

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

March 7, 2022

Shawn Biazar
SBS Construction and Engineering, LLC
10209 Snowflake Ct. NW
Albuquerque, NM 87114

RE: 112 Princeton Dr. SE
Grading & Drainage Plan
Engineer's Stamp Date: 02/02/22
Hydrology File: K16D094

Dear Mr. Biazar:

Based upon the information provided in your submittal received 02/04/2022, the Grading & Drainage Plans are approved for Building Permit, Grading Permit, and SO-19 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.
2. Please provide the Drainage Covenant with Exhibit A for the stormwater quality ponds per Article 6-15(C) of the DPM prior to Permanent Release of Occupancy. Please submit the original copies along with the \$ 25.00 recording fee check made payable to Bernalillo County to Marion G. Velasquez (mgvelasquez@cabq.gov) on the 4th floor of Plaza de Sol.

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



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 112 PRINCETON DR. SE GRADING PLAN **Building Permit #:** _____ **Hydrology File #:** _____

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: LOT 6, BLOCK 24, UNIVERSITY HEIGHTS ADDITION

City Address: 112 PRINCETON DR. SE

Applicant: SBS CONSTRUCTION AND ENGINEERING, LLC **Contact:** SHAWN BIAZAR

Address: 7632 WILLIAM MOYERS AVE., NE, ALBUQUERQUE, NM 87122

Phone#: (505) 804-5013 **Fax#:** (505) 897-4996 **E-mail:** AECLLC@AOL.COM

Other Contact: _____ **Contact:** _____

Address: _____

Phone#: _____ **Fax#:** _____ **E-mail:** _____

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) _____ RESIDENCE _____ DRB SITE ☒ ADMIN SITE

IS THIS A RESUBMITTAL? _____ Yes ☒ No

DEPARTMENT _____ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☒ GRADING PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ 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: 2-3-2022 **By:** SHAWN BIAZAR

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

Location

Lot 6, Block 24, University Heights Addition is located at 112 Princeton SE Albuquerque NM 87106. See attached portion of Vicinity Map K-16-Z for exact location.

Purpose

The purpose of this drainage report is to present a grading and drainage solution for the proposed buildings.

Existing Drainage Conditions

This lot is very flat and drains from north to south. No offsite runoff enters this site.

Proposed Conditions and On-Site Drainage Management Plan

The drainage patterns will remain the same. The additional runoff volume generated by this project garage will be retained on site. The total volume requirement under proposed conditions is 909.43 cf based on the 100-yr/10-day volume. Retention volume provided is 1007.67 cf. First Volume requirement is (0.42/12*3,585.50) 125.49 cf

VOLUME CALCULATIONS FOR 10 DAY STORM

BASIN	AREA (SF)	AREA (AC)	AREA (MI ²)
ON-SITE	7,171.00	0.16462	0.000257

$$E = \frac{EA(AA) + EB(AB) + EC(AC) + ED(AD)}{AA + AB + AC + AD}$$

$$V-360 = E (AA + AB + AC + AD)$$

$$EA = 0.62$$

$$EB = 0.80$$

$$EC = 1.03$$

$$ED = 2.33$$

$$P-60 = 1.78$$

$$P-360 = 2.29$$

$$P-1440 = 2.59$$

$$P-10 \text{ Day} = 3.62$$

EXISTING CONDITIONS	PROPOSED CONDITIONS
AA = 0.00%	AA = 0.00%
AB = 100.00%	AB = 10.00%
AC = 0.00%	AC = 40.00%
AD = 0.00%	AD = 50.00%
$E = 0.80 \text{ IN}$	$E = 1.66 \text{ IN}$
$V-360 = 478.07 \text{ CF}$	$V-360 = 990.29 \text{ CF}$
$AD = 0.0 \text{ AC}$	$AD = 0.08231 \text{ AC}$
$V-10 \text{ DAY} = 478.07 \text{ CF}$	$V-10 \text{ DAY} = 1,387.59 \text{ CF}$

$$V \text{ (REQUIRED)} = 990.29 - 478.07 = 512.22 \text{ CF USING } V-360$$

$$V \text{ (REQUIRED)} = 1,387.50 - 478.07 = 909.43 \text{ CF USING } V-10 \text{ DAY}$$

FLOW CALCULATIONS

$$A = 1.71 \text{ CFS/AC}$$

$$B = 2.36 \text{ CFS/AC}$$

$$C = 3.05 \text{ CFS/AC}$$

$$D = 7.34 \text{ CFS/AC}$$

$$\text{TOTAL } QP = QPA*AA + QPB*AB + QPC*AC + QPD*AD$$

$$QP \text{ (HISTORICAL)} = 0.45 \text{ CFS}$$

$$QP \text{ (PROPOSED)} = 0.69 \text{ CFS}$$

PONDING VOLUME CALCULATION

PONDS A & B & C & D

$$\text{BOTTOM AREA (@ } 5179.75) = 50.57 \text{ SF}$$

$$\text{TOP AREA (@ } 5180.50) = 171.13 \text{ SF}$$

$$\text{DEPTH} = 0.75'$$

$$\text{POND VOLUME} = (171.13 + 50.57) / 2 * 0.75$$

$$\text{POND VOLUME} = 83.13 \text{ CF}$$

$$\text{PONDS TOTAL VOLUME} = 83.13 * 4 = 332.54 \text{ CF}$$

POND E

$$\text{BOTTOM AREA (@ } 5178.25) = 81.26$$

$$\text{TOP AREA (@ } 5180.25) = 295.43$$

$$\text{DEPTH} = 2.00'$$

$$\text{POND VOLUME} = (295.43 + 81.26) / 2 * 2$$

$$\text{POND VOLUME} = 376.69 \text{ CF}$$

$$\text{TOTAL VOLUME (A+B+C+D+E+F)} =$$

$$\text{VOL} = 332.54 + 376.69 + 298.44 = 1,007.67 \text{ CF}$$

POND F

$$\text{BOTTOM AREA (@ } 5178.80) = 51.80$$

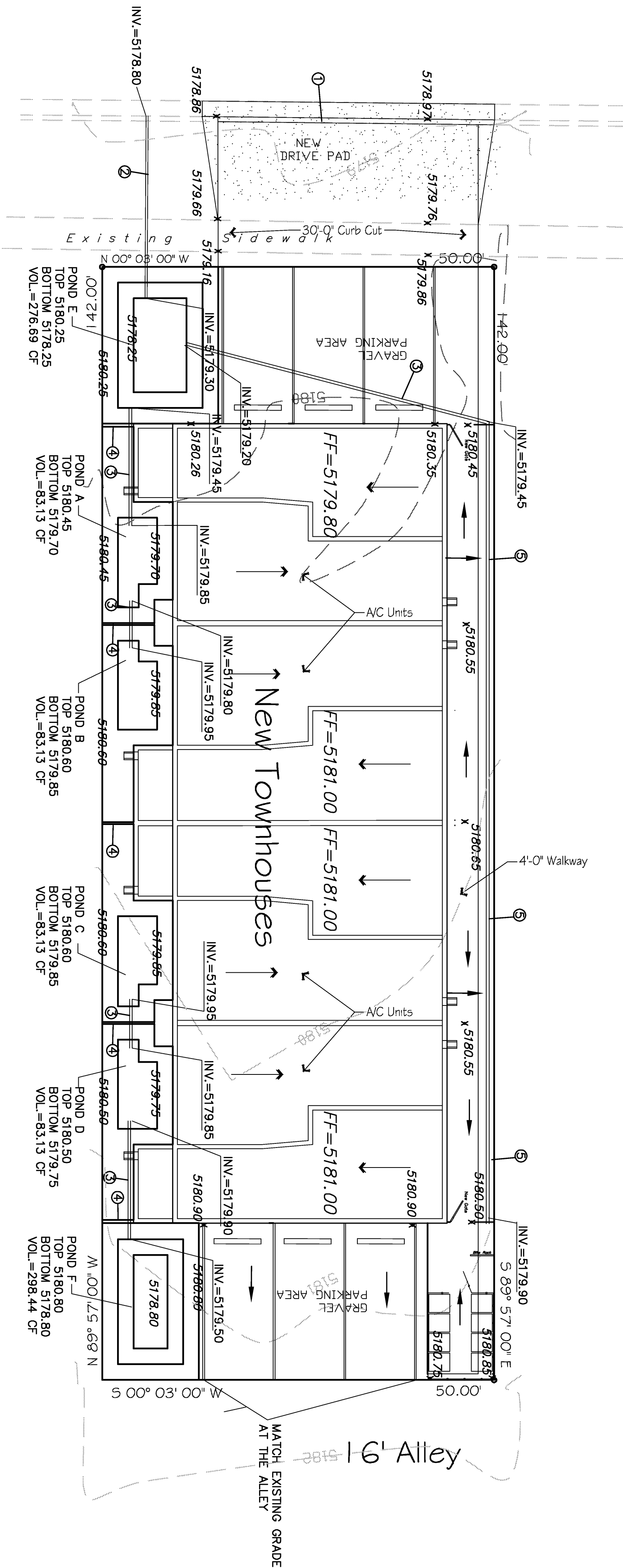
$$\text{TOP AREA (@ } 5180.80) = 246.64$$

$$\text{DEPTH} = 2.00'$$

$$\text{POND VOLUME} = (246.64 + 51.80) / 2 * 2.00'$$

$$\text{POND VOLUME} = 298.44 \text{ CF}$$

Princeton Dr. S.E.
(75' ROW)



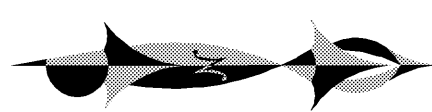
NOTICE TO CONTRACTOR
PRIVATE DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY (SO-19")

1. Build sidewalk culvert per COA STD DWG 2236. Work is permitted and inspected by DMD Construction Services Division.
2. An excavation permit will be required before beginning any work within City Right Of Way.
3. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health.
4. Prior to any excavation, the contractor must contact New Mexico One Call, dial "811" [or (505) 260_1990] for the location of existing utilities.
5. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
6. Backfill compaction shall be 95%.
7. Maintenance of the facility shall be the responsibility of the owner of the property being served.
8. Work on arterial streets may be required on a 24 hour basis.
9. For excavation and barricading inspections, contact DMD Construction Services Division.

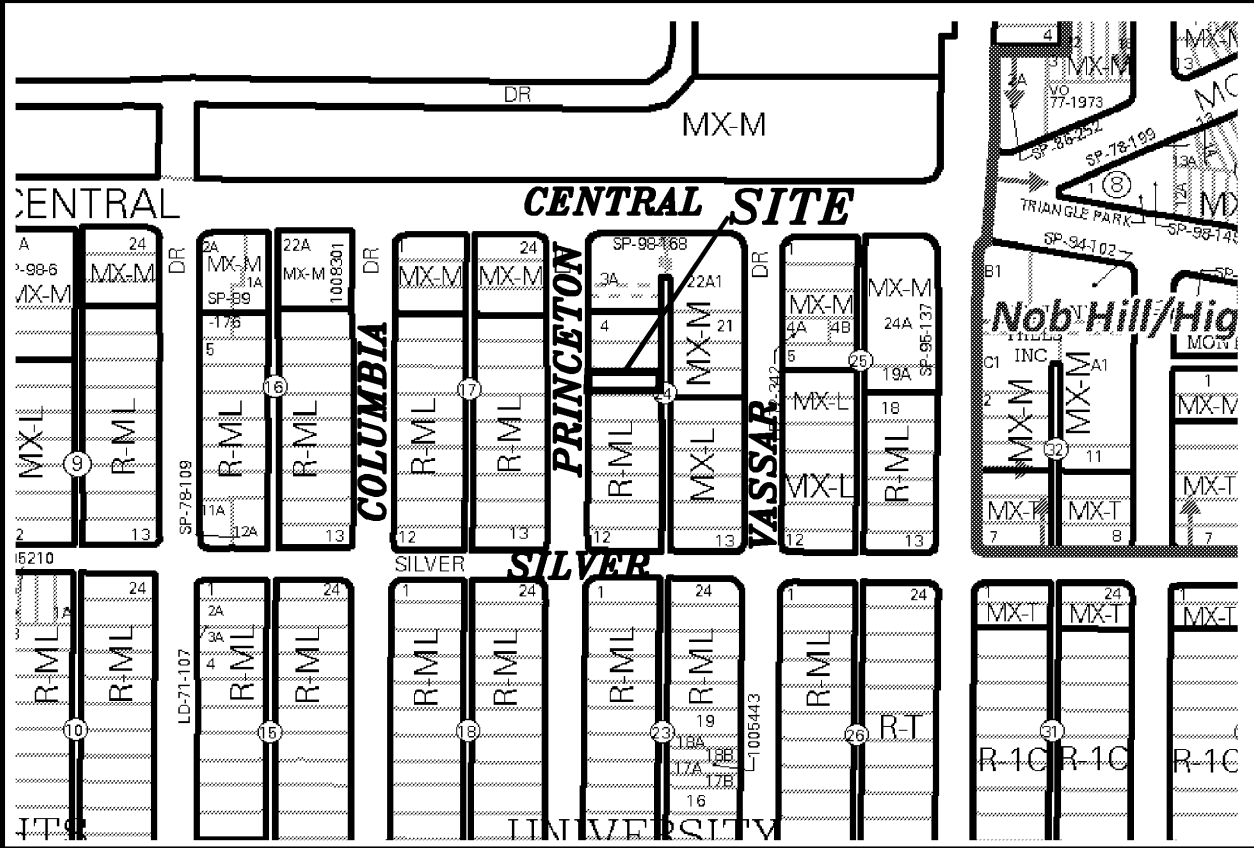
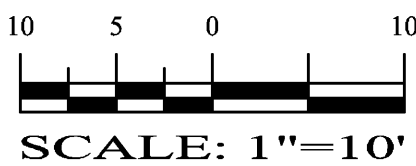
APPROVALS	NAME	DATE
INSPECTOR		

KEYED NOTES:

1. INSTALL NEW DRIVEPAD PER C.O.A. STD DWG 2425.
2. INSTALL 4" STORM DRAIN PIPE, SCHEDULE 40.
INSTALL CURB DRAIN PER C.O.A. STD DWG 2235.
3. INSTALL 4" STORM DRAIN PIPE, SCHEDULE 40.
4. DIVIDING WALL, PVC SLAT.
5. 4" PERFERATED PIPE WITH LINER AND GRAVEL ON TOP

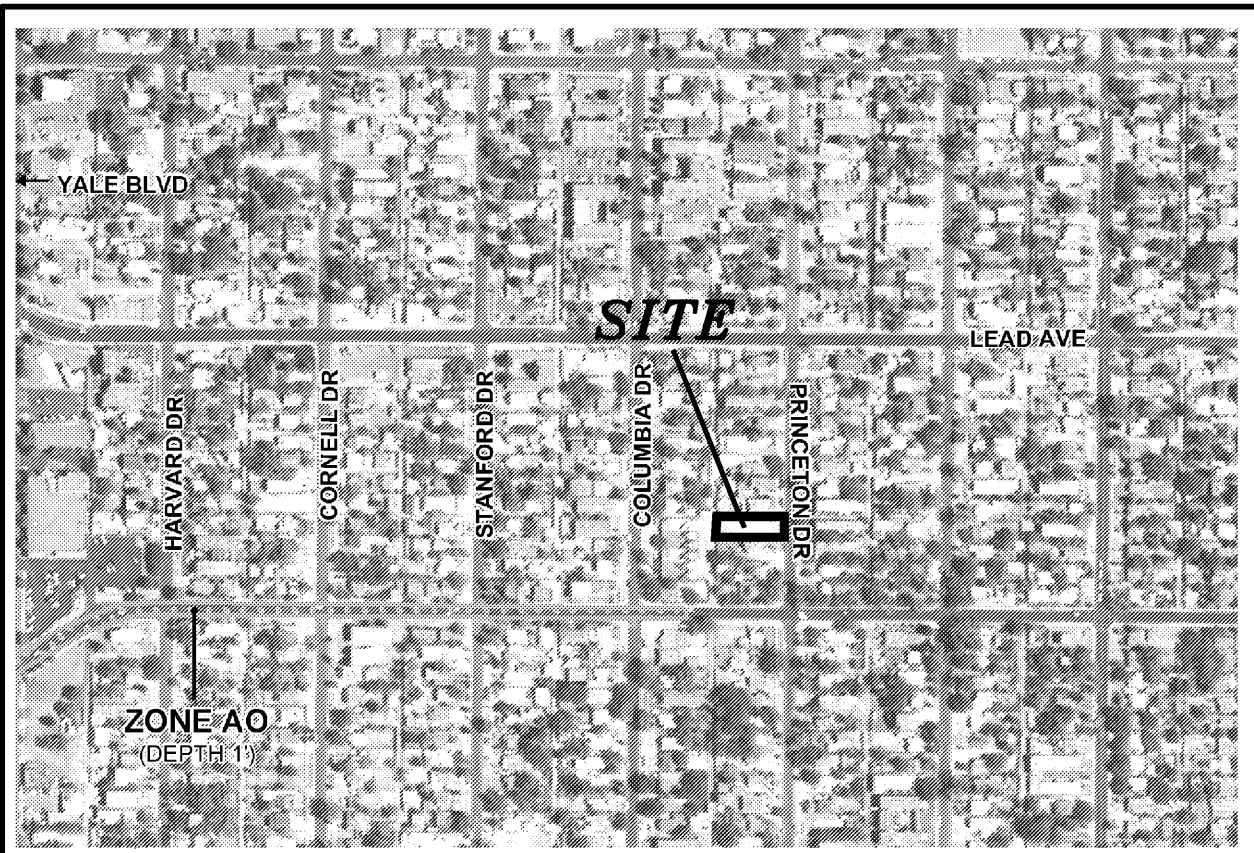


GRAPHIC SCALE



VICINITY MAP:

K-16-Z



FIRM MAP:

35001C0353H

LEGAL DESCRIPTION:

LOT 6, BLOCK 24, UNIVERSITY HEIGHTS ADDITION

ADDRESS: 112 PRINCETON DR., SE ALBUQUERQUE, NM 87106

LEGEND

---	-5030-	EXISTING CONTOUR (MAJOR)
---	-5029-	EXISTING CONTOUR (MINOR)
---		BOUNDARY LINE
X 42.70		PROPOSED SPOT ELEVATION
X 5029.16		EXISTING GRADE
X 5075.65		EXISTING FLOWLINE ELEVATION
FL		
█ █ █ █ █ █		PROPOSED RETAINING WALL
BC=41.30		BOTTOM OF CHANEL
TF=42.00		TOP OF FOOTING
TRW=45.12		TOP OF RETAINING WALL
HP		HIGH POINT
42.40		AS-BUILT GRADES
42.40		AS-BUILT SPOT ELEVATIONS



REZA AFAGHPOUR
P.E. #11814

112 PRINCETON DR., SE
GRADING PLAN

DRAWING:	DRAWN BY:	DATE:	SHEET #
202138GD.DWG	SH-B	1-25-2022	1