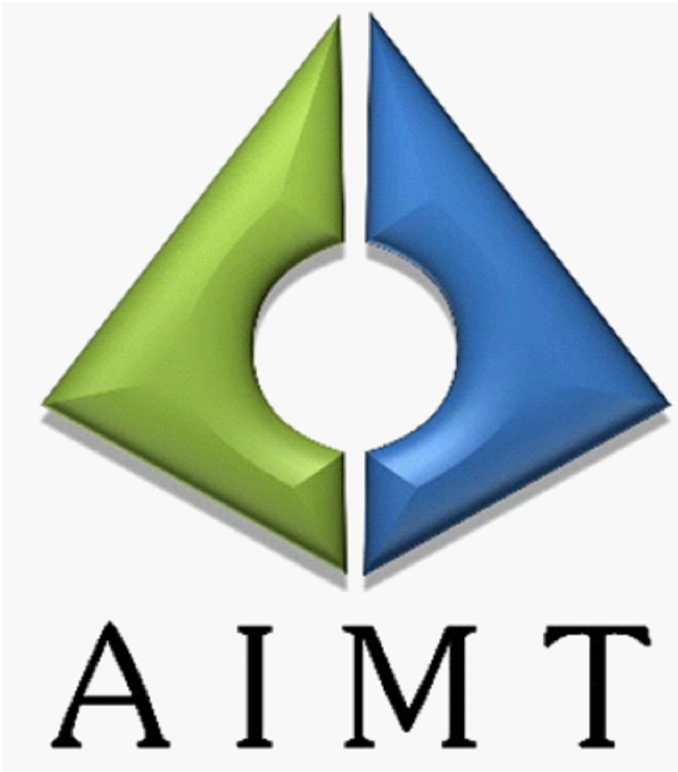
City of Albuquerque
Planning Department
Development Review Services
HYDROLOGY SECTION
APPROVED

DATE: 5/15/2025
BY: [Signature]
HydroTeam # M16D045

THE APPROVAL OF THESE PLANS/REPORTS SHALL NOT BE CONSTRUED TO PERMIT VIOLATIONS OF ANY CITY ORDINANCE OR STATE LAW, AND SHALL NOT PREVENT THE CITY OF ALBUQUERQUE FROM REQUESTING CORRECTIONS FOR ERRORS OR DIMENSIONS IN PLANS, SPECIFICATIONS, OR CONSTRUCTION DOCUMENTS. SUCH APPROVED PLANS/REPORTS SHALL NOT BE CHANGED, MODIFIED OR ALTERED WITHOUT AUTHORIZATION. THE APPROVAL OF THESE PLANS/REPORTS SHALL EXPIRE TWO (2) YEARS AFTER THE APPROVAL DATE IF NO BUILDING PERMIT HAS BEEN PULLED ON THE DEVELOPMENT.

PROJECT NAME:
DEVELOPMENT OF ALAMO
AVE. SE, SITE

PROJECT ADDRESS:
2450 Alamo Ave. SE,
Albuquerque, NM



AIMT Engineering Service Inc.
632 Cedar St. NE
Albuquerque, NM 87106
Phone: (505) 385-8930
www.aimteng.com

△	DATE	REVISION

DWG TITLE:

GRADING AND DRAINAGE:
EXISTING CONDITIONS

SEAL & SIGNATURE:



DATE:
05/12/2025

SCALE:
1" = 30'

DRAWING NO:

C-100

DOB BSCAN:

TABLE 1. PRECIPITATION ZONES

ZONE	LOCATION
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40

TABLE 2. LAND TREATMENTS

TREATMENT	LAND CONDITION
A	Soil un-compacted by human activity with 0 to 10 percent slopes
	Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, ground cover and infiltration capacity
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes.
	Native grasses, weeds and shrubs, and soil un-compacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil compacted by human activity. Minimum vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lands and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil un-compacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

TABLE 3. EXCESS PRECIPITATION		E (Inches) - 6 Hour Storm
ZONE	100 YR	

ZONE	100-YR..			
	[2-YR., 10-YR.]			
	LAND TREATMENT TYPE			
	A	B	C	D
1	0.44	0.67	0.99	1.97
	[0.00, 0.08]	[0.01, 0.22]	[0.12, 0.44]	[0.72, 1.24]
2	0.53	0.78	1.13	2.12
	[0.00, 0.13]	[0.02, 0.28]	[0.15, 0.52]	[0.79, 1.34]
3	0.66	0.92	1.29	2.36
	[0.00, 0.19]	[0.06, 0.36]	[0.20, 0.62]	[0.89, 1.50]
4	0.8	1.08	1.46	2.64
	[0.02, 0.28]	[0.11, 0.46]	[0.27, 0.73]	[1.01, 1.69]

TABLE 4. PEAK INTENSITY
(IN/ HR at $t_c = 0.2$ hour)

ZONE	100-YR..
	[2-YR.. 10-YR.]
	INTENSITY
1	4.7 [1.84, 3.14]
2	5.05 [2.04, 3.41]
3	5.38 [2.21, 3.65]
4	5.61 [2.34, 3.83]

TABLE 5. PEAK DISCHARGE (cfs/ acre)

ZONE	TREATMENT			100- YR. [2-YR., 10-YR.]
	A	B	C	D
1	1.29 [0.00, 0.24]	2.03 [0.03, 0.76]	2.87 [0.47, 1.49]	4.37 [1.69, 2.89]
2	1.56 [0.00, 0.38]	2.28 [0.08, 0.95]	3.14 [0.60, 1.71]	4.70 [1.86, 3.14]
3	1.87 [0.00, 0.58]	2.60 [0.21, 1.19]	3.45 [0.78, 2.00]	5.02 [2.04, 3.39]
4	2.20 [0.00, 0.87]	2.92 [0.38, 1.45]	3.73 [1.00, 2.26]	5.25 [2.17, 3.57]

DRAINAGE COMMENTS:

AS SHOWN IN THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED WITHIN SECTION 34, TOWNSHIP 10 NORTH, RANGE 3 EAST, NEW MEXICO PRINCIPAL MERIDIAN (N.M.P.M.), ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

THE SUBJECT SITE IS PRESENTLY AN UNDEVELOPED PROPERTY; THE PROPOSED PLAN AS SHOWN HEREON IS TO CONSTRUCT A 14' WIDE GRAVEL ROAD IN ADDITION TO NEW GRAVEL PARKING AREA.

THE SUBJECT SITE, 1) DOES NOT LIE WITHIN A DESIGNATED FLOODPLAIN, (RE: F.E.M.A. FIRM PANEL 35001C0342G, EFFECTIVE SEPTEMBER 26, 2008), 2) DOES NOT ACCEPT OFFSITE FLOWS FROM ADJACENT PROPERTIES, 3) DOES NOT CONTRIBUTE OFFSITE FLOW TO ADJACENT PROPERTIES.

DRAINAGE CALCULATIONS ARE PER ARTICLE 6-2, HYDROLOGY, OF THE DEVELOPMENT PROCESS MANUAL FOR THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

DESIGN CALCULATIONS:

SITE AREA = 120777 SQ. FT. = 2.773 ACRE
ZONE: TWO (2)

	<u>EXCESS PRECIPITATION</u>	<u>PEAK DISCHARGE</u>
TREATMENT A	0.53 in.	1.56 cfs/ac.
TREATMENT B	0.78 in.	2.28 cfs/ac.
TREATMENT C	1.13 in.	3.14 cfs/ac.
TREATMENT D	2.12 in.	4.70 cfs/ac.

	EXISTING CONDITIONS	PROPOSED CONDITIONS
	AREA	AREA
TREATMENT A	0.000 ac.	0.000 ac.
TREATMENT B	1.320 ac.	1.640 ac.
TREATMENT C	1.453 ac.	1.116 ac.
TREATMENT D	0.000 ac.	0.017 ac.

EXISTING EXCESS PRECIPITATION

$$\text{Weighted E} = [0.53 \times 0.00 + 0.78 \times 1.320 + 1.13 \times 1.453 + 2.12 \times 0.00] / 2.773 = 0.96 \text{ in.}$$

$$V_{100-360} = 0.96 \times 2.773 / 12 = 0.223 \text{ ac-ft} = 9713.87 \text{ cf.}$$

EXISTING PEAK DISCHARGE

$$Q_{100} = 1.56 \times 0.00 + 2.28 \times 1.320 + 3.14 \times 1.453 + 4.70 \times 0.00 = 7.57 \text{ cfs}$$

PROPOSED EXCESS PRECIPITATION

$$\text{Weighted E} = [0.53 \times 0.00 + 0.78 \times 1.640 + 1.13 \times 1.116 + 2.12 \times 0.017] / 2.773 = 0.93 \text{ in.}$$

$$V_{100-360} = 0.93 \times 2.773 / 12 = 0.215 \text{ ac-ft} = 9365.39 \text{ cf.}$$
PROPOSED PEAK DISCHARGE
$$Q_{100} = 1.56 \times 0.00 + 2.28 \times 1.64 + 3.14 \times 1.116 + 4.70 \times 0.017 = 7.32 \text{ cfs}$$

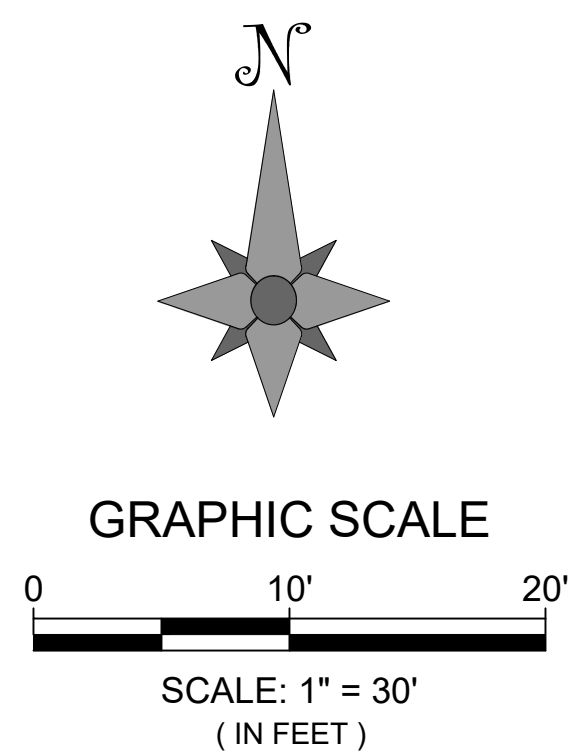
CHANGE

$$Q_{100} = 7.32 - 7.57 = -0.25 \text{ cfs (DECREASE)}$$
$$V_{100-360} = 9365.39 - 9713.87 = -348.48 \text{ cf (DECREASE)}$$

NOTE:
PROPOSED DEVELOPMENT WILL NOT CONTRIBUTE ADDITIONAL
RUB-OFF TO ADJACENT PROPERTIES.

STORMWATER QUALITY VOLUM CALCULATIONS:

IMPERVIOUS DRAINING AREA = 0.017 ACRE = 740.5 SQ. FT.
SWQV = $0.017 \times 0.42/12 = 0.0006$ AC-FT = 25.9 CF.
THE REQUIRED SWQV IS TOO SMALL FOR ONSITE STORMWATRE QUALITY
MANAGEMENT. THUS, PAYMENT-IN-LIEU IS REQUESTED.



GRADING PLAN

SCALE: 1" = 30'

