

CITY OF ALBUQUERQUE

Planning Department
Alan Varela, Director



Mayor Timothy M. Keller

February 25, 2025

Verlyn Miller, P.E.
Miller Engineering Consultants, Inc
3500 Comanche NE Bldg. F
Albuquerque, NM 87107

**RE: All Saints Lutheran Church
4800 All Saints Rd NW
Grading and Drainage Plan
Engineer's Stamp Date: 2/5/25
Hydrology File: C13D201
Case # HYDR-2025-00023**

Dear Mr. Miller:

Based upon the information provided in your submittal received 02/05/2025, the Grading and Drainage Plan **is approved** for Grading Permit. Please attach a copy of this approved plan in the construction sets for Building Permit processing.

PO Box 1293

PRIOR TO CERTIFICATE OF OCCUPANCY:

Albuquerque

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

NM 87103

2. Please provide the executed paper Drainage Covenant (latest revision) printed on one-side only with Exhibit A and a check for **\$25.00** made out to "**Bernalillo County**" for the detention pond per Article 6-15(C) of the DPM to Hydrology for review at Plaza de Sol.

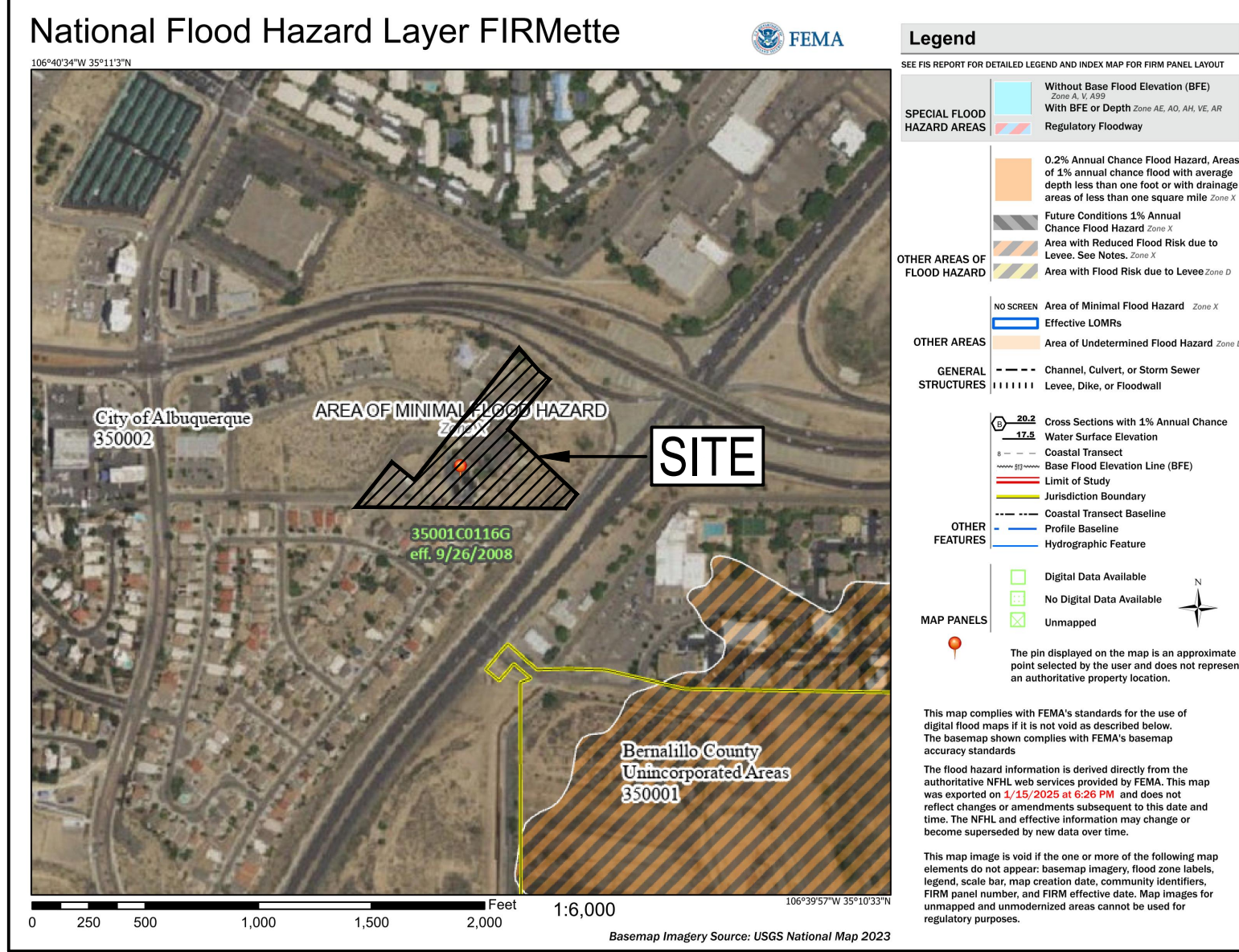
www.cabq.gov

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.

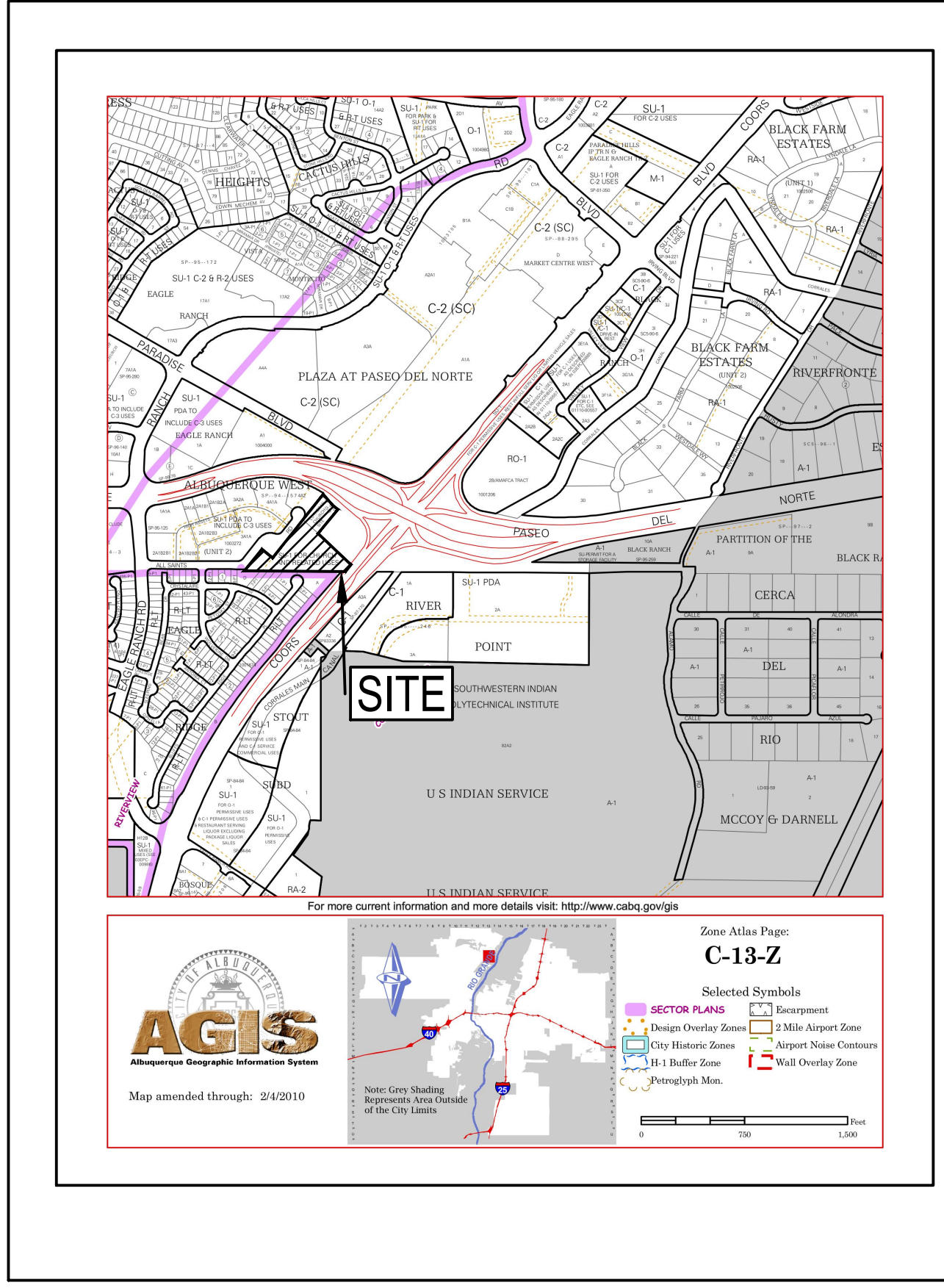
Sincerely,

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



D4 FLOOD ZONE MAP
SCALE: NOT TO SCALE

35001C0116G



D4 VICINITY MAP
SCALE: NOT TO SCALE

DRAINAGE REPORT

SITE LOCATION

The existing site is a parcel of land located southwest of Coors and Paseo Del Norte. The site can be accessed from Eagle Ranch Road and All Saints Road NW.

EXISTING CONDITIONS

The existing site has experienced flooding along the south side of the building that has caused erosion and failure of a retaining wall located along the south side property boundary. The area is partially developed with the church building, sidewalks and landscaping. The site slopes to the south and to the east toward Coors Boulevard. The site does not lie within a 100-year FEMA floodplain.

PROPOSED CONDITIONS

The proposed project will consist of a new storm drainage system to collect three (3) roof drains on the south side of the building that contributed to the cause of the erosion and damage to the retaining wall. This storm drain system will collect the three roof drains and route these flows east to a small retention pond located on the east side of the site. The roof area that drains to the three roof drains is denoted as Basin A and is estimated at 400sf based on site visits and available mapping. Hydrology calculations for this area are indicated on this sheet.

CONCLUSIONS

When fully developed as indicated on the grading and drainage plan, runoff from Basin A will discharge into the new storm drainage system and eventually to the small retention pond located on the east side of the site. The retention pond has a capacity of 1700 cubic feet, which is more than the estimated volume of 871 cubic feet from Basin A during the 100-year, 24-hour event.

GENERAL NOTES:

- EXISTING TOPOGRAPHIC DATA SHOWN ON THESE PLANS WAS PROVIDED BY TERRA LAND SURVEYS, LLC, CORRALES, NM DECEMBER 2024. MILLER ENGINEERING CONSULTANTS HAS UNDERTAKEN NO FIELD VERIFICATION OF THIS INFORMATION.
- A.G.R.S. BENCHMARK "10-C12 2003". PUBLISHED ELEVATION OF THE BENCHMARK IS 5095.033 FEET, NAVD 1988 DATUM. CONTOUR INTERVAL IS ONE FOOT.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES DURING THE CONSTRUCTION PHASE.
- CONTRACTOR SHALL OBTAIN A GRADING PERMIT FROM THE CITY OF ALBUQUERQUE, PRIOR TO ANY GRADING OR CONSTRUCTION.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION CONTRACTOR MUST CONTACT LINE LOCATING SERVICE 260-1990 FOR LOCATION OF EXISTING UTILITIES.
- ALL EMBANKMENTS SHALL BE PLACED AND COMPACTED IN LIFTS OF MAXIMUM OF 8". THE EMBANKMENTS SHALL BE WETTED AND COMPACTED TO 95% OPTIMUM DENSITY PER ASTM D1557 AND 95% UNDER ALL STRUCTURES INCLUDING DRIVEWAYS AND PARKING LOTS.
- THE CONTRACTOR SHALL FIELD VERIFY LOCATION AND SIZE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE STORM DRAINAGE REGULATIONS. ALL WORK PERFORMED SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF ALBUQUERQUE "GRADING AND DRAINAGE DESIGN REQUIREMENTS AND POLICIES FOR LAND DEVELOPMENT."
- THE OWNER, CONTRACTOR AND/OR BUILDER SHALL COMPLY WITH ALL APPROPRIATE LOCAL, STATE AND FEDERAL REGULATIONS AND REQUIREMENTS.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE AND REASONABLE MEASURES TO PREVENT SEDIMENT OR POLLUTANT LADEN STORM WATER FROM EXITING THE SITE DURING CONSTRUCTION. STORMWATER MAY BE DISCHARGED IN A MANNER, WHICH COMPLIES WITH THE APPROVED GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL TAKE ALL APPROPRIATE MEASURES TO PREVENT THE MOVEMENT OF CONSTRUCTION RELATED SEDIMENT, DUST, MUD, POLLUTANTS, DEBRIS, WASTE, ETC FROM THE SITE BY WIND, STORM FLOW OR ANY OTHER METHOD EXCLUDING THE INTENTIONAL, LEGAL TRANSPORTATION OF SAME IN A MANNER ACCEPTABLE BY THE CITY.
- THE CONTRACTOR SHALL NOT DISTURB AREAS OUTSIDE THE AREAS SHOWN AS "SLOPE LIMITS" ON THE GRADING AND DRAINAGE PLAN.
- SEE ARCHITECTURAL DRAWINGS FOR SIDEWALK AND HANDICAPPED RAMPS, DETAILS AROUND THE BUILDING.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE ANY SPOT ELEVATIONS ON THE GRADING AND DRAINAGE PLAN WHICH APPEAR TO BE AMBIGUOUS OR DO NOT MEET THE INTENT OF THE GRADING AND DRAINAGE PLAN.
- THE CONTRACTOR SHALL CONTACT THE PROJECT ENGINEER FOR CLARIFICATION IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DOES NOT MEET ADA ACCESSIBILITY REQUIREMENTS. ALL SIDEWALKS SHALL HAVE A MAXIMUM CROSS SLOPE OF 2.0%. ALL SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 5.0%. AND ALL RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 15:1.
- ALL SIDEWALKS AND CONCRETE FLATWORK SHALL HAVE A MINIMUM OF 0.5% SLOPE. CONTRACTOR SHALL CONTACT PROJECT ENGINEER IF THERE ARE SIDEWALKS OR CONCRETE FLATWORK WHICH DO NOT MEET THIS REQUIREMENT.
- THE CONTRACTOR SHALL SUBMIT MATERIAL SUBMITTALS, CUT SHEETS AND SHOP DRAWINGS FOR ALL CIVIL RELATED ITEMS FOR REVIEW PRIOR TO CONSTRUCTION.
- THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS (UPDATE 8, AMENDMENT 1)
- ALL EXISTING MANHOLES, VALVES AND METERS SHALL BE ADJUSTED TO NEW FINISH GRADE.
- ALL STORM DRAIN PIPE SHALL CONSIST OF A DOUBLE WALLED HDPE STORM DRAIN PIPE WITH WATER TIGHT JOINTS.

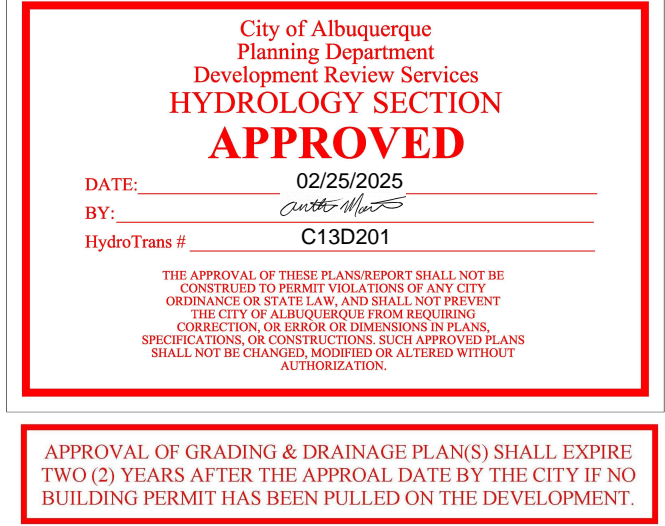
HYDROLOGY CALCULATIONS

HYDROLOGY									
Precipitation Zone 1 - 100-year Storm P(360) = 2.20 in P(1440) = 2.66									
Basin	Basin Area (Ac)	Land Treatment Factors				Ew (in)	V(100-6) (af)	V(100-24) (af)	Q(100) (cfs)
		A	B	C	D				
Existing Conditions									
A	0.09	0.00	0.00	0.00	0.09	2.24	0.017	0.020	0.37
Total	0.09								0.37
Proposed Conditions									
A	0.09	0.00	0.00	0.00	0.09	2.24	0.017	0.020	0.37
Total	0.09								0.37

WATER HARVEST AREA

WATER HARVEST AREA				
Pond Rating Table				
Side Slope				
Elev. (ft)	Area (sq ft)	Volume (ac-ft)	Cum Volume (ac-ft)	
4998	428	0.010	0	0
4999	813	0.019	0.014	0.014
5000	1340	0.031	0.025	0.039
5001	1525	0.035	0.033	0.072

$$SWQV (\text{BASIN A}) = 4,000 \text{ S.F.} * 0.42''/12 = 140 \text{ CF}$$

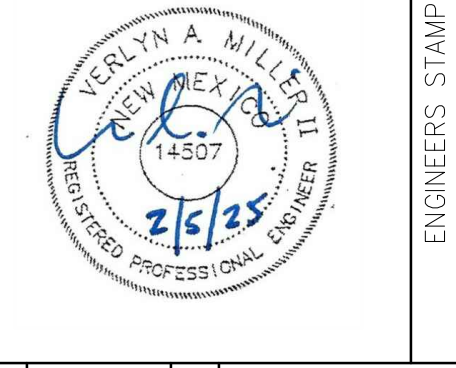


APPROVAL OF GRADING & DRAINAGE PLANS SHALL EXPIRE TWO (2) YEARS AFTER THE APPROVAL DATE BY THE CITY IF NO BUILDING PERMIT HAS BEEN PULLED ON THE DEVELOPMENT.

MILLER ENGINEERING CONSULTANTS
Engineers • Planners

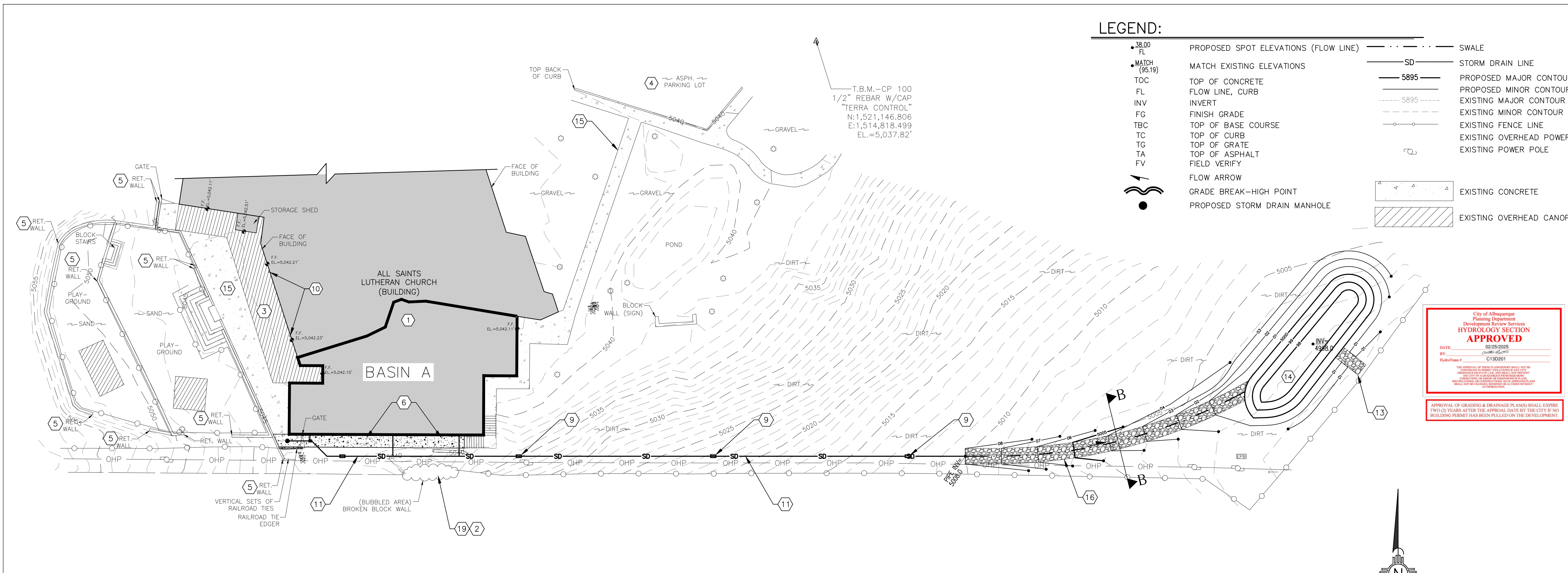
3500 COMANCHE NE
BLDG F
ALBUQUERQUE, NM 87107
(505)888-7500
(505)888-3600 (FAX)

DESIGNED	VAM	JOB # E-24-041
DRAWN	DLW	FILE C-100.dwg
CHECKED	VAM	DATE 02-05-2025



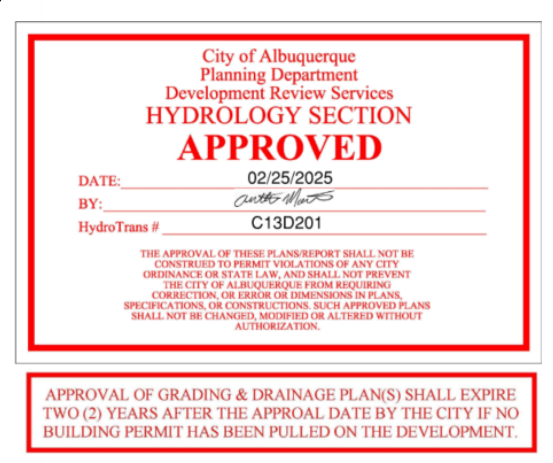
NEW MEXICO
BERNALILLO
ALL SAINTS LUTHERAN CHURCH
ALBUQUERQUE
HYDROLOGY

REVISION	DESCRIPTION	DATE	MARK

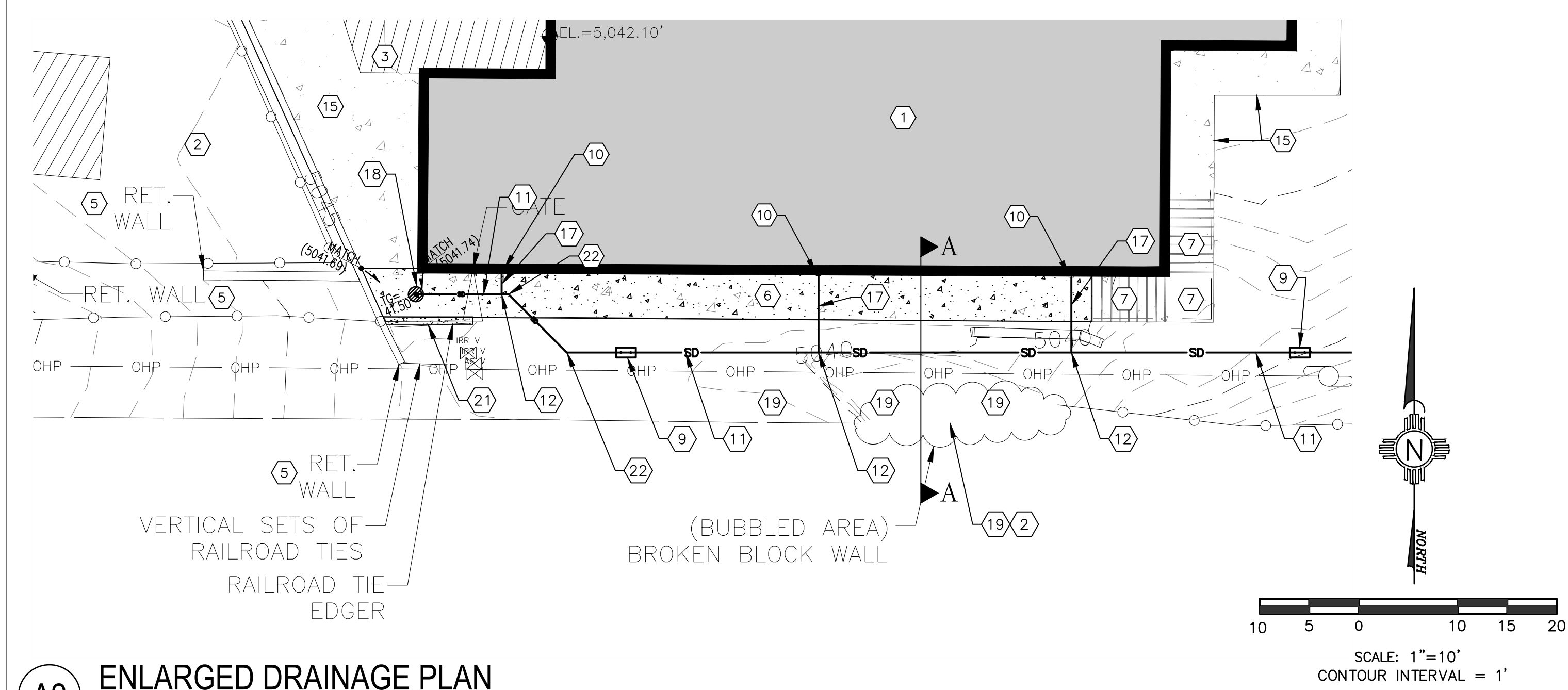


LEGEND:

• 38.00 FL	PROPOSED SPOT ELEVATIONS (FLOW LINE)	— — — — —	SWALE
• MATCH (95.19)	MATCH EXISTING ELEVATIONS	— SD —	STORM DRAIN LINE
— — — — —	TOP OF CONCRETE	— 5895 —	PROPOSED MAJOR CONTOUR
— — — — —	FLOW LINE, CURB	— 5895 —	PROPOSED MINOR CONTOUR
— — — — —	INVERT	— — — — —	EXISTING MAJOR CONTOUR
— — — — —	FINISH GRADE	— — — — —	EXISTING MINOR CONTOUR
— — — — —	TOP OF BASE COURSE	— — — — —	EXISTING FENCE LINE
— — — — —	TOP OF CURB	— — — — —	EXISTING OVERHEAD POWER
— — — — —	TOP OF GRATE	— — — — —	EXISTING POWER POLE
— — — — —	TOP OF ASPHALT	— — — — —	
— — — — —	FIELD VERIFY	— — — — —	
— — — — —	FLOW ARROW	— — — — —	
— — — — —	GRADE BREAK—HIGH POINT	— — — — —	EXISTING CONCRETE
— — — — —	PROPOSED STORM DRAIN MANHOLE	— — — — —	EXISTING OVERHEAD CANOPY



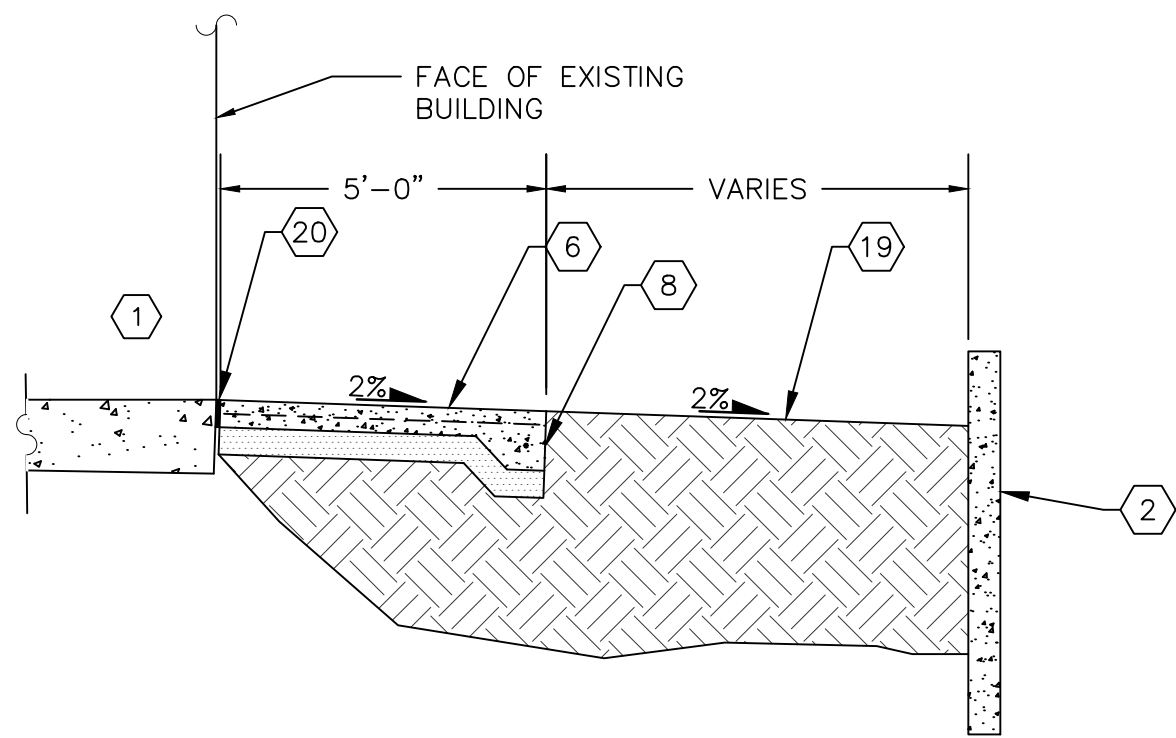
A1 OVERALL GRADING AND DRAINAGE PLAN
SCALE: 1"=20'



A2 ENLARGED DRAINAGE PLAN
SCALE: 1"=10'

KEYED NOTES:

- 1 SOUTHERN HALF OF EXISTING BUILDING.
- 2 EXISTING RETAINING WALL TO BE RECONSTRUCTED BY OTHERS.
- 3 EXISTING SHADE STRUCTURE.
- 4 EXISTING ASPHALT PARKING LOT.
- 5 EXISTING RETAINING WALLS.
- 6 REMOVE AND REPLACE EXISTING DAMAGED SIDEWALK. SEE DETAIL SHEET C-501.
- 7 EXISTING CONCRETE STAIRS AND LANDING TO BE REMOVED AND REPLACED BY OTHERS (AS NEEDED).
- 8 NEW TURN DOWN EDGE OF CONCRETE SIDEWALK. SEE DETAIL SHEET C-501.
- 9 NEW DOUBLE CLEAN OUT. SEE DETAIL SHEET C-501.
- 10 EXISTING DOWN SPOUT LOCATION. CONNECT DOWNSPOUT TO NEW 6" STORM DRAIN PIPE PER DETAIL SHEET C-501.
- 11 NEW 12" STORM DRAIN LINE AT 2% MINIMUM SLOPE.
- 12 NEW 12"x6" TEE.
- 13 RIP-RAP OVERFLOW SPILLWAY. CREST ELEV. 5000.0.
- 14 NEW STORM WATER RETENTION POND. INV=4998.0, TOP=5001.0 SEE DETAIL SHEET C-501.
- 15 EXISTING SIDEWALK TO REMAIN.
- 16 NEW 6" WIDE RIP-RAP DRAINAGE CHANNEL. SEE DETAIL SHEET C-501.
- 17 NEW 6" STORM DRAIN LINE AT 2% MINIMUM SLOPE. CONNECT TO NEW 12" SD LINE.
- 18 NEW 18" NYLOPLAST DRAIN BASIN. TG=41.50, INV=38.50. SEE DETAIL SHEET C-501.
- 19 BACKFILL SINK HOLE BEHIND WALL. SEE SECTION A-A THIS SHEET.
- 20 1" LONGITUDINAL REMOLDED BITUMINOUS EXPANSION JOINT WITH A SIKAFLEX SELF-LEVELING JOINT SEALANT TO CREATE A WATERTIGHT JOINT AT FACE OF BUILDING.
- 21 NEW 12" HIGH CONCRETE HEADER CURB. SEE DETAIL SHEET C-501.
- 22 NEW 12"x45" ELBOW.



SECTION A-A
N.T.S.

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ALL SAINTS LUTHERAN CHURCH
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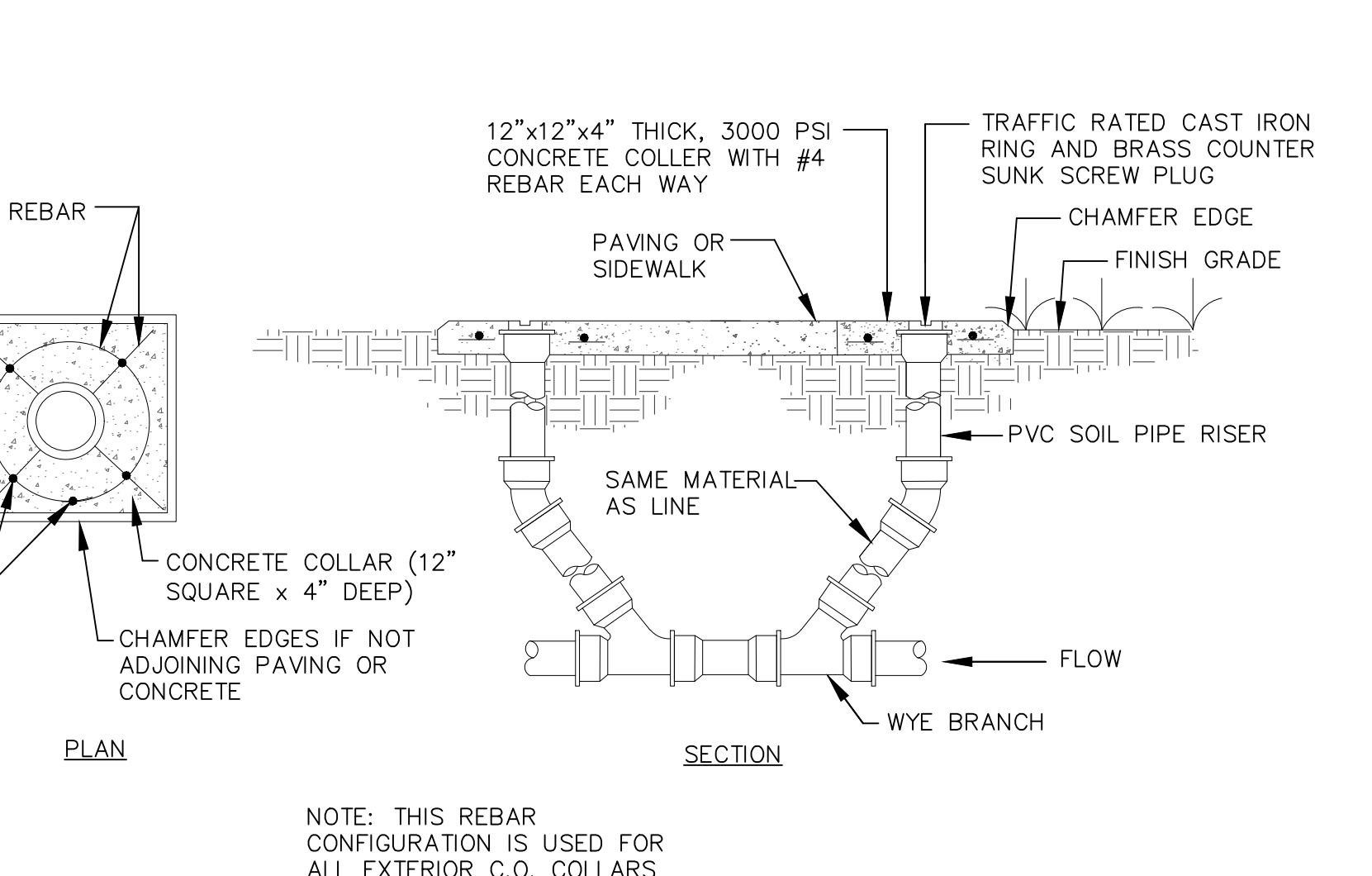
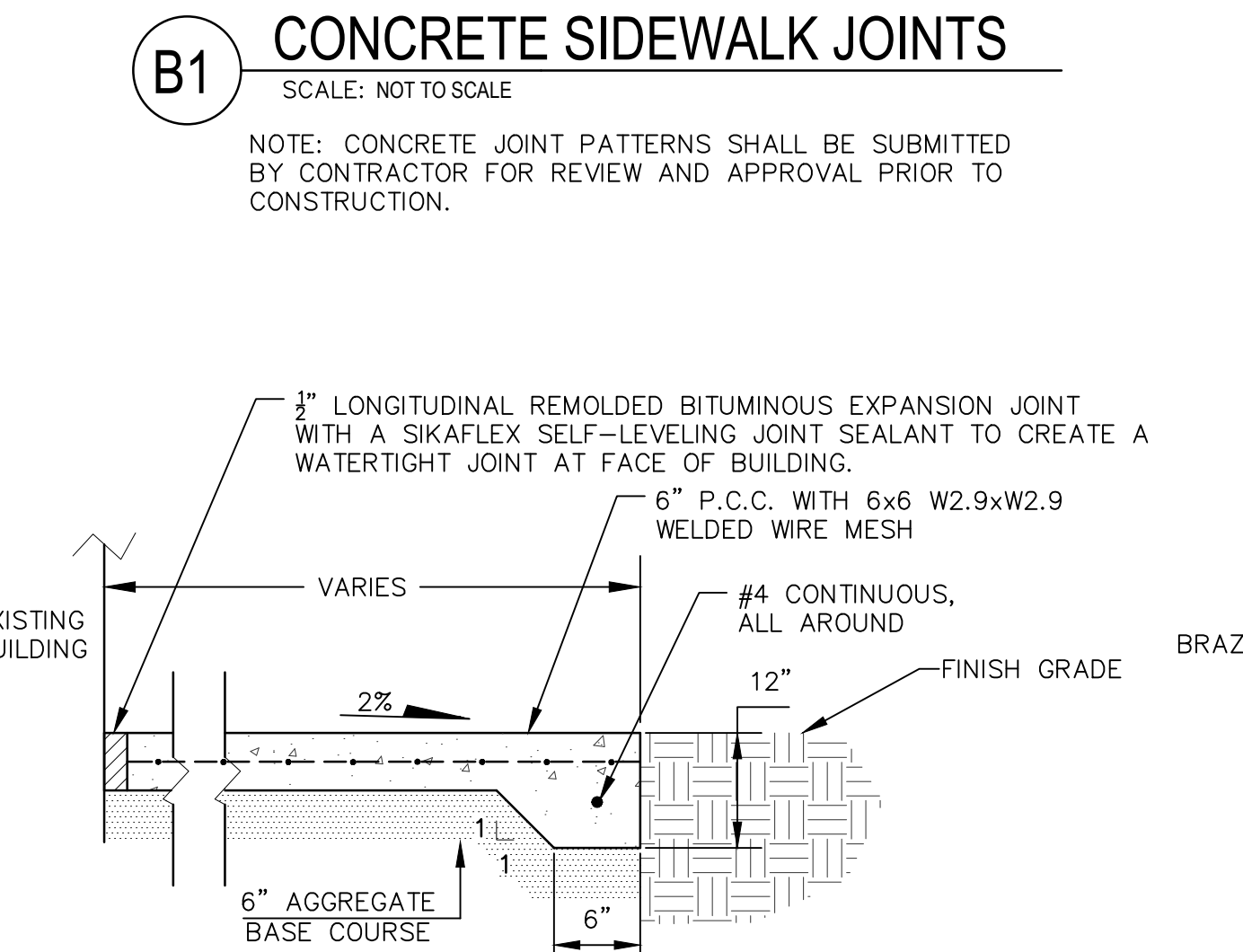
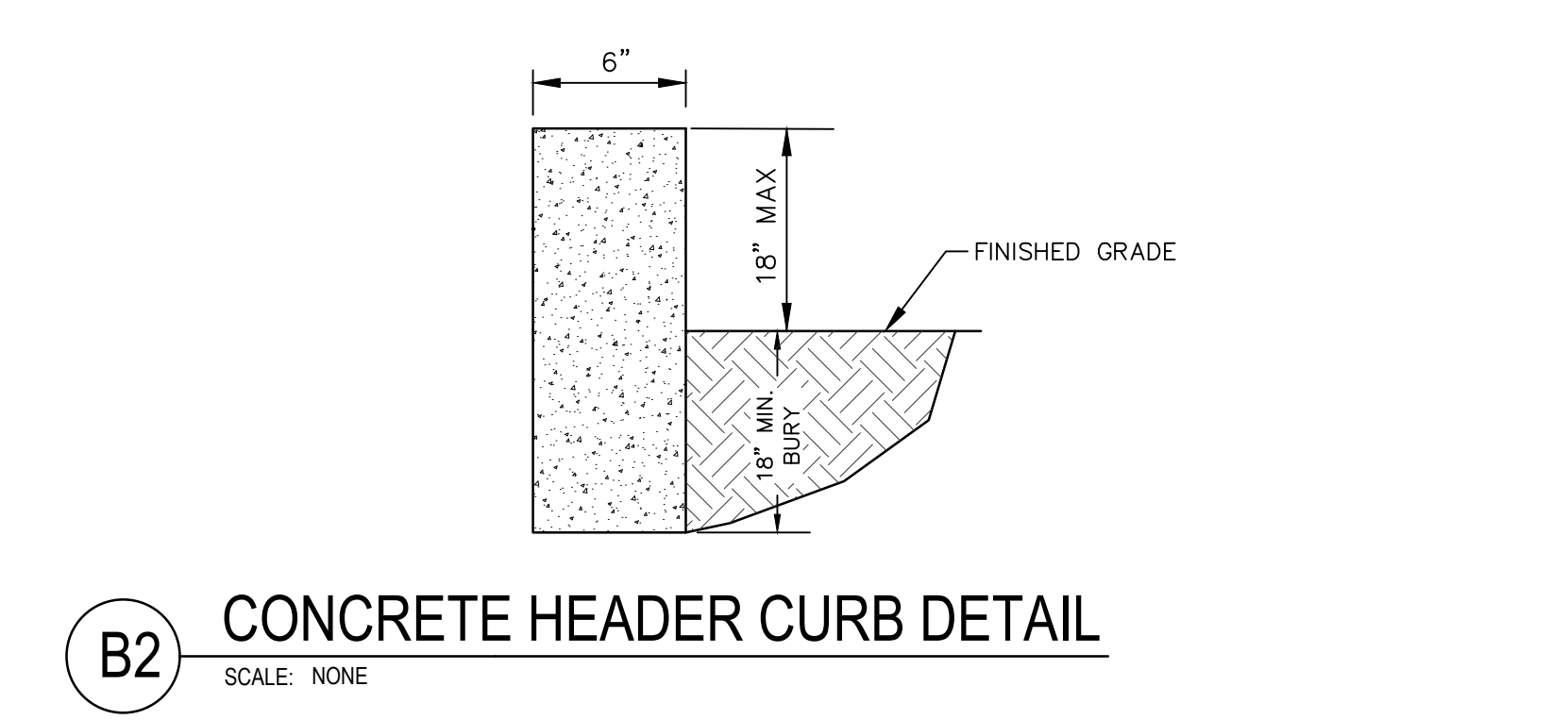
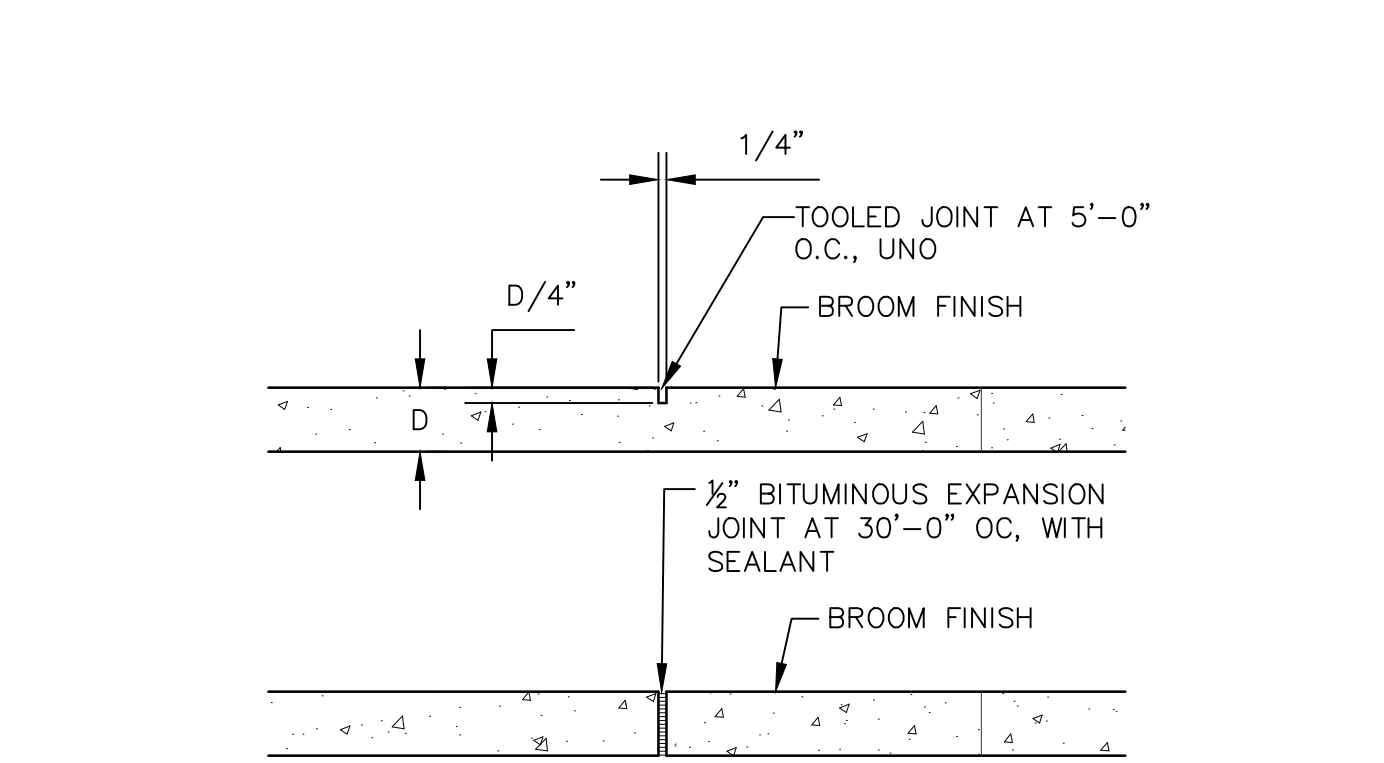
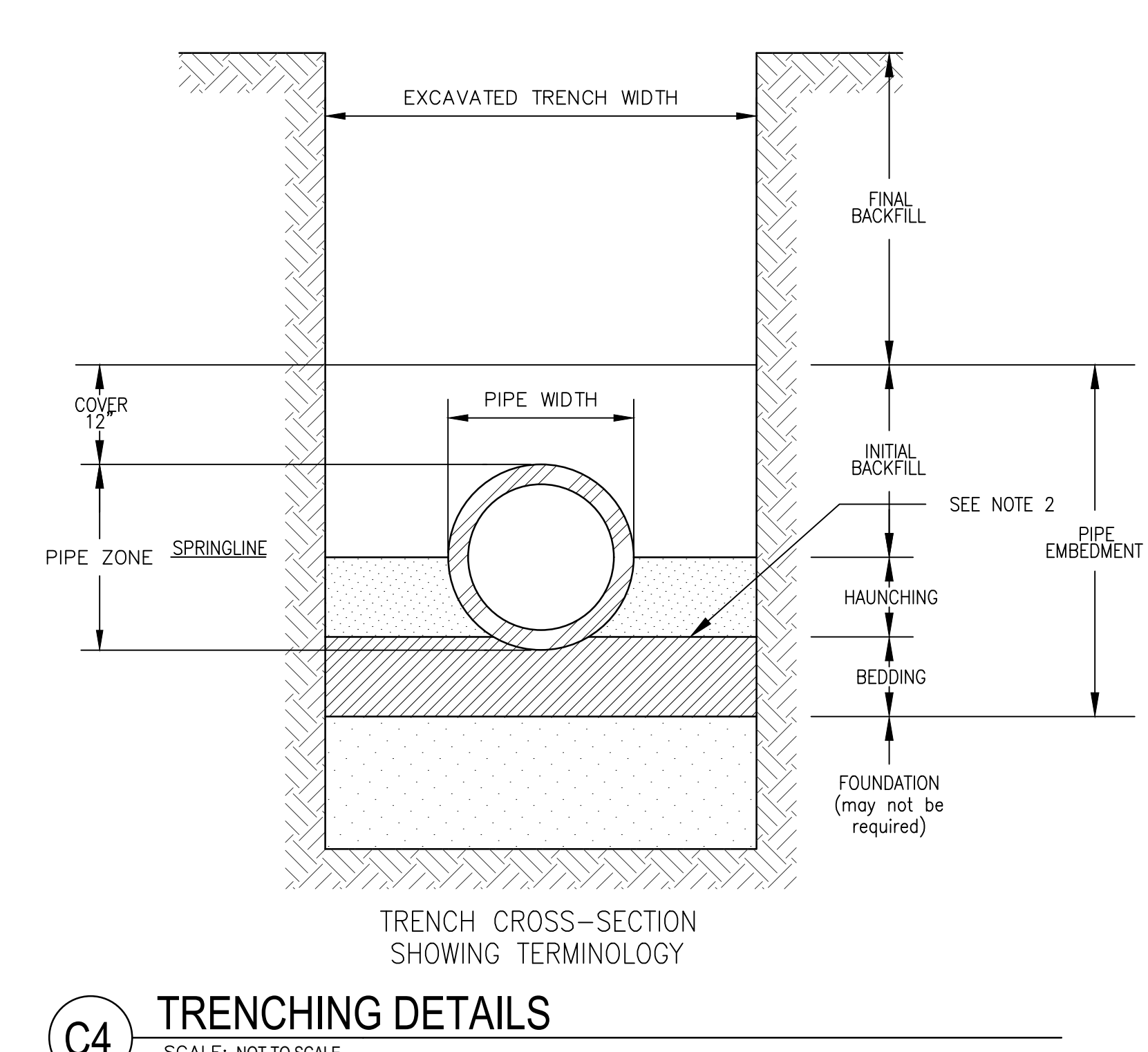
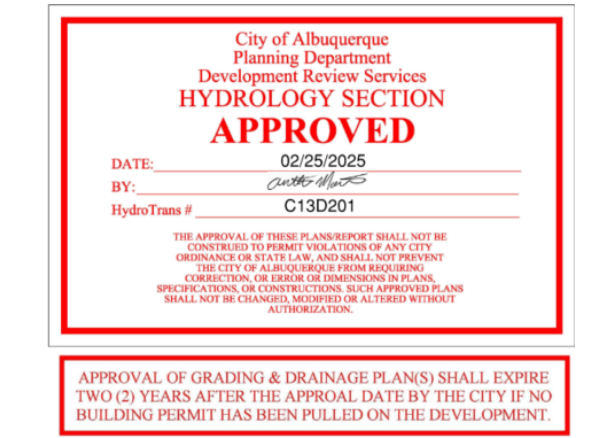
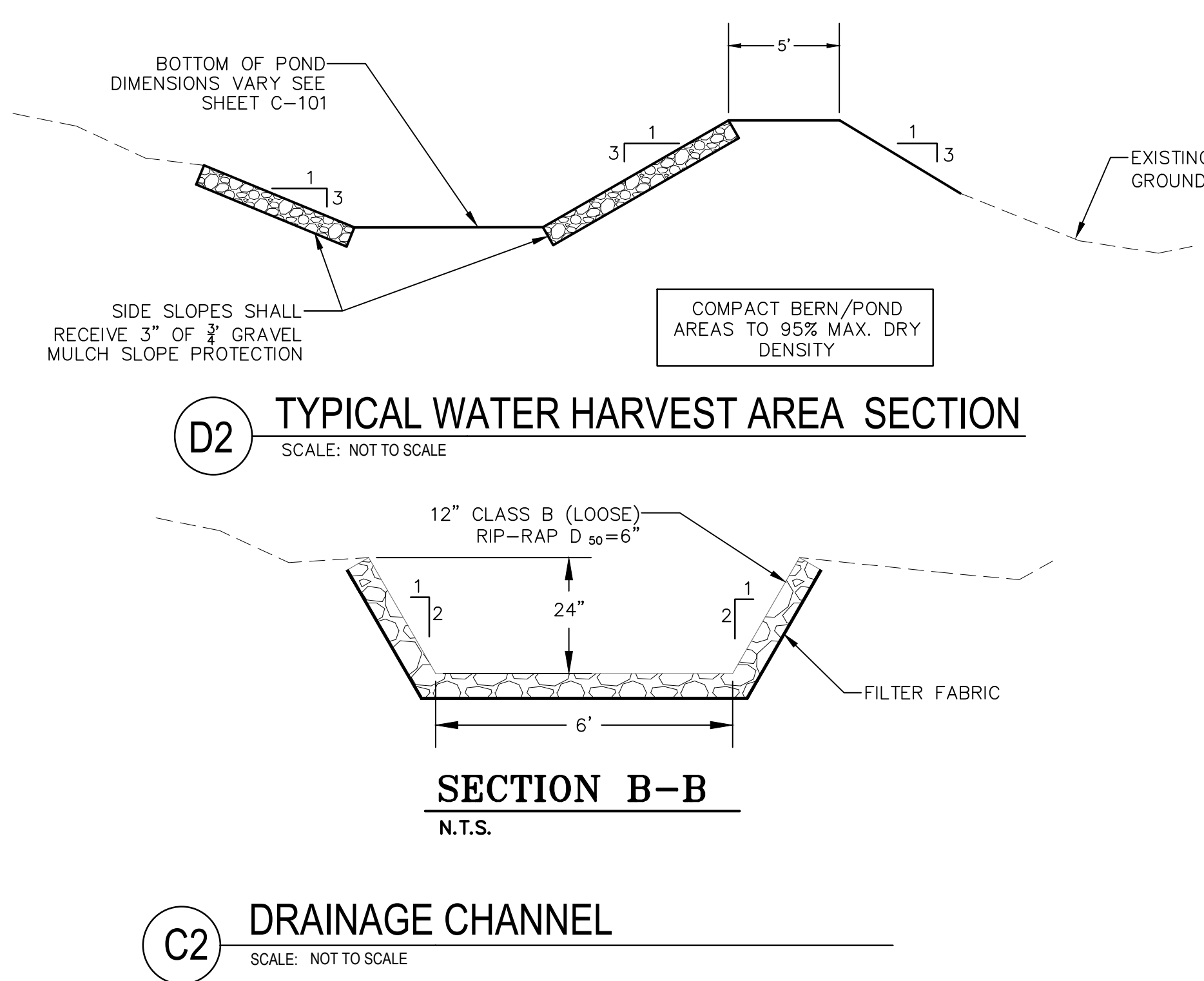
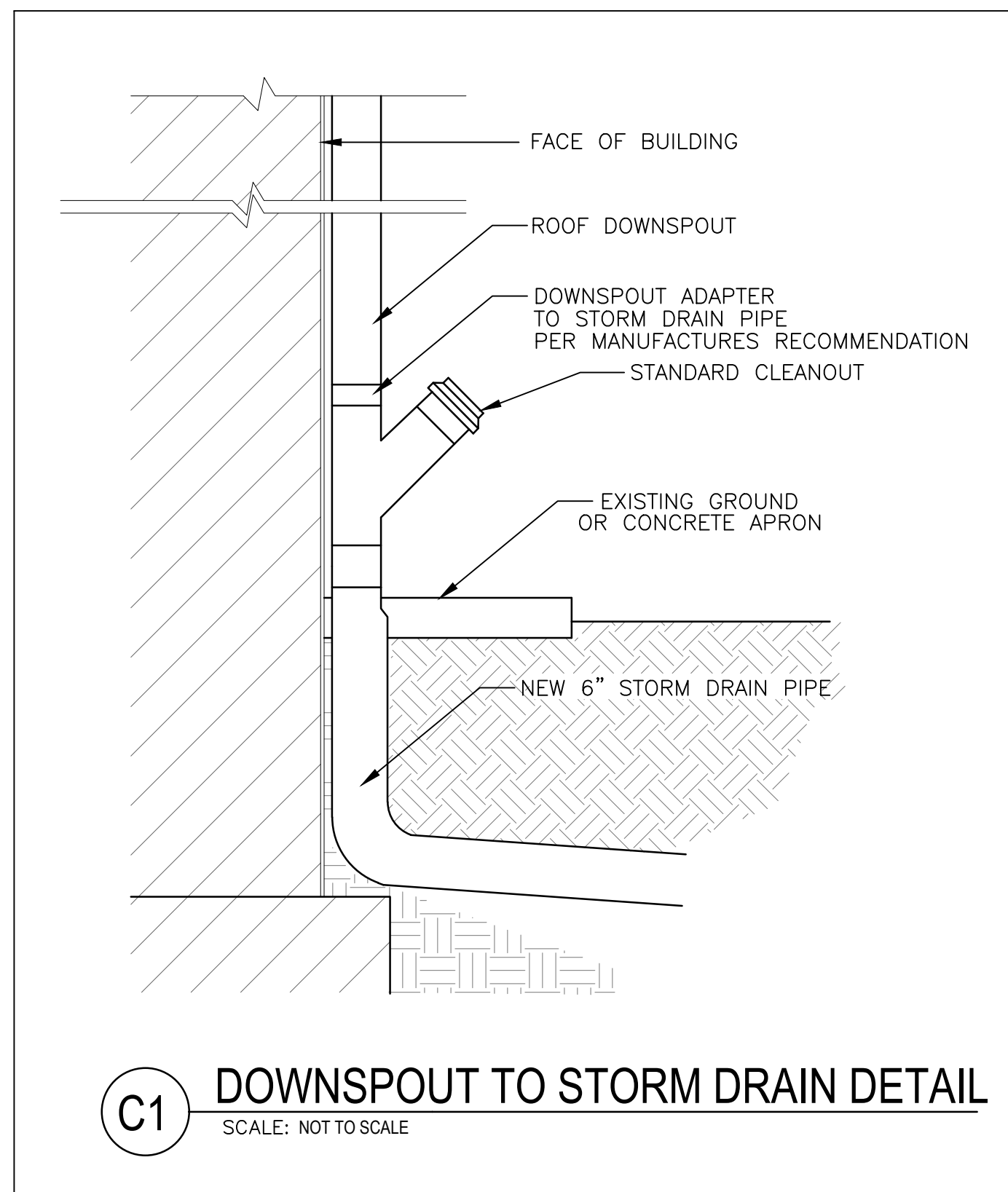
GRADING AND DRAINAGE PLAN

APPROVED
DATE: 02/25/2025
BY: [Signature]
Hydrology # C130201

APPROVAL OF GRADING & DRAINAGE PLANS SHALL EXPIRE TWO (2) YEARS AFTER THE APPROVAL DATE BY THE CITY IF NO BUILDING PERMIT HAS BEEN FILED ON THE DEVELOPMENT.

REVISION	DESCRIPTION	DATE	MARK

SHEET **C-101**



NYLOPLAST 18" DRAIN BASIN: 2818AG __ X

GENERAL NOTES:

- MECHANICAL TAMPERS NOT TO BE USED IN THE INITIAL BACKFILL SECTION FOR FLEXIBLE PIPE.
- MINIMUM CLASS "C" BEDDING WILL BE USED.

TRAFFIC LOADS: CONCRETE SLAB DIMENSIONS ARE FOR GUIDELINE PURPOSES ONLY. ACTUAL CONCRETE SLAB MUST BE DESIGNED TAKING INTO CONSIDERATION LOCAL SOIL CONDITIONS, TRAFFIC LOADING, & OTHER APPLICABLE DESIGN FACTORS. SEE DRAWING NO. 7001-110-111 FOR NON TRAFFIC INSTALLATION.

THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I, CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

GRATE OPTIONS	LOAD RATING	PART #	DRAWING #
PEDESTAL	MEE TS H-10	1890CGP	7001-110-212
STANDARD	MEE TS H-20	1890CGS	7001-110-213
SOLID COVER	MEE TS H-20	1890CGC	7001-110-214
DOME	N/A	1890CGD	7001-110-215
DROP IN GRATE	LIGHT DUTY	1801DI	7001-110-074

DRAWN BY EBC	MATERIAL	ADS Nyloplast	3130 YERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com
DATE 04-03-06			
REVISED BY NMH	PROJECT NO./NAME	TITLE	
DATE 03-14-16		18 IN DRAIN BASIN QUICK SPEC INSTALLATION DETAIL	
DWG SIZE A	SCALE 1:30	SHEET 1 OF 1	REV E

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DESIGNED	VAM	JOB #	E-24-041
DRAWN	DLW	FILE	C-501.dwg
CHECKED	VAM	DATE	02-05-2025

VERLYN A. MILLER II
REGISTERED PROFESSIONAL ENGINEER
NEW MEXICO
14507

ALL SAINTS LUTHERAN CHURCH
ALBUQUERQUE

MISC DETAILS

REVISION	DESCRIPTION	DATE	MARK

SHEET **C-501**