

CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director



Mayor Timothy M. Keller

June 9, 2021

Ron Hensley, P.E.
THE Group
300 Branding Iron Rd. SE
Rio Rancho, NM 87124

**RE: SAMS Academy
6441 Ventana Rd. N.W.
Grading & Drainage Plan
Engineer's Stamp Date: 05/22/21
Hydrology File: A10D010**

Dear Mr. Hensley:

PO Box 1293

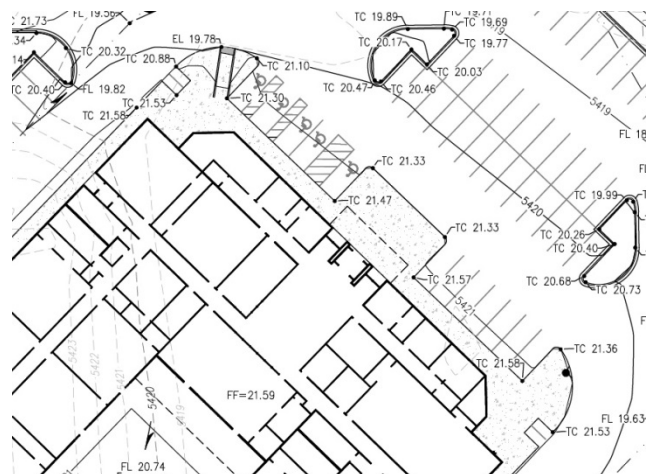
Albuquerque

NM 87103

www.cabq.gov

Based upon the information provided in your submittal received 05/25/2021, the Grading & Drainage Plan **is not** approved for Building Permit, Grading Permit, and for action by the DRB on Site Plan for Building Permit. The following comments need to be addressed for approval of the above referenced project:

1. Sheet C1. Please just show the building outline. I do not need to see the rooms inside the building on the Grading & Drainage Plan. (See image on Comment #2 below)
2. Sheet C1. Please show the curb along the proposed sidewalk next to the building. This needs to look like all the other curbs that you have. With only a single line, it appears that the sidewalk is at the same elevation of the asphalt.



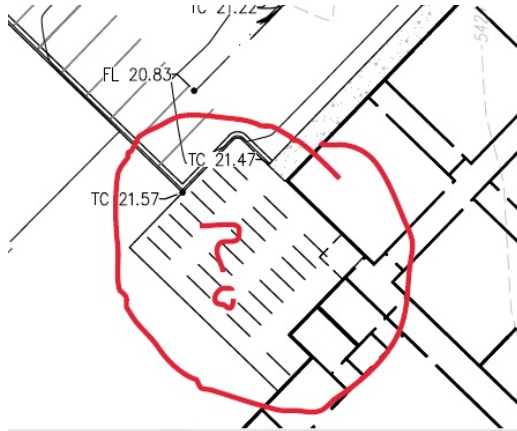
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3. Sheet C1. What is this area at the northwest corner of the proposed building? If part of the building, than see comment #2. If concrete, than please provide a few grade points and label it.



4. Sheet C1. Please show and label the existing asphalt trail along Irving Blvd. Also please note that there will be no grading within the R.O.W. so please terminate the grades at the property line at the same existing grade line.

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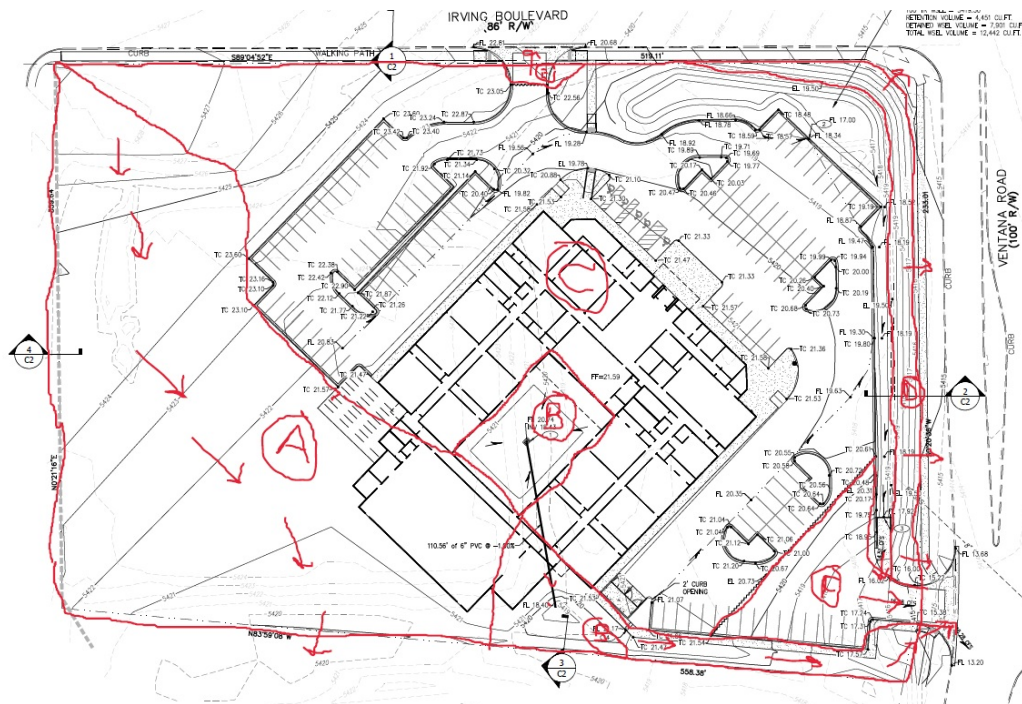
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5. Sheet C1. Going off the proposed grades, there are six drainage areas with their own discharge points. (See photo below). Also please check with the architect to where the building's downspouts will be so that you can better determine what impervious area needs to be included. I have labeled them A – F. I will start off with the easiest drainage area E (the drive pad on Irving Blvd). This area is mainly from the waterblock to the property line and is mostly impervious which can freely discharge to Irving. Drainage area A (this is mostly type C but may have some of the building impervious runoff) has a point discharge into the City's Open Space property. This will need to detain the difference between the existing runoff and the proposed runoff onto this property. Drainage area B appears to be a portion of a courtyard within the building which does go to what appears to be a stormwater quality pond but this appears to then discharge down the south side of the property to Ventana Rd. This area will need to meet the allowable discharge rate of 3.93 cfs/ac. Since most of this area is type C I think it may be able to



achieve this. Drainage area D appears to sheet drain to Ventana Rd. This area will need to meet the allowable discharge rate of 3.93 cfs/ac. Since most of this area is type C I think it may be able to achieve this. Drainage area C is the biggest area but also is mostly impervious. Since this area needs to meet the discharge rate of 3.93 cfs/ac, I believe that the detention pond may not be big enough. And lastly drainage area F is entirely impervious and there is no stormwater quality for this drainage area and if this entire site is to freely discharge into Ventana Rd., then the discharge rate that drainage area C can add to this will have to be calculated by adding the drainage area C and F together to determine the allowable discharge and then subtract the free discharge of drainage area F. Please correct all calculations showing these six drainage area and show the proposed drainage map with the drainage areas and discharge for each area. You may also need to show the existing drainage areas as well, since this also looks to have at least two area on it, on draining onto the City's Open Space and the other onto Ventana Rd.



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6. Sheet C1. Please add the grade point at the east waterblock of the drive on Irving Blvd.
7. Sheet C1. Please provide the drainage calculations for the detention pond for drainage area C as outlined in Development Process Manual (DPM) (signed 06/08/20) Article 6-2(a).
8. Sheet C1. Please provide the weir calculations, per DPM Chapter Article 6-16(A), for the curb cuts and sidewalk culverts. A coefficient of 2.7 is typically used for the weir equation $Q = CLH^{2/3}$.

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9. Sheet C2. Sections 1, 2, 3, & 4 provide no additional information to the contractor. Please remove. In this space, you may need to add both the existing drainage areas and proposed drainage areas here.
10. Sheet C2. Detail #1 - Outfall Structure. Please label the elevations at the corners of the walls. Please show the flowline (as a dash line) with the flowline elevation at both ends. Please call out see wall section this sheet. Please show the swale from the detention pond and label it. The section for this does not give any additional information if the above info is shown.
11. Sheet C2. Detail #6 – Outfall Wall Section. Please change this to Detail #2 and change the reference to it on Sheet C1.
12. 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 , 924-3420) 14 days prior to any earth disturbance.
13. Standard review fee of \$300 (for DRB Site) will be required at the time of resubmittal.

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Albuquerque

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

Sincerely,

NM 87103

Renée C. Brissette

www.cabq.gov

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



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: SAMS Academy **Building Permit #:** _____ **Hydrology File #:** B10
DRB#: _____ **EPC#:** _____ **Work Order#:** _____
Legal Description: TRACT A-2 BULK LAND PLAT FOR TRACTS A-1 & A-2 (A REPLAT OF TRACT A, VENTANA RANCH)
City Address: 6441 VENTANA RD. N.W.

Applicant: THE Group **Contact:** Ron Hensley
Address: 300 Branding Iron Rd. SE, Rio Rancho, NM 87124
Phone#: 505-410-1622 **Fax#:** _____ **E-mail:** ron@thegroup.cc
Owner: Rachel Mathew Development **Contact:** Steve Hernandez
Address: 9320 Menaul Blvd. NE, ste. D
Phone#: 505-228-1401 **Fax#:** _____ **E-mail:** steve@dmcnm.com

TYPE OF SUBMITTAL: _____ PLAT (____# OF LOTS) _____ RESIDENCE _____ DRB SITE ☒ ADMIN SITE

IS THIS A RESUBMITTAL?: _____ Yes ☒ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION ☒ HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☒ GRADING PLAN
- ☐ DRAINAGE MASTER PLAN
- ☐ DRAINAGE REPORT
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ SITE PLAN FOR SUB'D APPROVAL
- ☒ SITE PLAN FOR BLDG. PERMIT APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ GRADING PERMIT APPROVAL
- ☐ SO-19 APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ GRADING/ PAD CERTIFICATION
- ☐ WORK ORDER APPROVAL
- ☐ CLOMR/LOMR
- ☐ FLOODPLAIN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: 5/25/21 **By:** THE Group / Ron Hensley

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

DRAINAGE INFORMATION

LOCATION & DESCRIPTION
THE PROPOSED SITE IS AN UNDEVELOPED TRACT AT THE INTERSECTION OF IRVING BLVD. AND VENTANA RD. THAT HAS BEEN PREVIOUSLY GRADED..

FLOODPLAIN STATUS
THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0103H, DATED AUGUST 16, 2012 IS NOT WITHIN A DESIGNATED 100-YEAR FLOODPLAIN.

EXISTING DRAINAGE
THE SITE DRAINS TO VENTANA RD. AND IS WITHIN THE AREA OF THE MASTER DRAINAGE PLAN OF "B10003A - SEDONA SUBDIVISION PHASE 2" AND IS RESTRICTED TO THE DISCHARGE RATES DEFINED IN THAT REPORT. BASIN A-1 OF THE REPORT CONTAINS THE SITE AND IS RESTRICTED TO A DISCHARGE 3.93 CFS/ACRE.

DEVELOPED CONDITION
THE SITE WILL BE IMPROVED WITH A SCHOOL. THE MAJORITY OF THE SITE RUNOFF (BASIN A) WILL BE ROUTED TO THE POND DEPICTED TO RESTRICT DISCHARGE FROM THIS SUB-BASIN TO 15.61 CFS DISCHARGED TO VENTANA RD. DISCHARGE FROM THE POND WILL BE CONTROLLED WITH A CHANNEL WEIR AND COMBINED WITH THE REMAINING RUNOFF FOR A PEAK FLOW OF 16.28 CFS.

METHODOLOGY
THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE WEIGHTED E METHOD..

PRECIPITATION
THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 1 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, CHAPTER 6.

EQUATIONS:
WEIGHTED E = $E_a A_a + E_b A_b + E_c A_c + E_d A_d / (\text{Total Area})$ WHERE FOR 100-YEAR, 6-HOUR STORM(ZONE 1)

FLOW = $Q_a * A_a + Q_b * A_b + Q_c * A_c + Q_d * A_d$

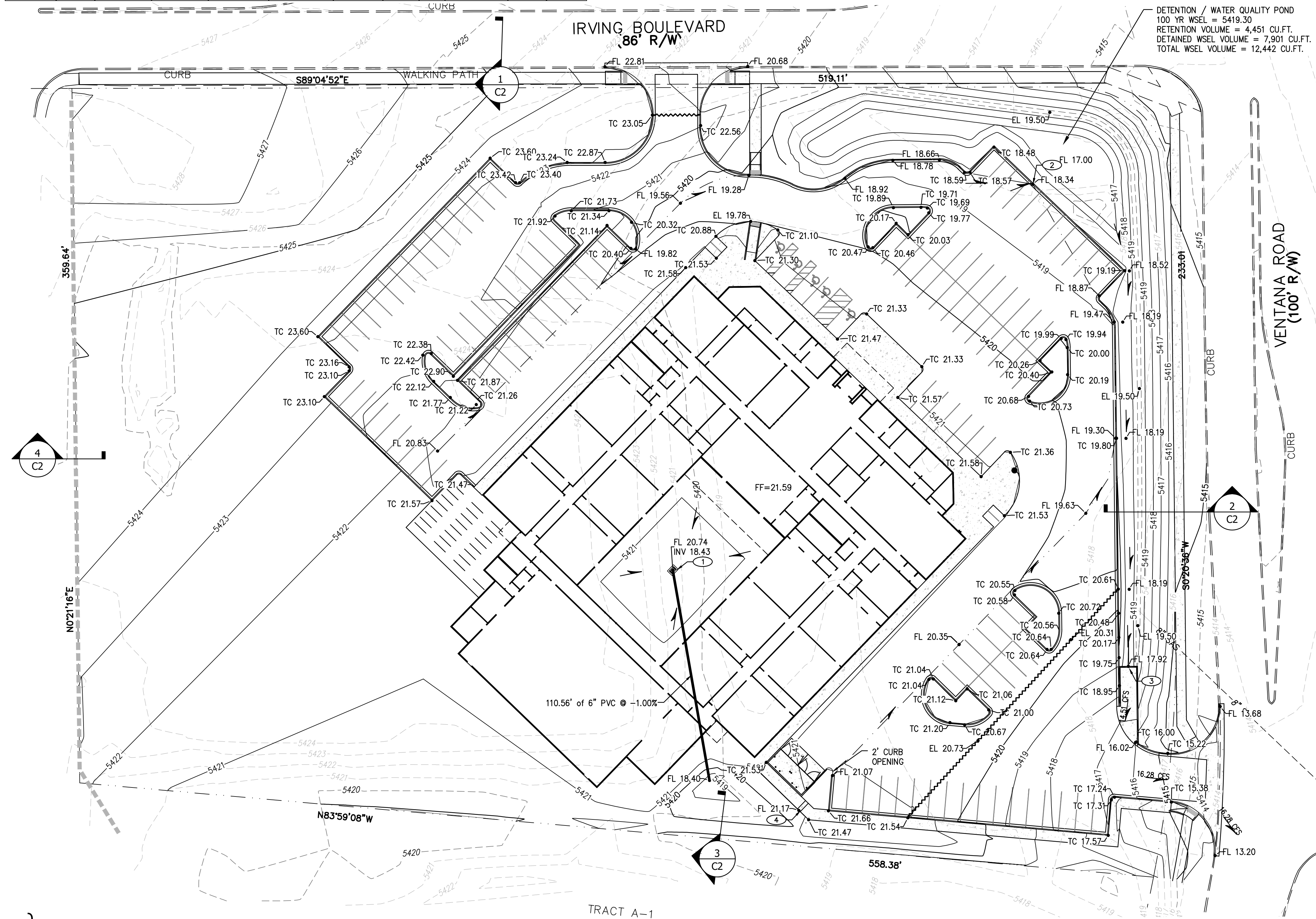
$E_a = 0.55$ $Q_a = 1.54$
 $E_b = 0.73$ $Q_b = 2.16$
 $E_c = 0.95$ $Q_c = 2.87$
 $E_d = 2.24$ $Q_d = 4.12$

BASIN	AREA (sf)	TREATMENT A % sf	TREATMENT B % sf	TREATMENT C % sf	TREATMENT D % sf	WEIGHTED E	VOLUME (cu.-ft.)	FLOW (cfs)	ALLOWED FLOW (cfs)	CFS/AC (cfs)	ALLOWED (cfs/ac)
EXISTING	217800	100%	217800	0%	0	0%	0	0.6200	11253	8.55	19.65
PROPOSED A	190179	26%	48954	17%	32636	0%	0	57%	108589	1.6273	25789
PROPOSED B	27621	0%	0	68%	18774	0%	0	32%	8847	1.2137	2794
PROP. TOT.	217800	22%	48954	24%	51410	0%	0	54%	117436	1.2137	28583

REQUIRED WATER QUALITY VOLUME

SITE DRAINAGE AS DEPICTED ON THIS PLAN SHALL BE MAINTAINED.

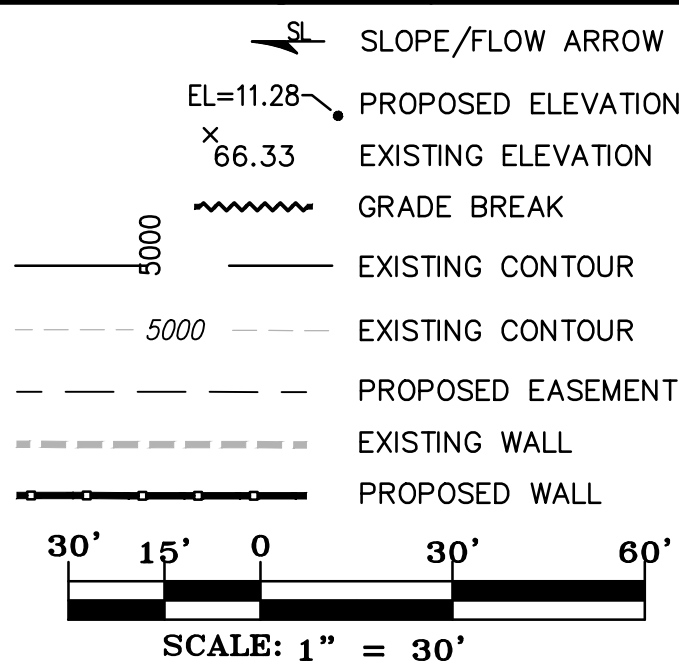
SITE DEPICTED HEREON SHALL BE RESPONSIBLE FOR MAINTAINING WATER QUALITY RUNOFF RETENTION ON THE SITE IMMEDIATELY PRIOR TO DISCHARGE. THE VOLUME SHALL BE EQUAL TO: IMPERVIOUS AREA * 0.42/12 IN CUBIC FEET.
IMPERVIOUS AREA = 117,436 SQ.FT.
REQUIRED VOLUME = 117,436 * 0.42/12 = 4,110 CU.FT.
VOLUME PROVIDED = 4,541 CU.FT.



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 (CITY) ACCEPTANCE OF ANY PROJECT.

LEGEND



CONSTRUCTION NOTES

THE ENGINEER HAS UNDERTAKEN LIMITED FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UNDERGROUND UTILITY LINES. MAKES NO REPRESENTATION PERTAINING THERETO AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY, AND PRESERVE ANY AND ALL EXISTING UTILITIES. THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE UTILITIES, COMPLYING WITH "BLUE STAKES" PROCEDURES, OR OTHERWISE.

THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE INTENDED FOR USE ON THIS PROJECT AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF THE GROUP. IN THE EVENT OF UNAUTHORIZED USE, THE USER ASSUMES ALL RESPONSIBILITY AND LIABILITY WHICH RESULTS.



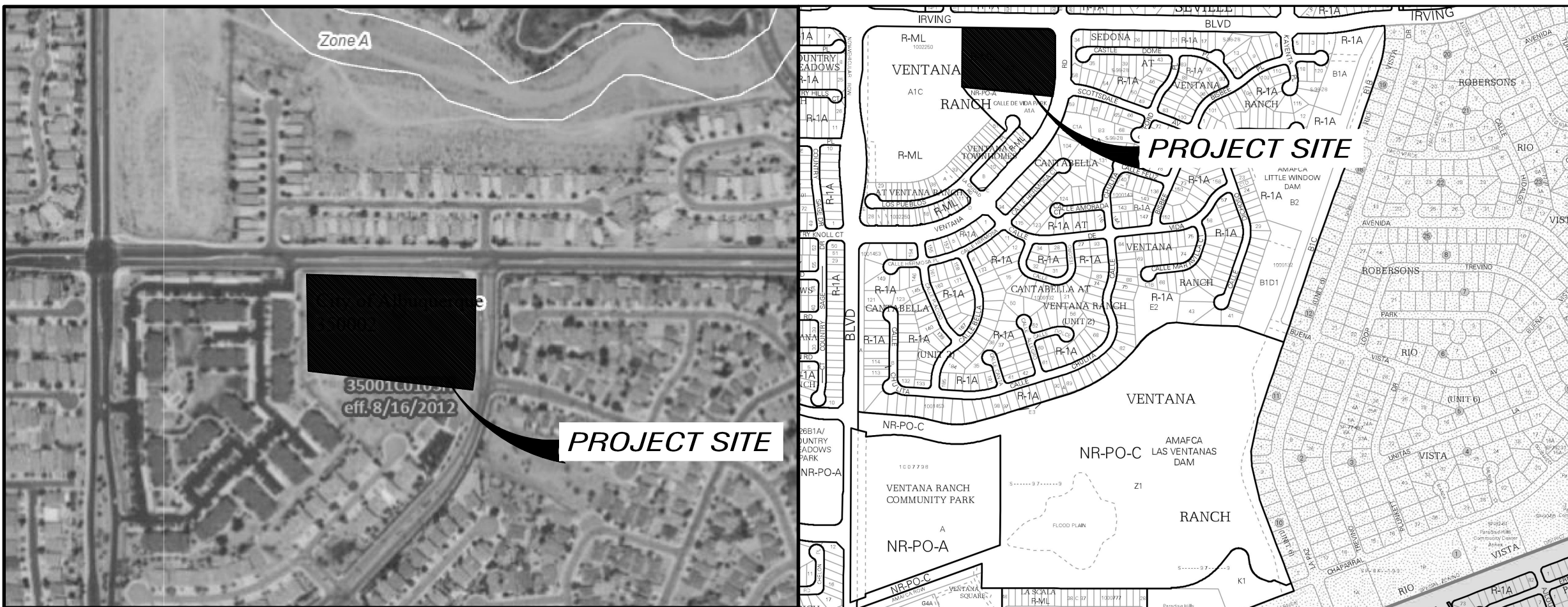
DEVELOPMENT MANAGEMENT CONSULTANTS

PROFESSIONAL CONSTRUCTION MANAGERS & CONSULTING ENGINEERS

9320 Menaul Blvd. NE, ste. D
Albuquerque, NM 87112

DMC

Office: (505) 296-7100
Fax: (505) 296-7105



FIRM MAP NO. 35001C0103H

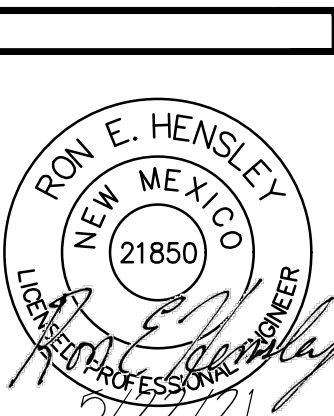
VICINITY MAP B-10-Z

GENERAL NOTES

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREIN, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION, UPDATE NO 8.
- ANY EROSION PROTECTION SPECIFIED ON THIS PLAN IS THE MINIMUM RECOMMENDED. THE OWNER IS RESPONSIBLE FOR INCORPORATING EROSION RESISTANT LANDSCAPING ON AREAS WHERE EROSION MAY OCCUR SUCH AS SLOPES AND SWALES. THE OWNER IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL FEATURES NECESSARY TO PRESERVE THE DESIGN INTENT OF THE GRADING PLAN.
- THE DRAINAGE INFRASTRUCTURE SHOWN ON THIS PLAN IS THE RESPONSIBILITY OF THE PROPERTY OWNER.
- ALL DISTURBED AREAS OUTSIDE THE BUILDING PAD MUST BE RESEEDING OR LANDSCAPED.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS AND EXISTING PAYEMENT. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.

KEYED NOTES

- TYPE "D" DROP INLET AREA DRAIN
- 4 - 2' CURB OPENINGS
- DISCHARGE WEIR AND SPILLWAY PER DETAIL 5/C2
- SIDEWALK CULVERT



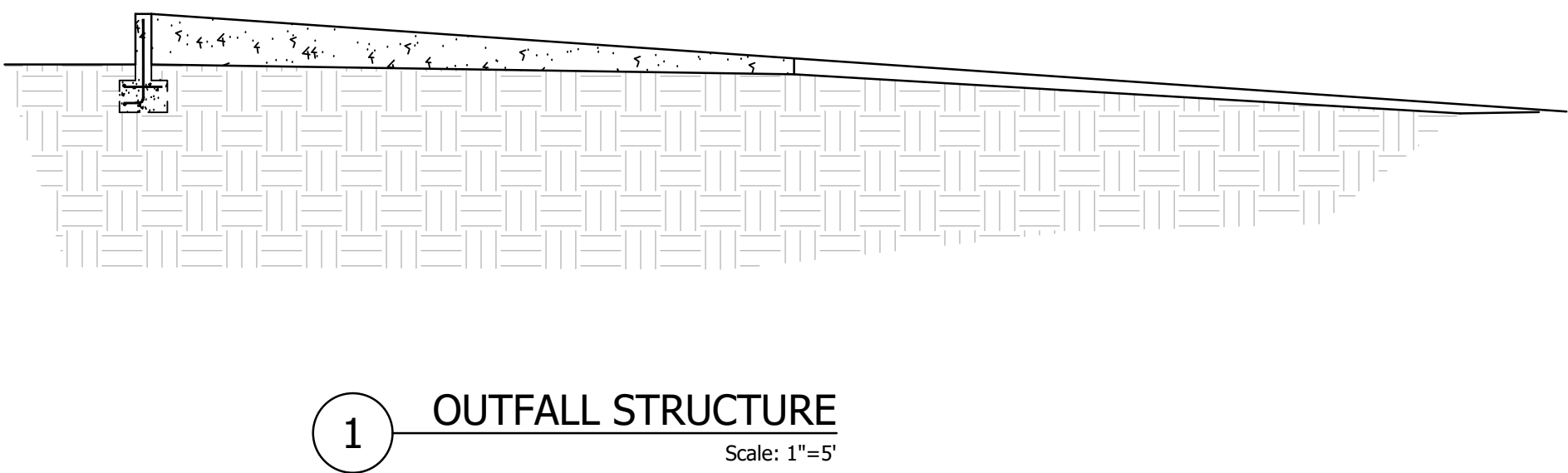
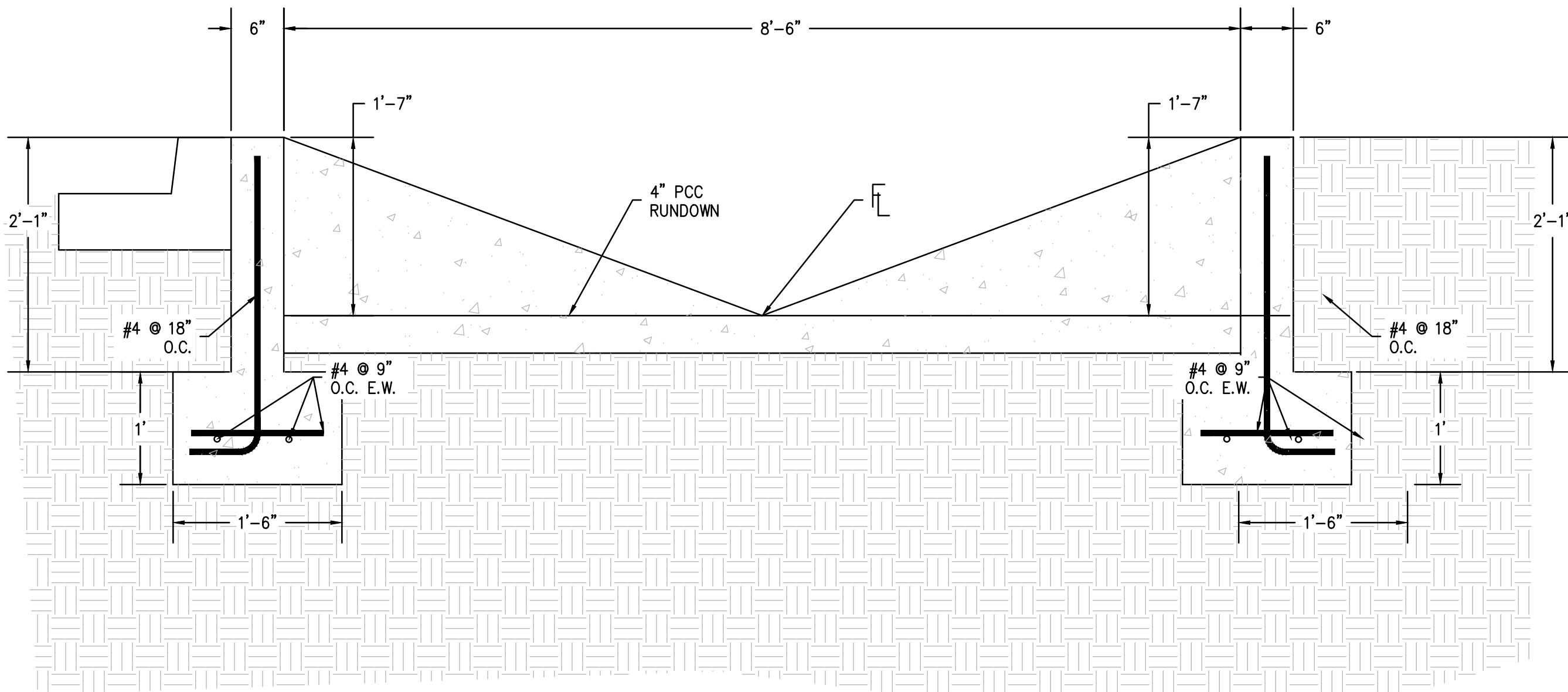
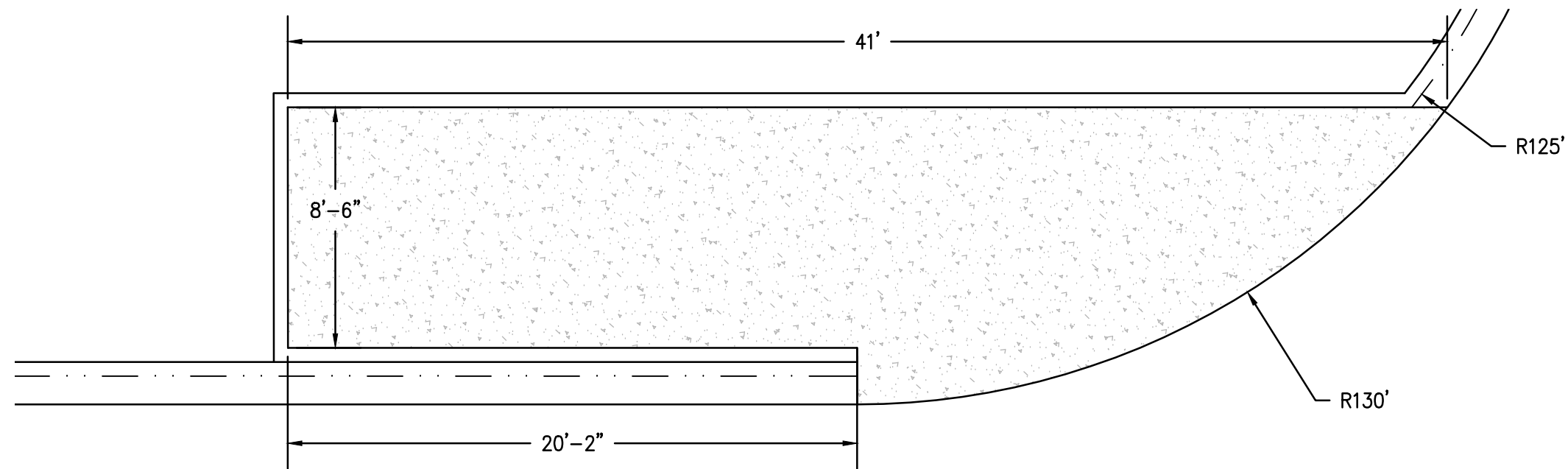
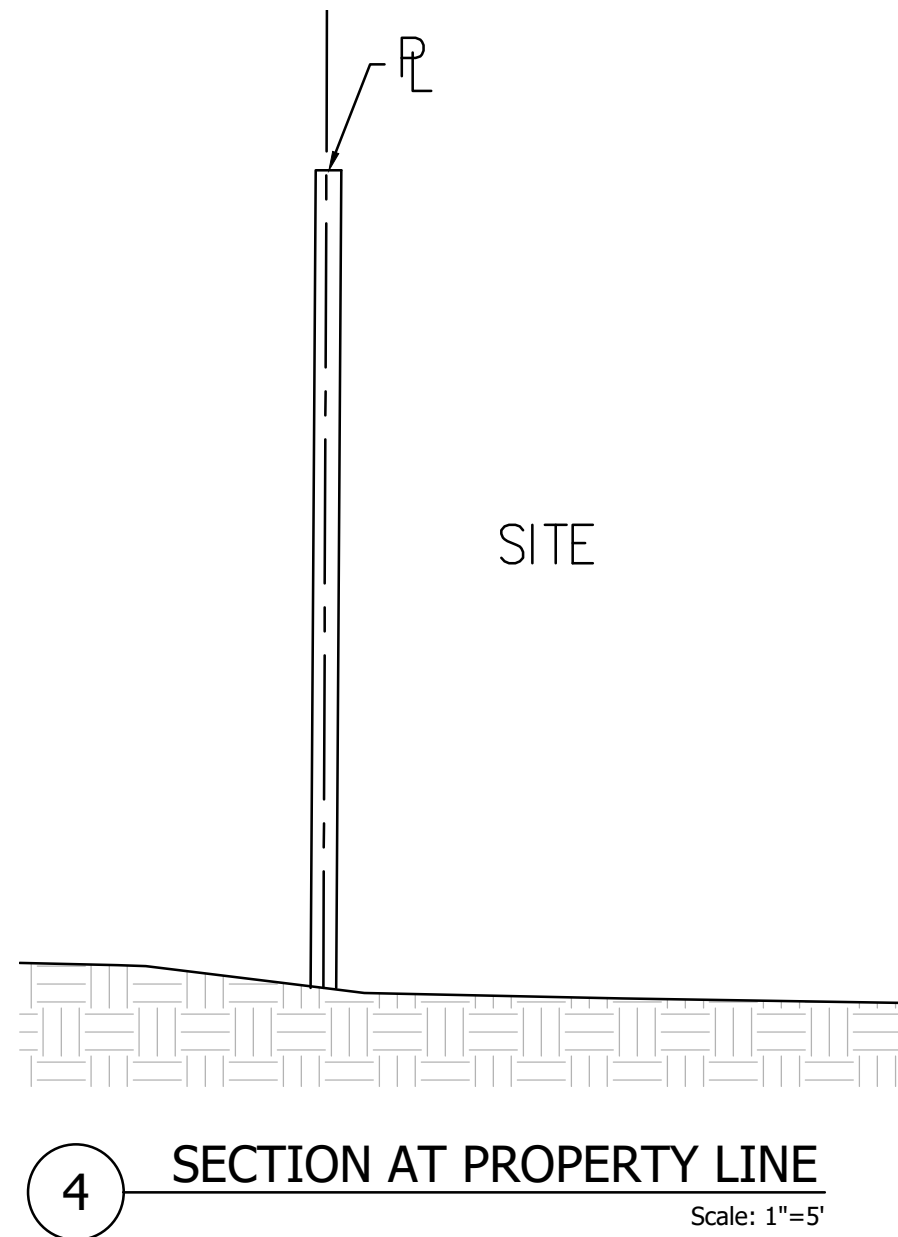
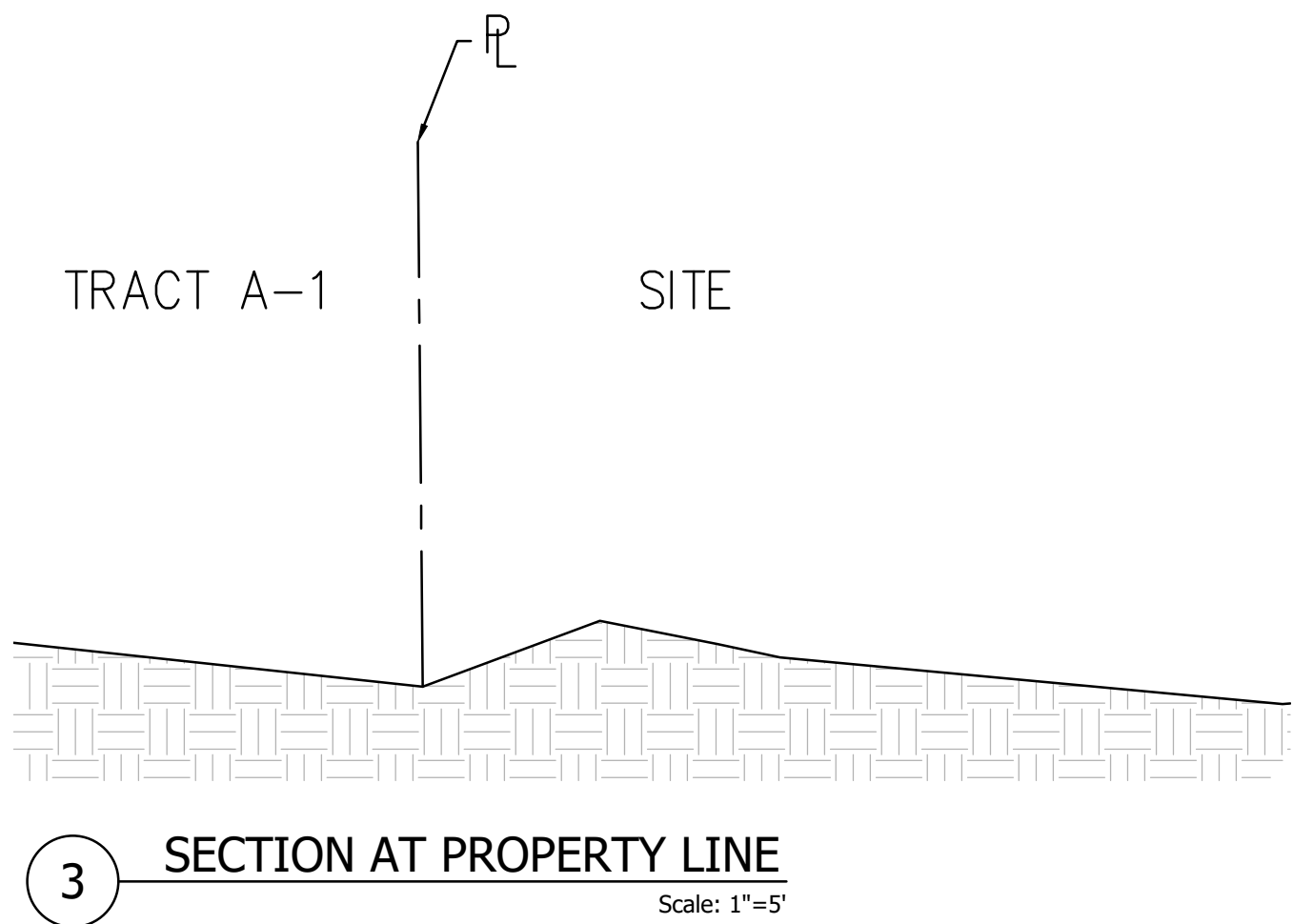
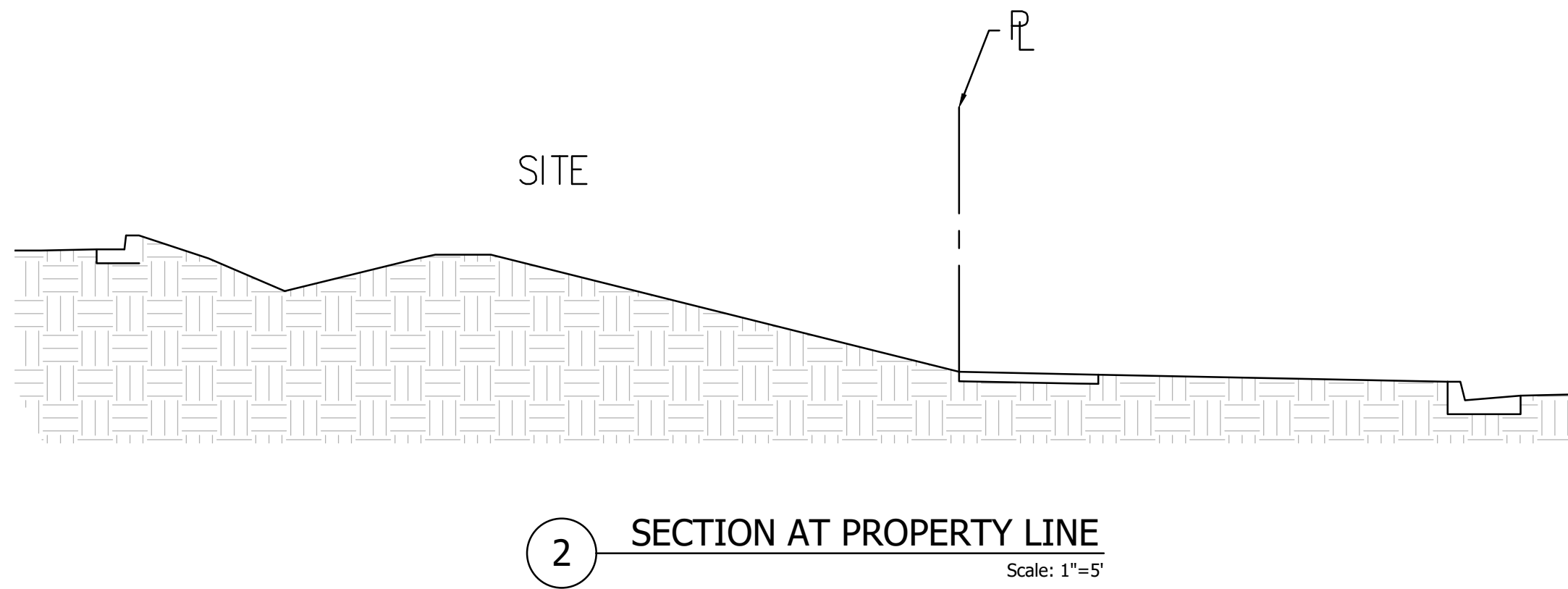
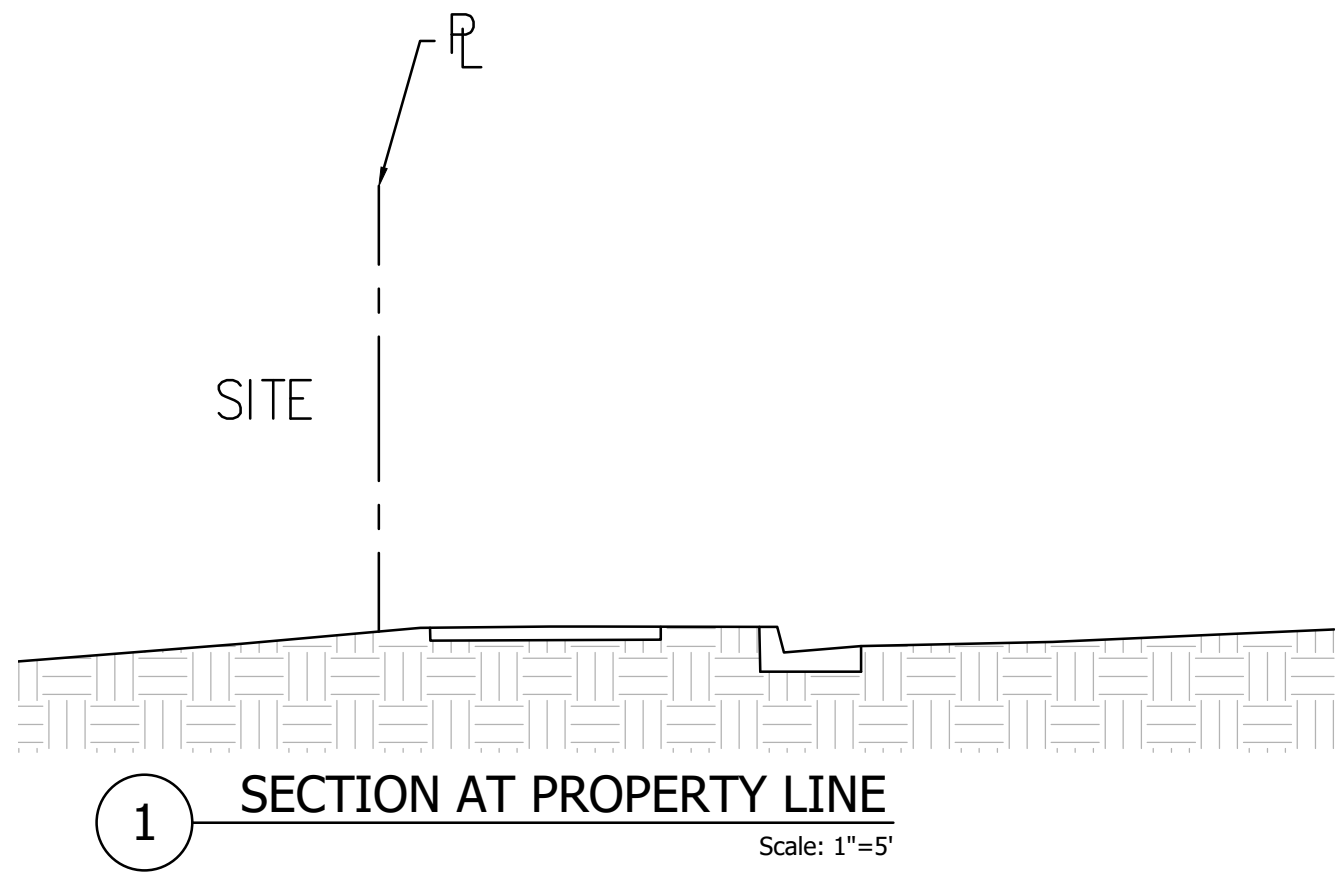
1. THIS SET OF DRAWINGS CONTAINS A WHOLE SET OF THE SOLE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO THEM BY THE CLIENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO THEM BY THE CLIENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE INFORMATION PROVIDED TO THEM BY THE CLIENT.

PROJECT ADDRESS:
6441 VENTANA RD. N.W.
ALBUQUERQUE, NM

PROJECT NAME:
SAMS ACADEMY

PROJECT NUMBER:
PROJECT PROGRESS:
PERMIT
DRAWN BY:
REH
CHECKED BY:
REH / REH
DATE:
MAY 22, 2021
SCALE:
AS NOTED
SHEET:

C 1



1. THIS SET OF DRAWINGS EXIST AS A WHOLE. IF THE SOLE CONTRACTOR INVOLVED IN THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE DRAWINGS AS SUCH. EACH SHEET OF THE DRAWINGS SHALL BE TO THE CONTRACTOR'S OWNERS TO THEIR RESPECTIVE DISCIPLINES.
2. DUE TO POTENTIAL INCONSISTENCIES DURING PLAN INCORPORATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND NOT RECONSTRUCTED.

PROJECT ADDRESS
**6441 VENTANA RD. N.W.
ALBUQUERQUE, NM**
CLIENT'S NAME

DRAWING NAME
SITE DETAILS
PROJECT NAME
SAMS ACADEMY

PROJECT NUMBER
PROJECT PROGRESS
PERMIT
DRAWN BY
REH
CHECKED BY
REH / REH
DATE
MAY 22, 2021
SCALE
AS NOTED
SHEET



THE HENSLEY ENGINEERING GROUP
300 BRANDING IRON RD. SE
RIO RANCHO, NEW MEXICO 87124
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DEVELOPMENT MANAGEMENT CONSULTANTS

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