

# JOHN KNOX VILLAGE COURTYARDS-BUILDING E

New Atrium & Independent Living

LEE'S SUMMIT, MO

## FINAL DEVELOPMENT PLAN SUBMISSION

DATE: DECEMBER 1, 2023

COMM. NO. 23104.00

DRAWING INDEX

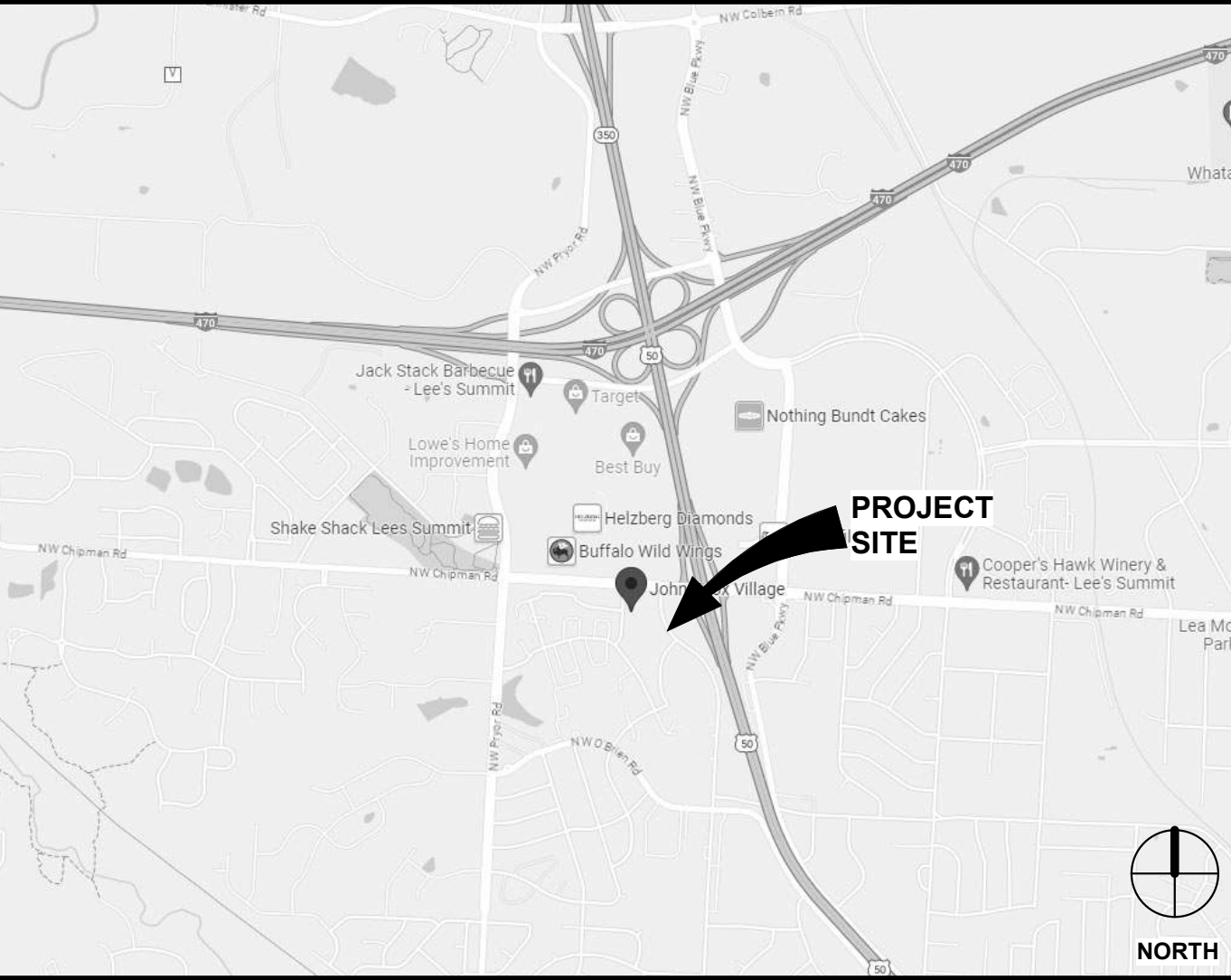
CIVIL	
C1.0	DEMOLITION PLAN
C2.0	SITE PLAN
C3.0	DIMENSION PLAN
C4.0	GRADING PLAN
C4.1	DETAILED GRADING PLAN
C4.2	ADA GRADING PLAN
C5.0	PRE-CON EROSION CONTROL PLAN
C5.1	MID-CON EROSION CONTROL PLAN
C5.2	POST-CON EROSION CONTROL PLAN
C6.0	UTILITY PLAN
C6.1	SANITARY PLAN & PROFILE
C6.2	STORM PLAN & PROFILE
C7.0	CONSTRUCTION DETAILS
C7.1	CONSTRUCTION DETAILS 2
C7.2	CONSTRUCTION DETAILS 3
C7.3	CONSTRUCTION DETAILS 4
C8.0	EROSION CONTROL DETAILS

LANDSCAPE	
L.01	LANDSCAPE PLAN NOTES
L.02	TREE PROTECTION & REMOVAL
L1.0	SITE REFERENCE PLAN
L1.1	DOG PARK DIMENSION PLAN
L1.2	DOG PARK AMENITIES PLAN
L1.3	DOG PARK PAVING PLAN
L1.4	DOG PARK FENCING PLAN
L2.0	OVERALL PLANTING PLAN
L2.1	TREE PLANTING PLAN
L2.2	SHRUB & PERENNIAL PLANTING PLAN
L2.3	TURF & MULCH PLAN
L3.1	CONSTRUCTION DETAILS
L3.2	CONSTRUCTION DETAILS
L3.3	AMENITIES DETAILS
L3.4	PLANTING DETAILS

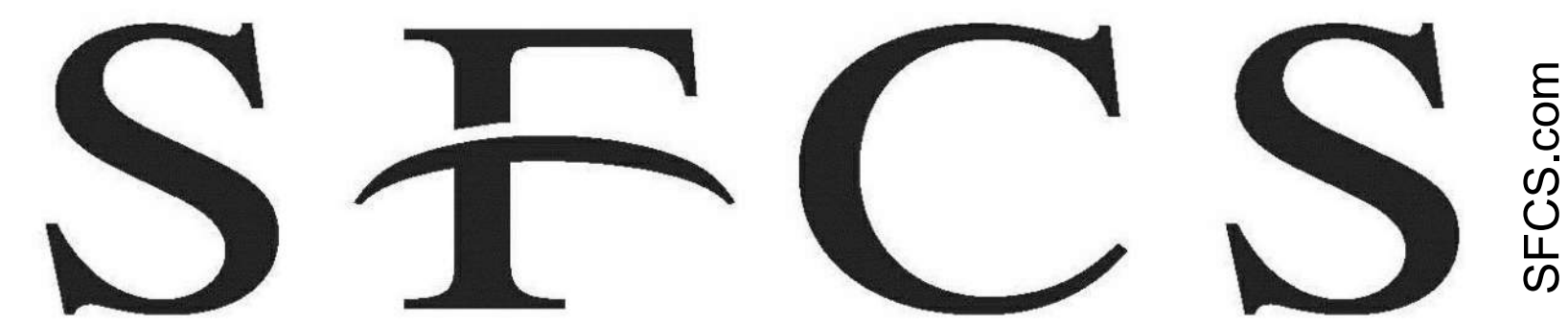
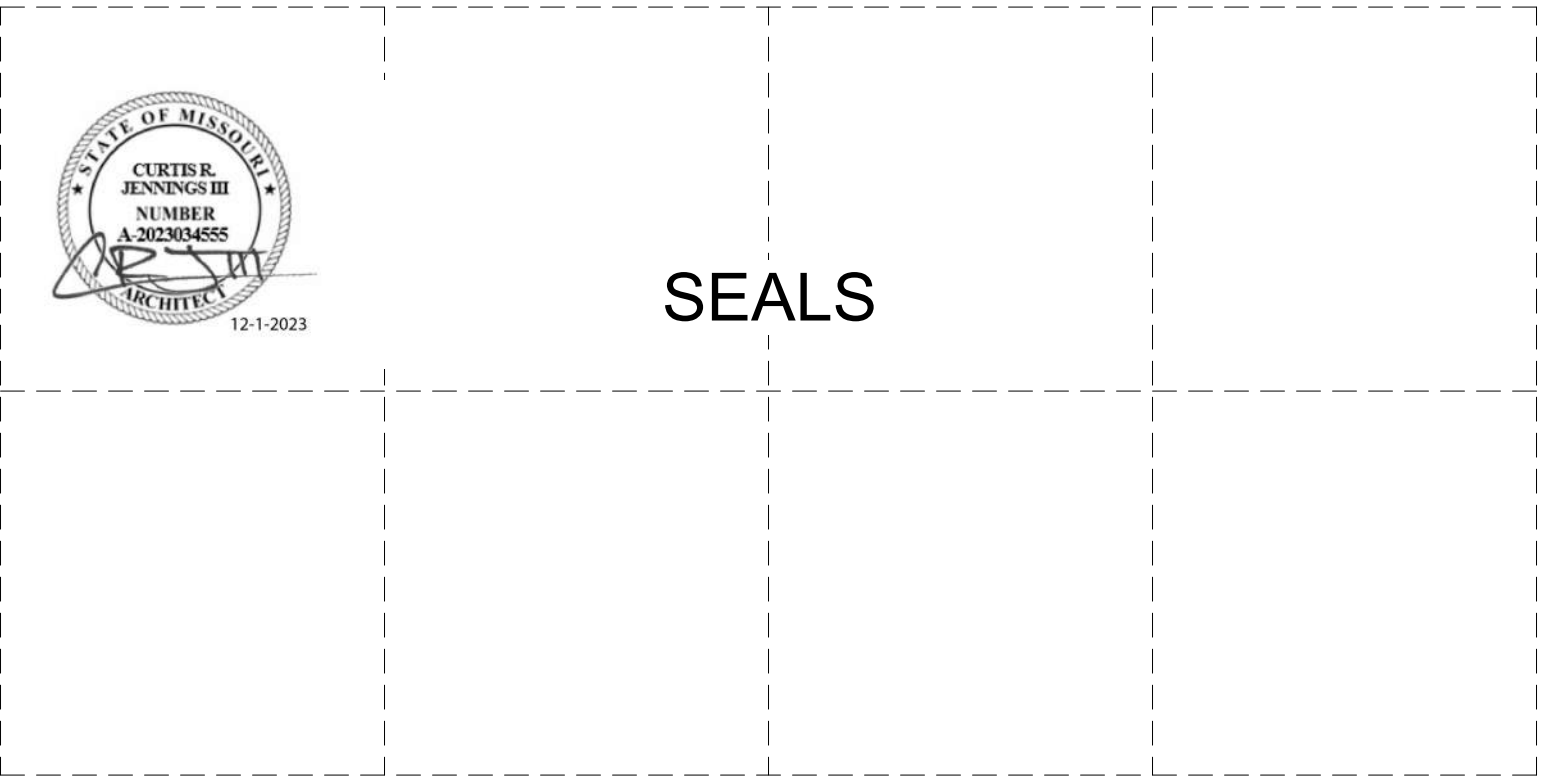
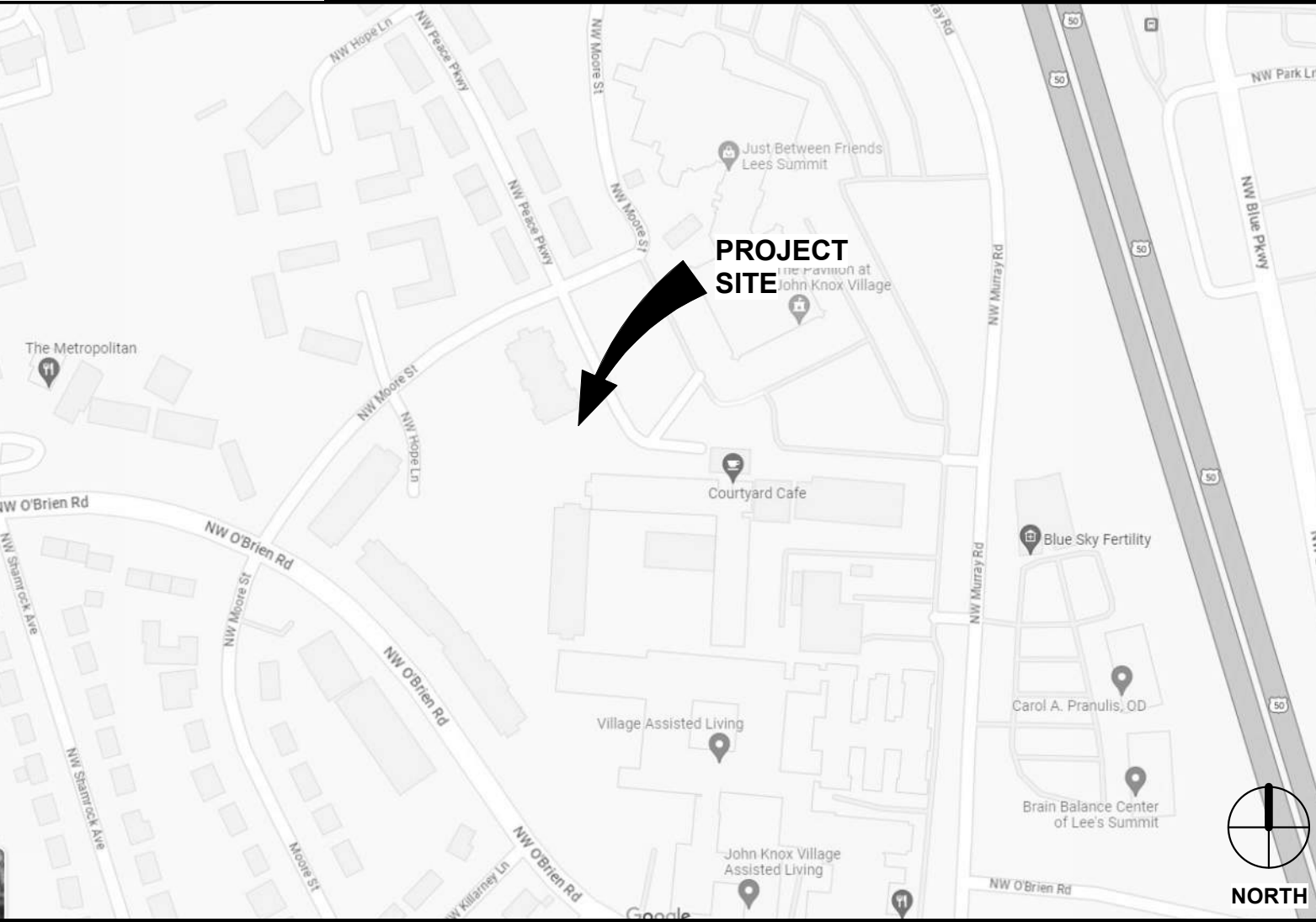
ARCHITECTURAL	
A1.1	ARCHITECTURAL SITE PLAN
A1.3	FIRST FLOOR PLAN - IL UNITS
A1.4	SECOND FLOOR PLAN - IL UNITS
A1.5	THIRD FLOOR PLAN - IL UNITS
A1.6	FOURTH FLOOR PLAN - IL UNITS
A1.7	ROOF PLAN - IL UNITS
A1.8	FIRST AND SECOND FLOOR PLANS - ATRIUM
A1.9	THIRD AND FOURTH FLOOR PLANS - ATRIUM
A5.1	EXTERIOR ELEVATIONS
A5.1A	EXTERIOR ELEVATIONS - MATERIALS

ELECTRICAL	
E0.4	ELECTRICAL SITE PLAN

VICINITY MAP



LOCATION MAP



Architecture  
Engineering  
Planning  
Interiors

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1927 SOUTH TRYON STREET, SUITE 207  
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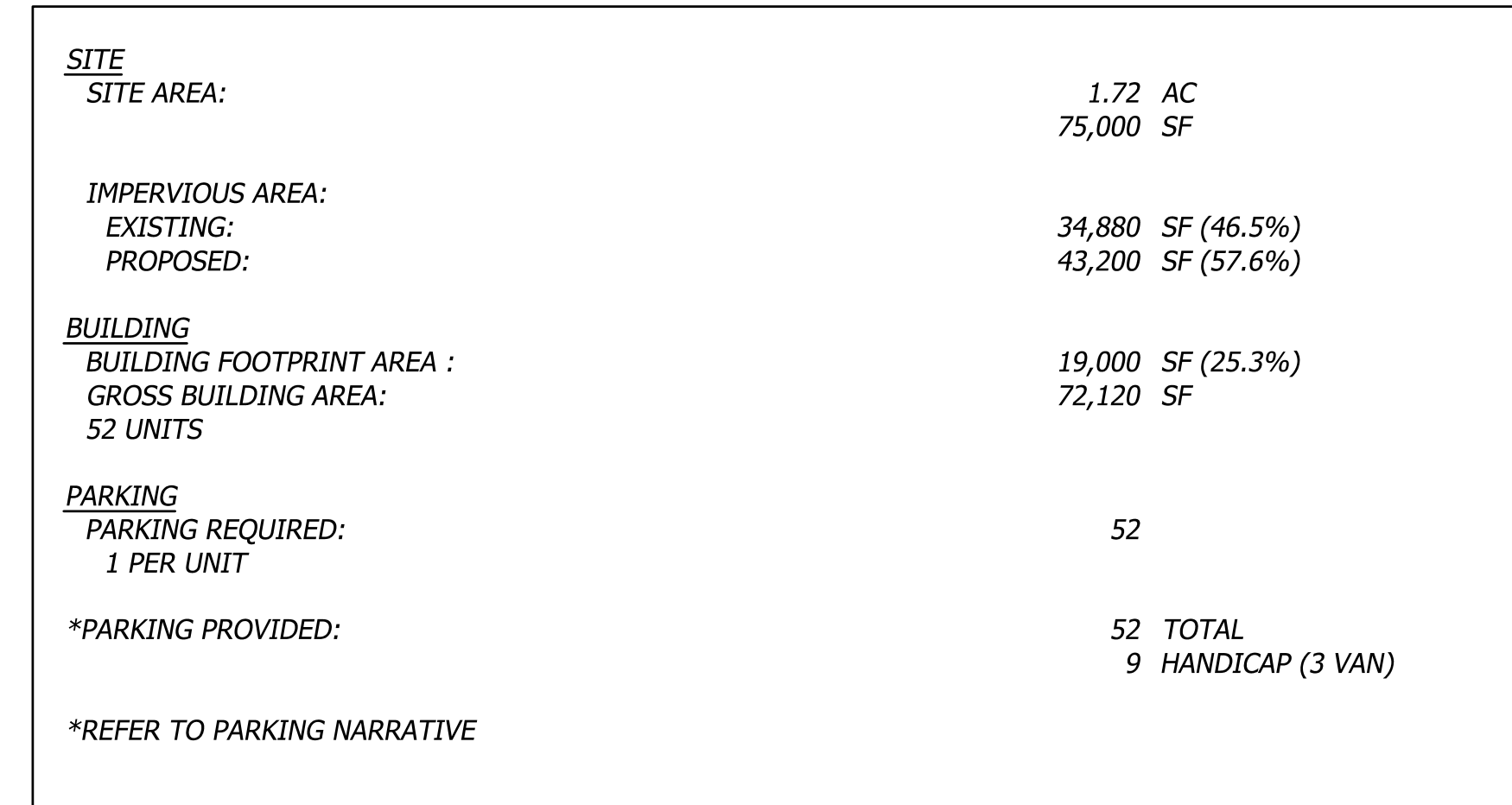
**PHILADELPHIA OFFICE**  
1777 SENTRY PARKWAY WEST  
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225 E. John Carpenter Freeway, Suite 700  
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**BHC RHODES**  
CIVIL ENGINEERING  
7101 College Blvd., Suite 400  
Overland Park, KS 66210  
Phone: 913.663.1900  
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# C1.0



## PMIX (PLANNED MIXED USE)

LOT 1, JOHN KNOX RETIREMENT VILLAGE 14TH PLAT

- [illegible]

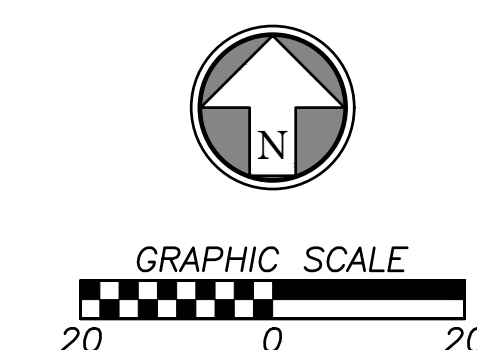
SECTION MAP  
SECTION 01-T47N-R32W

ACCORDING TO THE DNR OIL AND GAS LOGS FOR THE COUNTY OF JACKSON, THERE ARE NOT OIL AND GAS WELLS NEAR THE PROPERTY AS SURVEYED HEREON.

	PROPOSED BUILDING		ROLLOVER CURB & GUTTER
	EXISTING BUILDING		STANDARD CURB & GUTTER
	ASPHALT PAVEMENT OVERLAY		DRY CURB & GUTTER
	LIGHT DUTY ASPHALT PAVEMENT		STANDARD ZERO HEIGHT CURB
	MEDIUM DUTY ASPHALT PAVEMENT		TRANSITION CURB
	FENCE		RETAINING WALL
			CONCRETE SIDEWALK

SEE CONSTRUCTION DETAILS - SHEETS C7.0-C7.1

- 002 CONCRETE CURB & GUTTER; RE. LEGEND FOR TYPE  
005 LIGHT DUTY ASPHALT PAVEMENT  
006 MEDIUM DUTY ASPHALT PAVEMENT  
010 ASPHALT PAVEMENT OVERLAY  
014 CONCRETE SIDEWALK  
018 SIDEWALK RAMP (PUBLIC)  
019 SIDEWALK RAMP (PRIVATE)  
021 (ADA) HANDICAP PARKING STRIPING  
022 (ADA) HANDICAP PARKING SIGNAGE  
031 CONCRETE RAMP WITH HANDRAIL  
035 CONCRETE STAIR & HANDRAIL  
050 MODULAR BLOCK RETAINING WALL



# FINAL DEVELOPMENT PLAN

PROJECT TITLE



COURTYARDS - BUILDING E



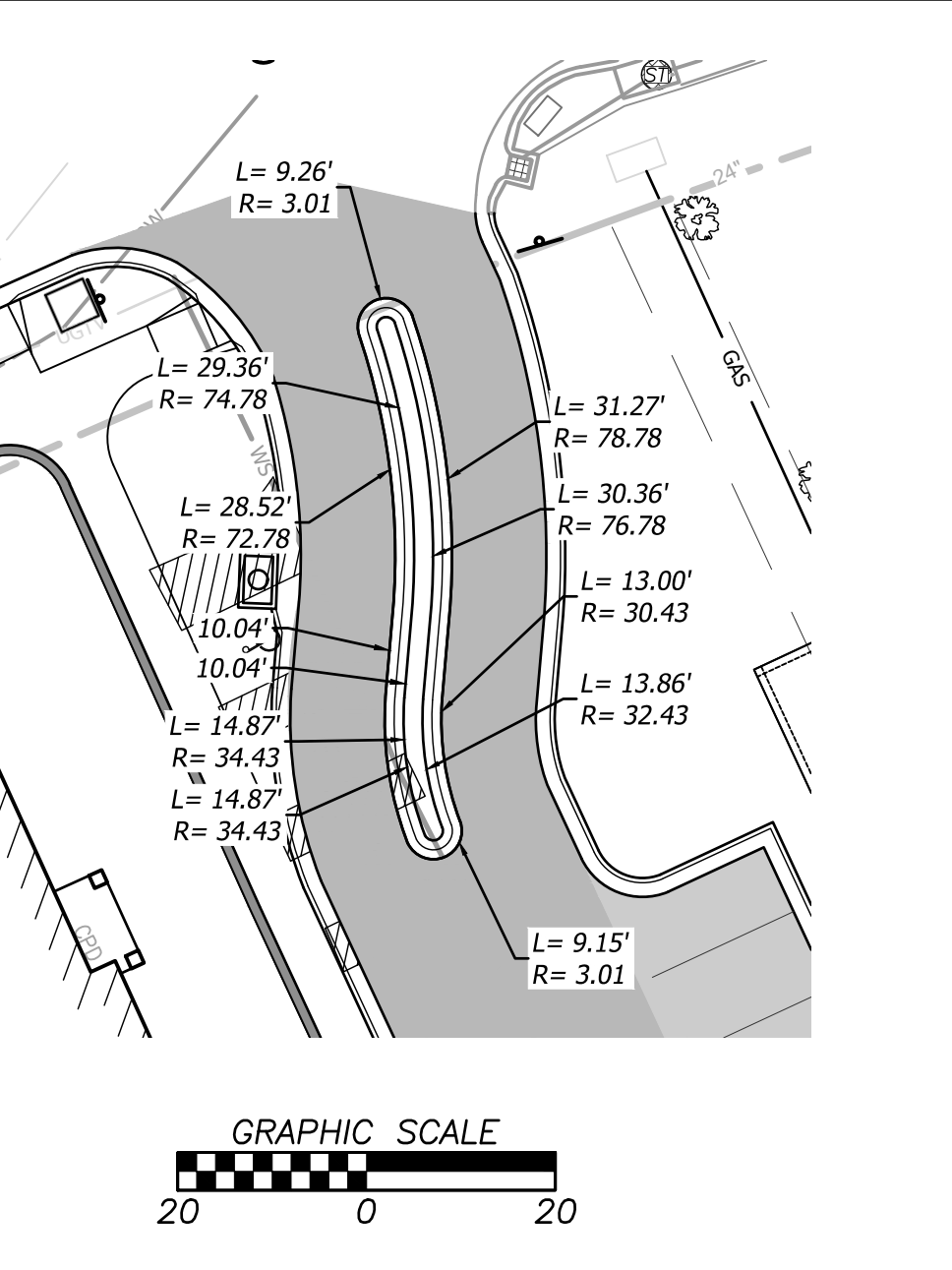
SFCS Inc. ■ 1927 South Tryon St. - Suite 207  
Charlotte, North Carolina 28203.4633  
704.372.7327 ■ Fax 704.372.7369  
[www.sfcs.com](http://www.sfcs.com)

DESIGNER : DAS	DRAWN : ARK
ARCHITECT : DAS	CHECKED : ERB
ENGINEER : ERB	APPROVED : ERB
NO.	REVISION DESCRIPTION DATE

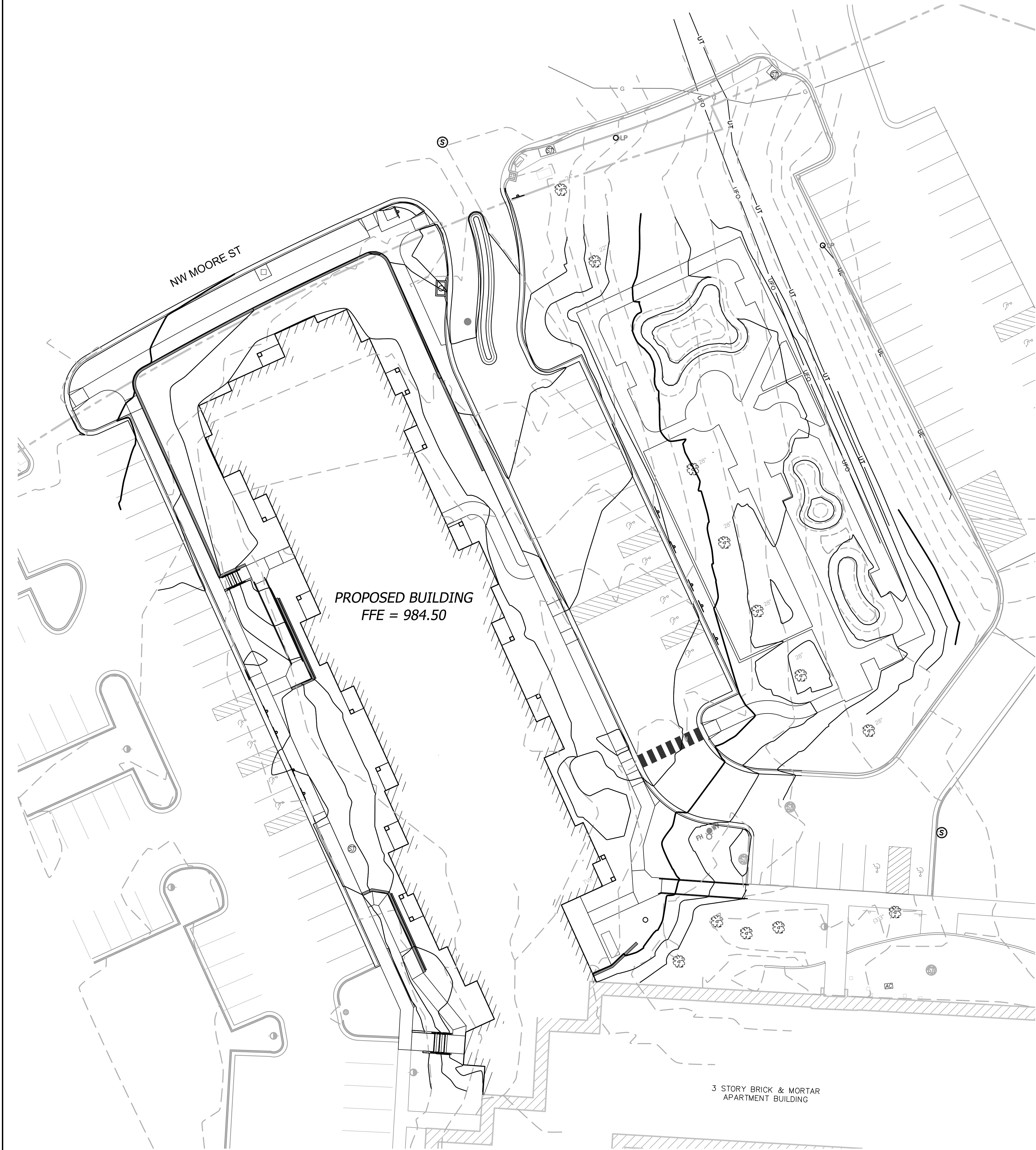
DRAWING TITLE

## SITE PLAN

DATE: December 1, 2023	DRAWING <b>C2.0</b>
COMM. NO. 23104.00	



DATE: December 1, 2023	DRAWING <b>C3.0</b>
COMM. NO. 23104.00	



### GRADING NOTES

- Contractor shall obtain a copy of the Geotechnical Services Report for the project and be familiar with the existing conditions and recommendations contained in the report if such a report has been prepared.
- Contractor is responsible for any over excavation of existing unsuitable soils will be required under building and pavement areas. Contractor shall perform over excavation of unsuitable soils as a part of this work.
- Contractor shall obtain soils suitable as structural fill from off-site sources. All borrow materials must be tested and approved by the Geotechnical Engineer prior to importing the soils to the project site.
- Contractor shall operate under the terms and permits included in the Stormwater Pollution Prevention Plan (SWPPP) prepared for this project and permitted through the State of Kansas. Contractor shall employ a qualified person to conduct regular inspections of the site erosion control measures and document such inspections in the SWPPP document maintained by the Contractor.
- All topsoil, vegetation, root structures, and deleterious materials shall be stripped from the ground surface prior to the placement of embankments. Contractor shall obtain the on-site geotechnical representative's acceptance of the existing ground surface materials and the proposed fill material prior to the placement of fill.
- All proposed contour lines and spot elevations shown are finish ground elevations. Contractor shall account for pavement depths, building pads, topsoil, etc when grading the site.
- All disturbed areas that are not to be paved (green spaces) shall be finish graded with a minimum of six inches of topsoil.
- All excavation and embankments shall comply with the recommendations provided by the geotechnical engineer.
- Prior to placing any concrete or asphalt pavement the contractor shall perform a proof roll of the pavement sub-grade with a fully loaded tandem axle dump truck. The proof roll shall be conducted in the presence of the on-site geotechnical representative. Areas that display rutting or pumping that are unsatisfactory to the geotechnical representative shall be re-worked and a follow-up proof roll shall be conducted prior to acceptance of the sub-grade for paving. The contractor may, at its own expense, stabilize the sub-grade using Class C fly ash or quicklime, as approved by the geotechnical engineer.
- Finished grades shall not be steeper than 3:1.
- All grading work shall be considered unclassified. No additional payments shall be made for rock excavation. Contractor shall satisfy himself as to any rock excavation required to accomplish the improvements shown hereon.
- A 2.0% maximum cross slope shall be maintained on all pedestrian sidewalks and paths.

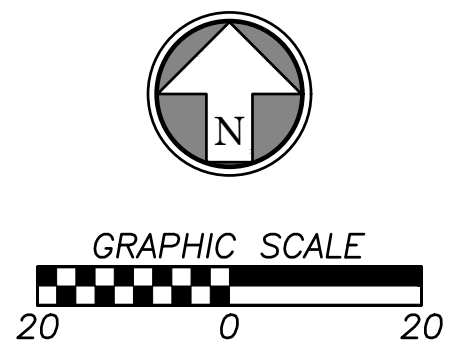
### FLOOD STATEMENT

The subject property lies within Flood Zone "X" (unshaded) (Areas determined to be outside the 0.2% annual chance floodplain), as shown on the Jackson County, Missouri and Incorporated Areas Flood Insurance Rate Map (F.I.R.M.).  
Map Number: 29095C0416G and 29095C0417G  
Panel No.: 416 and 417 of 625  
Map Revised Date: January 20, 2017

**NOTE:** This statement is provided for informational purposes only and shall in no way constitute a basis for a flood certificate. No field work was performed to establish the boundaries of this zone. The information was derived by scaling the subject property on the above referenced map.

### GRADING LEGEND

	STANDARD CURB & GUTTER
	ROLLOVER CURB & GUTTER
	DRY CURB & GUTTER
	ZERO HEIGHT CURB
	TRANSITION CURB
	RETAINING WALL
	FINISH GRADE MAJOR CONTOURS
	FINISH GRADE MINOR CONTOURS
	EXISTING GRADE MAJOR CONTOURS
	EXISTING GRADE MINOR CONTOURS



## FINAL DEVELOPMENT PLAN

PROJECT TITLE



COURTYARDS - BUILDING E

# SFCS

Architecture  
Engineering  
Planning  
Interiors

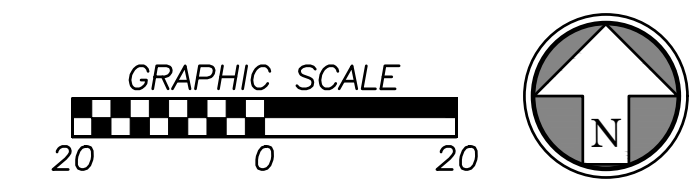
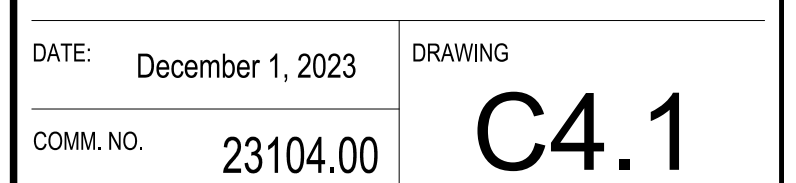
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DESIGNER : DAS	DRAWN : ARK	
ARCHITECT : DAS	CHECKED : ERB	
ENGINEER : ERB	APPROVED : ERB	
NO.	REVISION DESCRIPTION	DATE

DRAWING TITLE

## GRADING PLAN

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	C4.0



0000.00 FG	FINISHED GRADE ELEVATION
0000.00 TC	TOP OF CURB ELEVATION
0000.00 TP	TOP OF PAVEMENT ELEVATION
0000.00 TW	FG @ TOP OF RETAINING WALL
0000.00 BW	FG @ BOTTOM OF RETAINING WALL
0000.00 ME	MATCH EXISTING GRADE
0000.00 TE	TOP ELEVATION OF STRUCTURE
	SLOPE INDICATOR

[illegible]

The site plan illustrates a residential layout with the following details:

- Street Layout:** A main road runs from the top left, curves into a roundabout, and then continues as a cul-de-sac at the bottom. A secondary road branches off to the right, ending in another cul-de-sac.
- Elevation Points (TP):** Numerous points are marked with elevations such as 983.30 TP, 984.00 TP, 982.00 TP, 981.95 TP, 982.05 TP, 982.12 TP, 982.95 TP, 981.63 TP, 982.24 TP, 981.64 TP, 981.74 TP, 982.40 TP, 984.90 TP, 983.00 TP, 983.30 TP, 982.25 TP, 981.69 TP, 982.40 TP, 984.90 TP, 984.43 TP, 984.47 TP, 984.50 TP, and 984.90 TP.
- Slopes:** Various slopes are indicated along the road segments, including 0.99%, 1.32%, 2.60%, 1.12%, 0.99%, 1.14%, 1.07%, 3.87%, 1.75%, 0.68%, 0.58%, 0.14%, 1.17%, 1.05%, 1.97%, 0.78%, 0.63%, 1.43%, 1.5%, 4.71%, and 0.99%.
- Buildings:** Several building footprints are shown, mostly with flat roofs. One building has a gabled roof section.
- Other Features:** A roundabout is located on the left side of the plan. A cul-de-sac is at the bottom. A small circular feature, possibly a manhole or a tree, is located near the roundabout.

This diagram illustrates the vertical alignment of a road intersection. It features several key elements:

- Vertical Curves:** Two parabolic curves are shown. The first curve has a length of 100 feet and a grade change from -0.25% to +3.78%. The second curve also has a length of 100 feet and a grade change from -0.97% to -3.78%.
- Stationing and Elevation:** Numerous points along the roadway are labeled with their stationing and elevation. Examples include:
  - 980.63 TC (Top of Curve)
  - 980.70 TC
  - 980.75 TP (Tangent Point)
  - 980.93 TC
  - 980.99 TC
  - 981.00 TP
  - 981.11 TC
  - 981.40 TC
  - 981.43 TC
  - 981.93 TP
- Grades:** Specific grades are indicated at various points: -0.25%, +3.78%, -0.97%, and -3.78%.
- Intersection Details:** A building footprint is shown near the intersection. A dashed line indicates the centerline of the intersecting road, which is labeled "ORE ST".
- Other Labels:** Additional labels include "980.69 TP", "980.73 TP", "980.75 TP", "980.82 TP", "980.85 TP", "980.90 TP", "980.95 TP", "980.99 TP", "981.00 TP", "981.11 TP", "981.11 TC", "981.40 TC", "981.43 TC", "981.93 TP", "982.00 TP", "982.05 TP", "982.10 TP", "982.15 TP", "982.20 TP", "982.25 TP", "982.30 TP", "982.35 TP", "982.40 TP", "982.45 TP", "982.50 TP", "982.55 TP", "982.60 TP", "982.65 TP", "982.70 TP", "982.75 TP", "982.80 TP", "982.85 TP", "982.90 TP", "982.95 TP", "983.00 TP", "983.05 TP", "983.10 TP", "983.15 TP", "983.20 TP", "983.25 TP", "983.30 TP", "983.35 TP", "983.40 TP", "983.45 TP", "983.50 TP", "983.55 TP", "983.60 TP", "983.65 TP", "983.70 TP", "983.75 TP", "983.80 TP", "983.85 TP", "983.90 TP", "983.95 TP", "984.00 TP", "984.05 TP", "984.10 TP", "984.15 TP", "984.20 TP", "984.25 TP", "984.30 TP", "984.35 TP", "984.40 TP", "984.45 TP", "984.50 TP", "984.55 TP", "984.60 TP", "984.65 TP", "984.70 TP", "984.75 TP", "984.80 TP", "984.85 TP", "984.90 TP", "984.95 TP", "985.00 TP", "985.05 TP", "985.10 TP", "985.15 TP", "985.20 TP", "985.25 TP", "985.30 TP", "985.35 TP", "985.40 TP", "985.45 TP", "985.50 TP", "985.55 TP", "985.60 TP", "985.65 TP", "985.70 TP", "985.75 TP", "985.80 TP", "985.85 TP", "985.90 TP", "985.95 TP", "986.00 TP", "986.05 TP", "986.10 TP", "986.15 TP", "986.20 TP", "986.25 TP", "986.30 TP", "986.35 TP", "986.40 TP", "986.45 TP", "986.50 TP", "986.55 TP", "986.60 TP", "986.65 TP", "986.70 TP", "986.75 TP", "986.80 TP", "986.85 TP", "986.90 TP", "986.95 TP", "987.00 TP", "987.05 TP", "987.10 TP", "987.15 TP", "987.20 TP", "987.25 TP", "987.30 TP", "987.35 TP", "987.40 TP", "987.45 TP", "987.50 TP", "987.55 TP", "987.60 TP", "987.65 TP", "987.70 TP", "987.75 TP", "987.80 TP", "987.85 TP", "987.90 TP", "987.95 TP", "988.00 TP", "988.05 TP", "988.10 TP", "988.15 TP", "988.20 TP", "988.25 TP", "988.30 TP", "988.35 TP", "988.40 TP", "988.45 TP", "988.50 TP", "988.55 TP", "988.60 TP", "988.65 TP", "988.70 TP", "988.75 TP", "988.80 TP", "988.85 TP", "988.90 TP", "988.95 TP", "989.00 TP", "989.05 TP", "989.10 TP", "989.15 TP", "989.20 TP", "989.25 TP", "989.30 TP", "989.35 TP", "989.40 TP", "989.45 TP", "989.50 TP", "989.55 TP", "989.60 TP", "989.65 TP", "989.70 TP", "989.75 TP", "989.80 TP", "989.85 TP", "989.90 TP", "989.95 TP", "990.00 TP", "990.05 TP", "990.10 TP", "990.15 TP", "990.20 TP", "990.25 TP", "990.30 TP", "990.35 TP", "990.40 TP", "990.45 TP", "990.50 TP", "990.55 TP", "990.60 TP", "990.65 TP", "990.70 TP", "990.75 TP", "990.80 TP", "990.85 TP", "990.90 TP", "990.95 TP", "991.00 TP", "991.05 TP", "991.10 TP", "991.15 TP", "991.20 TP", "991.25 TP", "991.30 TP", "991.35 TP", "991.40 TP", "991.45 TP", "991.50 TP", "991.55 TP", "991.60 TP", "991.65 TP", "991.70 TP", "991.75 TP", "991.80 TP", "991.85 TP", "991.90 TP", "991.95 TP", "992.00 TP", "992.05 TP", "992.10 TP", "992.15 TP", "992.20 TP", "992.25 TP", "992.30 TP", "992.35 TP", "992.40 TP", "992.45 TP", "992.50 TP", "992.55 TP", "992.60 TP", "992.65 TP", "992.70 TP", "992.75 TP", "992.80 TP", "992.85 TP", "992.90 TP", "992.95 TP", "993.00 TP", "993.05 TP", "993.10 TP", "993.15 TP", "993.20 TP", "993.25 TP", "993.30 TP", "993.35 TP", "993.40 TP", "993.45 TP", "993.50 TP", "993.55 TP", "993.60 TP", "993.65 TP", "993.70 TP", "993.75 TP", "993.80 TP", "993.85 TP", "993.90 TP", "993.95 TP", "994.00 TP", "994.05 TP", "994.10 TP", "994.15 TP", "994.20 TP", "994.25 TP", "994.30 TP", "994.35 TP", "994.40 TP", "994.45 TP", "994.50 TP", "994.55 TP", "994.60 TP", "994.65 TP", "994.70 TP", "994.75 TP", "994.80 TP", "994.85 TP", "994.90 TP", "994.95 TP", "995.00 TP", "995.05 TP", "995.10 TP", "995.15 TP", "995.20 TP", "995.25 TP", "995.30 TP", "995.35 TP", "995.40 TP", "995.45 TP", "995.50 TP", "995.55 TP", "995.60 TP", "995.65 TP", "995.70 TP", "995.75 TP", "995.80 TP", "995.85 TP", "995.90 TP", "995.95 TP", "996.00 TP", "996.05 TP", "996.10 TP", "996.15 TP", "996.20 TP", "996.25 TP", "996.30 TP", "996.35 TP", "996.40 TP", "996.45 TP", "996.50 TP", "996.55 TP", "996.60 TP", "996.65 TP", "996.70 TP", "996.75 TP", "996.80 TP", "996.85 TP", "996.90 TP", "996.95 TP", "997.00 TP", "997.05 TP", "997.10 TP", "997.15 TP", "997.20 TP", "997.25 TP", "997.30 TP", "997.35 TP", "997.40 TP", "997.45 TP", "997.50 TP", "997.55 TP", "997.60 TP", "997.65 TP", "997.70 TP", "997.75 TP", "997.80 TP", "997.85 TP", "997.90 TP", "997.95 TP", "998.00 TP", "998.05 TP", "998.10 TP", "998.15 TP", "998.20 TP", "998.25 TP", "998.30 TP", "998.35 TP", "998.40 TP", "998.45 TP", "998.50 TP", "998.55 TP", "998.60 TP", "998.65 TP", "998.70 TP", "998.75 TP", "998.80 TP", "998.85 TP", "998.90 TP", "998.95 TP", "999.00 TP", "999.05 TP", "999.10 TP", "999.15 TP", "999.20 TP", "999.25 TP", "999.30 TP", "999.35 TP", "999.40 TP", "999.45 TP", "999.50 TP", "999.55 TP", "999.60 TP", "999.65 TP", "999.70 TP", "999.75 TP", "999.80 TP", "999.85 TP", "999.90 TP", "999.95 TP", "1000.00 TP"

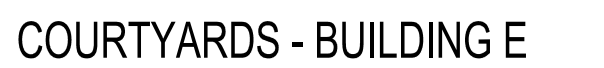
Technical site plan showing proposed elevations (TP) and grades for a residential lot. The plan includes a curved driveway on the right side, with a 28' wide section. The lot is bounded by a 105' street on the left and a 60' street on the right. The plan shows a series of proposed steps or terraces along the right boundary, with elevations ranging from 983.00 to 985.50. The lot area is divided into several sections by dashed lines, and the overall layout is designed to accommodate a building and a driveway.

Key features and elevations:

- Left Boundary (105' Street):**
  - 983.37 TP
  - 983.05 TP
  - 983.15 TP
  - 983.50 TP
  - 984.10 TP
  - 983.78 TP
  - 983.83 TC
  - 984.20 TP
- Right Boundary (60' Street):**
  - 985.72 TP
  - 985.84 TP
  - 985.42 TP
  - 985.40 TP
  - 985.00 TP
  - 984.92 TP
  - 985.50 TP
- Internal Points and Grades:**
  - 983.08 TP, 983.20 TP, 983.28 TP, 983.40 TP, 983.50 TP, 983.10 TP, 983.64 TP, 983.10 TP, 983.44 TC, 983.78 TP, 983.86 TP, 984.00 TP, 984.55 TP, 984.10 TC, 983.73 TC, 983.78 TC, 983.80 TP, 984.03 TC, 984.10 TP
  - Grades: -1.53%, -1.46%, -1.40%, -1.37%, -1.31%, -1.25%, -1.19%, -1.10%, -1.09%, -1.00%, -0.99%, -0.77%, -0.72%, -0.64%, -0.56%, -0.48%, -0.40%, -0.37%, -0.31%, -0.25%, -0.19%, -0.10%, -0.01%, -0.08%, -0.14%, -0.19%, -0.25%, -0.31%, -0.37%, -0.43%, -0.48%, -0.54%, -0.60%, -0.66%, -0.72%, -0.77%, -0.83%, -0.89%, -0.95%, -1.01%, -1.07%, -1.13%, -1.19%, -1.25%, -1.31%, -1.37%, -1.43%, -1.49%, -1.55%



## PROJECT TITLE



Architecture  
Engineering  
Planning  
Interiors

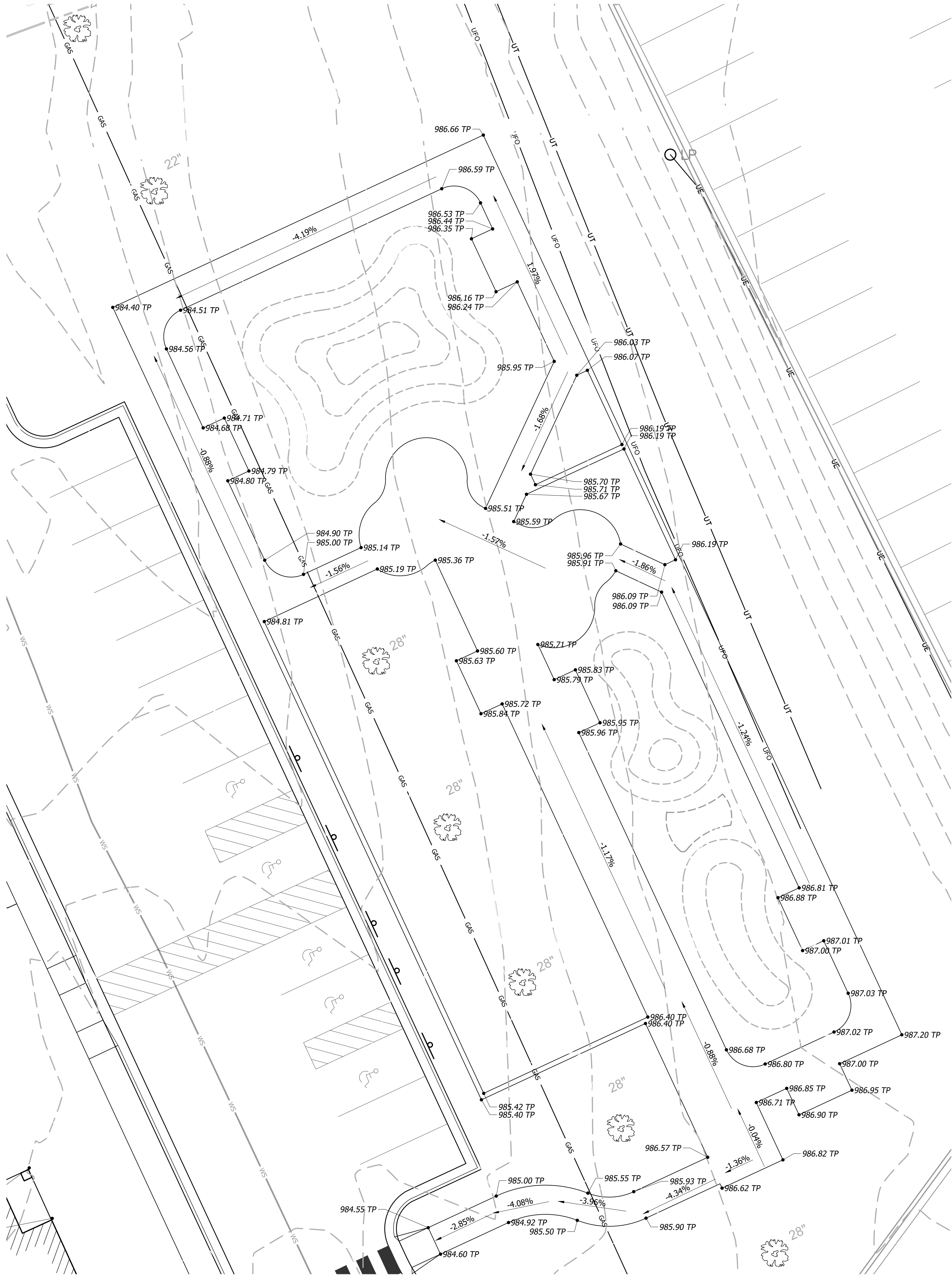
DESIGNER : DAS	DRAWN : ARK
ARCHITECT : DAS	CHECKED : ERB
ENGINEER : ERB	APPROVED : ERB
NO.	REVISION DESCRIPTION DATE

## ADA GRADING PLAN

COMM. NO.	23104.00
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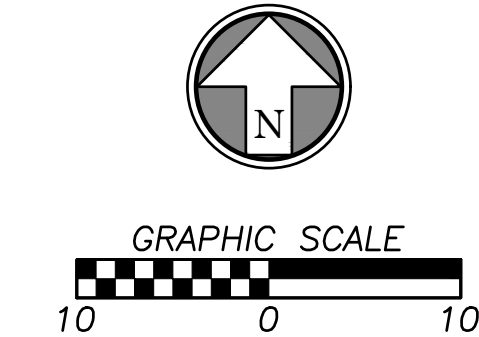
## C4.2

DOGPAK SECTION



DETAILED GRADING LEGEND

- 0000.00 FG FINISHED GRADE ELEVATION
- 0000.00 TC TOP OF CURB ELEVATION
- 0000.00 TP TOP OF PAVEMENT ELEVATION
- 0000.00 TW FG @ TOP OF RETAINING WALL
- 0000.00 BW FG @ BOTTOM OF RETAINING WALL
- 0000.00 ME MATCH EXISTING GRADE
- 0000.00 TE TOP ELEVATION OF STRUCTURE
- 0000.00 XX HIGH POINT AT SPECIFIC CALLOUT
- 0000.00 XX LOW POINT AT SPECIFIC CALLOUT
- 1.00% SLOPE INDICATOR



FINAL DEVELOPMENT PLAN

PROJECT TITLE

COURTYARDS - BUILDING E

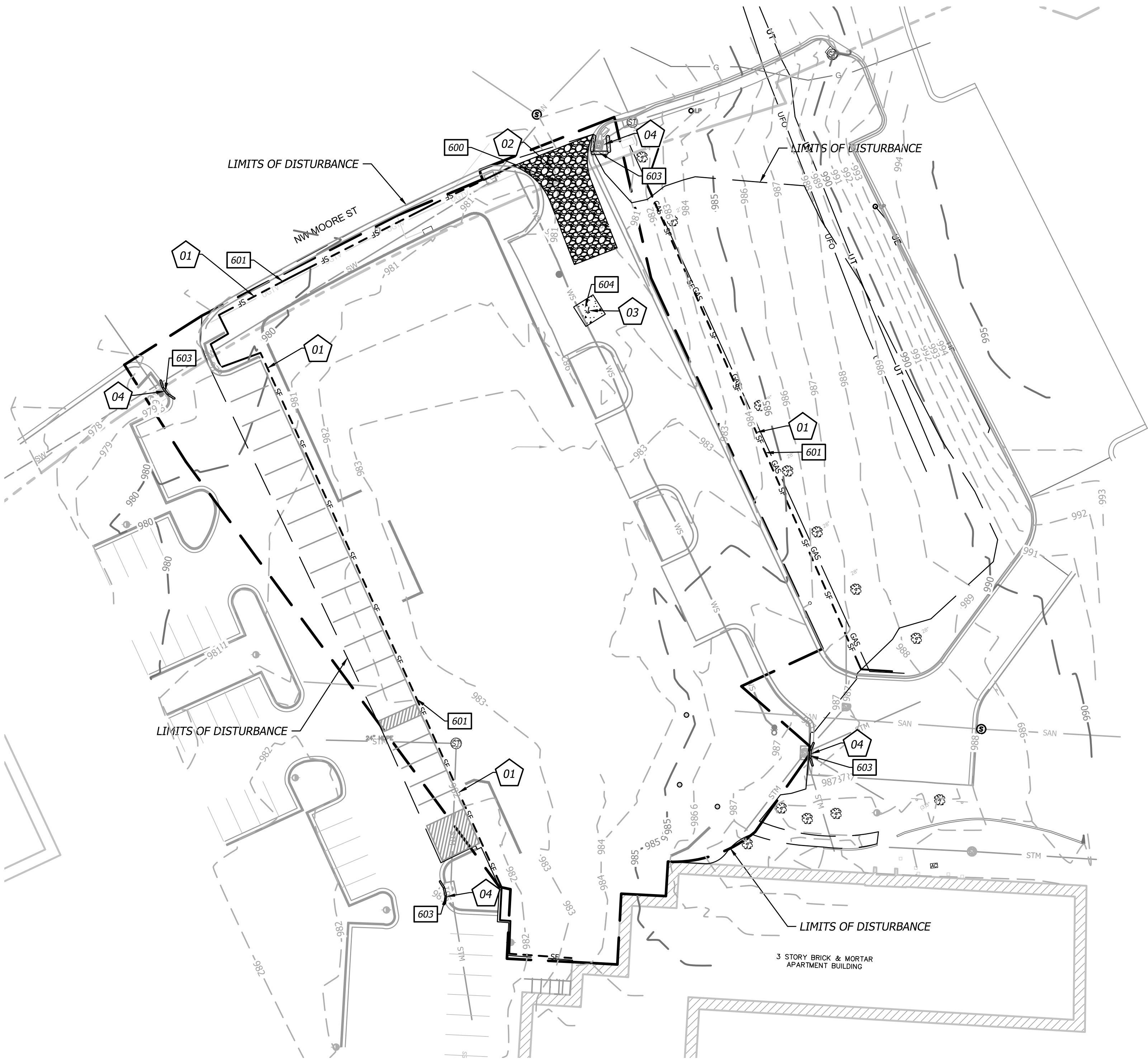


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DESIGNER : DAS	DRAWN : ARK
ARCHITECT : DAS	CHECKED : ERB
ENGINEER : ERB	APPROVED : ERB
NO.	REVISION DESCRIPTION DATE

DOG PARK DETAILED GRADING PLAN

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	C4.3

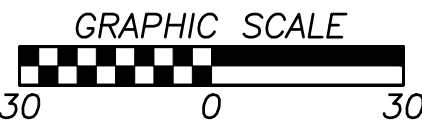
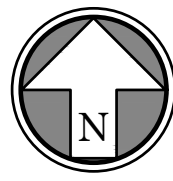


### EROSION AND SEDIMENT CONTROL GENERAL NOTES

- Prior to Land Disturbance activities, the contractor shall:
  - Delineate the outer limits of any natural stream corridor designated with construction fencing.
  - Install perimeter controls and request the inspection of the pre-construction erosion and sediment control measures designated on the approved erosion and sediment control plan. Land disturbance work shall not proceed until there is a satisfactory inspection.
  - Identify the limits of construction on the ground with easily recognizable indications such as construction staking, construction fencing, and placement of physical barriers or other means acceptable to the City inspector and in conformance with the erosion and sediment control plan.
- The contractor shall comply with all requirements of the Storm Water Pollution Prevention Plan, including but not limited to:
  - The contractor shall seed, mulch, or otherwise stabilize any disturbed area where the land disturbance activity has ceased for more than 14 days.
  - The contractor shall perform inspections of erosion and sediment control measures at the following minimum intervals:
    - During active construction phases - at least once per week
    - During periods of inactivity - at least once per 14 days
    - After each rainfall event of ½ inch or more - within 24 hours of the rain event
  - The contractor shall maintain an inspection log including the inspector's name, date of inspection, observations as to the effectiveness of the erosion and sediment control measures, actions necessary to correct deficiencies, when the deficiencies were corrected, and the signature of the person performing the inspection. The inspection log shall be available for review by the regulatory authority.
  - The contractor shall have the erosion and sediment control plan routinely updated to show all changes and amendments to the plan. A copy of the erosion and sediment control plan shall be kept on site and made available for review by the regulatory authority.
- Unless otherwise noted in the plans, all seeding must conform to Division II-Construction and Materials Specification-Section 2150 published by the Kansas City Metropolitan Chapter of the American Public Works Association dated May 21, 2008. Permanent seeding shall be installed after completion of final grading except when seeding will occur outside of the acceptable seeding season as specified in Section 2150. When temporary seeding is installed, permanent seeding shall be installed at the next seeding season. Temporary seeding shall not be used as a stabilization measure for a period exceeding 12 months. The Permit will not be closed until permanent seeding has been established to a minimum of 70% density over the entire disturbed area.
- The contractor shall maintain installed erosion and sediment control devices in a manner that preserves their effectiveness for preventing sediment from leaving the site or entering a sensitive area such as a natural stream corridor, areas of the site intended to be left undisturbed, a storm sewer, or an on-site drainage channel.
- The contractor is responsible for providing erosion and sediment control for the duration of a project. If the City determines that the BMPs in place do not provide adequate erosion and sediment control at any time during the project, the contractor shall install additional or alternate measures that provide effective control.
- Concrete wash or rinse water from concrete mixing equipment, tools and/or ready-mix trucks, tools, etc. may not be discharged into or be allowed to run directly into any existing water body or storm inlet. One or more locations for concrete wash out will be designated on site, such that discharges during concrete washout will be contained in a small area where waste concrete can solidify in place.
- Chemicals or materials capable of causing pollution may only be stored onsite in their original container. Materials stored outside must be in closed and sealed water-proof containers and located outside of drainage ways or areas subject to flooding. Locks and other means to prevent or reduce vandalism shall be used. Spills will be reported as required by law and immediate actions taken to contain them.
- Silt fences and erosion control BMPs which are shown along the back of curb must be installed within two weeks of curb backfill and prior to placement of base asphalt. Exact locations of these erosion control methods may be field adjusted to minimize conflicts with utility construction; however, anticipated disturbance by utility construction shall not delay installation.
- Interior Silt Fence as necessary during construction. Portions may be limited as vegetation is established and hardscape is installed. Entire length may be installed at the contractor's option to aid in stabilizing slopes.
- Private Erosion & Sediment Control inspections are required in accordance with NPDES schedule and requirements. After inspections, provide the City of Lee's Summit with reports and documentation.

#### EROSION CONTROL LEGEND

- DISTURBED AREA (0.00 AC)
- SILT/SEDIMENT FENCE
- INLET PROTECTION FILTER BAGS
- CONSTRUCTION ENTRANCE
- CONCRETE CLEANOUT



#### 000 DETAILS

- SEE EROSION CONTROL DETAIL SHEET FOR THE FOLLOWING

- 600 TEMPORARY CONSTRUCTION ENTRANCE
- 601 FILTER FABRIC SILT FENCE
- 603 STORM INLET PROTECTION
- 604 CONCRETE WASH-OUT

### EROSION & SEDIMENT CONTROL STAGING CHART

Phase	Project Stage	BMP Plan Ref. No.	BMP Description	Remove After Stage:	Notes:
Phase I (PRE-CON)	A - Place BMP's Prior to Land Disturbance	01	Perimeter Silt Fence	C	Place as shown on plan
		02	Construction Entrance & Staging Area	C	Place as shown on plan
		03	Concrete Wash-Out	C	Place as shown on plan
		04	Existing Inlet Protection	C	Place as shown on plan
Phase II (MID-CON)	B - After Utility Storm Sewer Construction		Storm Inlet Protection	C	Place as shown on plan
Phase III (POST-CON)	C - Final Grading, Paving & Landscaping	06	Final Seeding, Sod, and Landscaping	N/A	Silt fencing & inlet protect may be removed once seed & sodded areas are established on 80% of site.



### FINAL DEVELOPMENT PLAN

PROJECT TITLE



COURTYARDS - BUILDING E



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ENGINEER : ERB	APPROVED : ERB
NO.	REVISION DESCRIPTION DATE

DRAWING TITLE

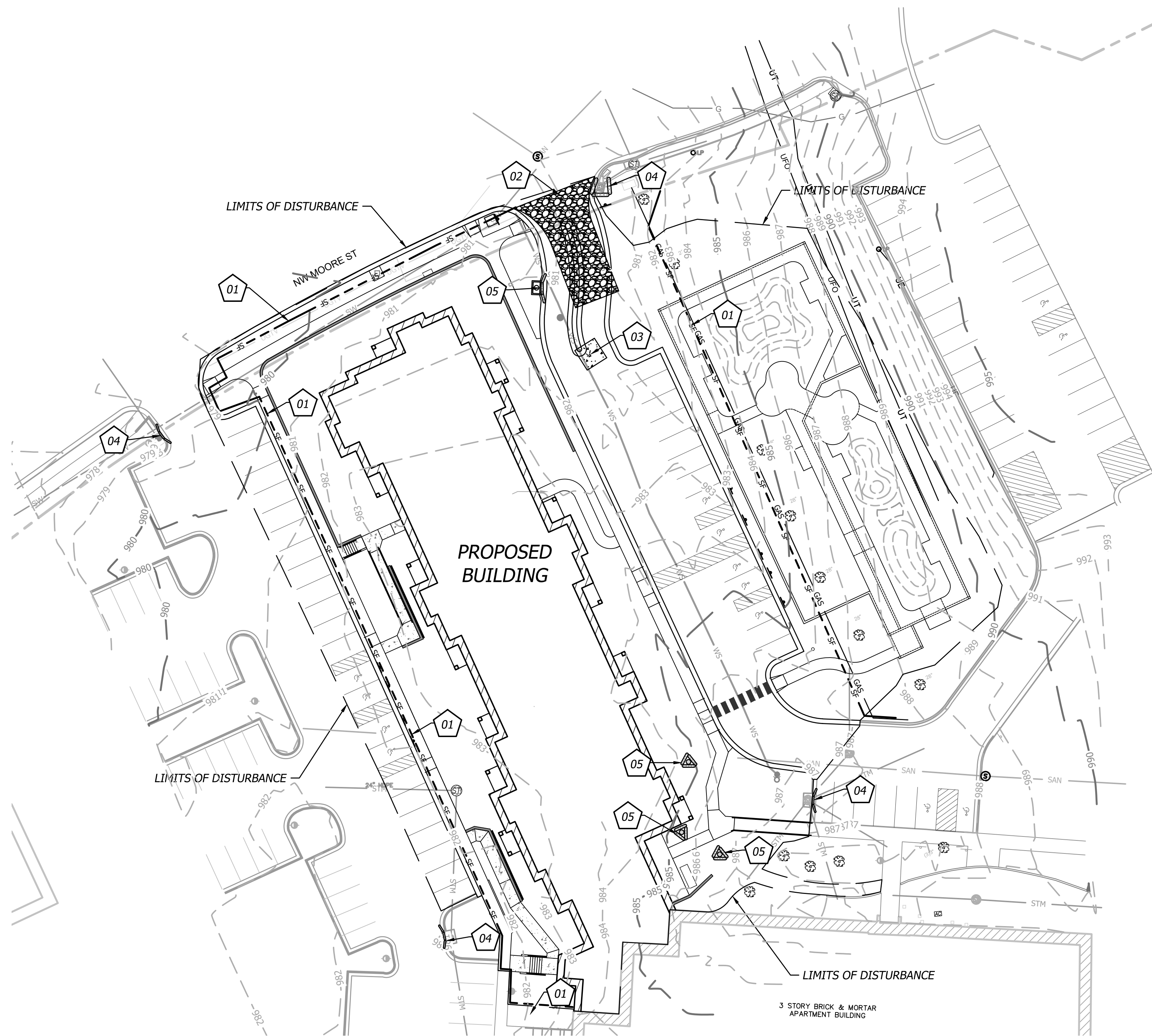
### PRE-CONSTRUCTION EROSION CONTROL PLAN

DATE: December 1, 2023

COMM. NO. 23104.00

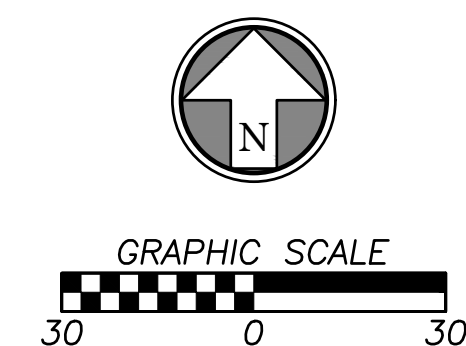
DRAWING

C5.0



- EROSION CONTROL LEGEND**
- DISTURBED AREA (0.00 AC)
  - SF SILT/SEDIMENT FENCE
  - INLET PROTECTION FILTER BAGS
  - CONSTRUCTION ENTRANCE
  - CONCRETE CLEANOUT

- 000 DETAILS**
- SEE EROSION CONTROL DETAIL SHEET FOR THE FOLLOWING
  - 600 TEMPORARY CONSTRUCTION ENTRANCE
  - 601 FILTER FABRIC SILT FENCE
  - 603 STORM INLET PROTECTION
  - 604 CONCRETE WASH-OUT



### EROSION & SEDIMENT CONTROL STAGING CHART

Phase	Project Stage	BMP Plan Ref. No.	BMP Description	Remove After Stage:	Notes:
Phase I (PRE-CON)	A - Place BMP's Prior to Land Disturbance	01	Perimeter Silt Fence	C	Place as shown on plan
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		03	Concrete Wash-Out	C	Place as shown on plan
		04	Existing Inlet Protection	C	Place as shown on plan
Phase II (MID-CON)	B - After Utility Storm Sewer Construction		Storm Inlet Protection	C	Place as shown on plan
Phase III (POST-CON)	C - Final Grading, Paving & Landscaping	06	Final Seeding, Sod, and Landscaping	N/A	Silt fencing & inlet protect may be removed once seed & sodded areas are established on 80% of site.



### FINAL DEVELOPMENT PLAN

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COURTYARDS - BUILDING E



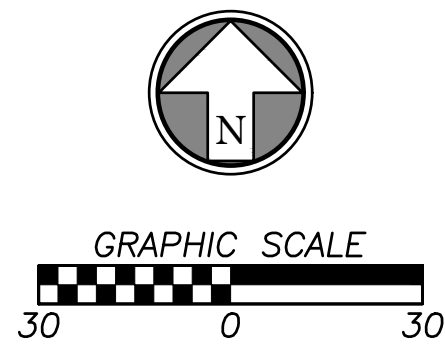
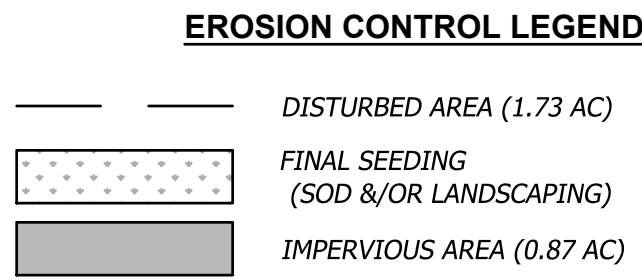
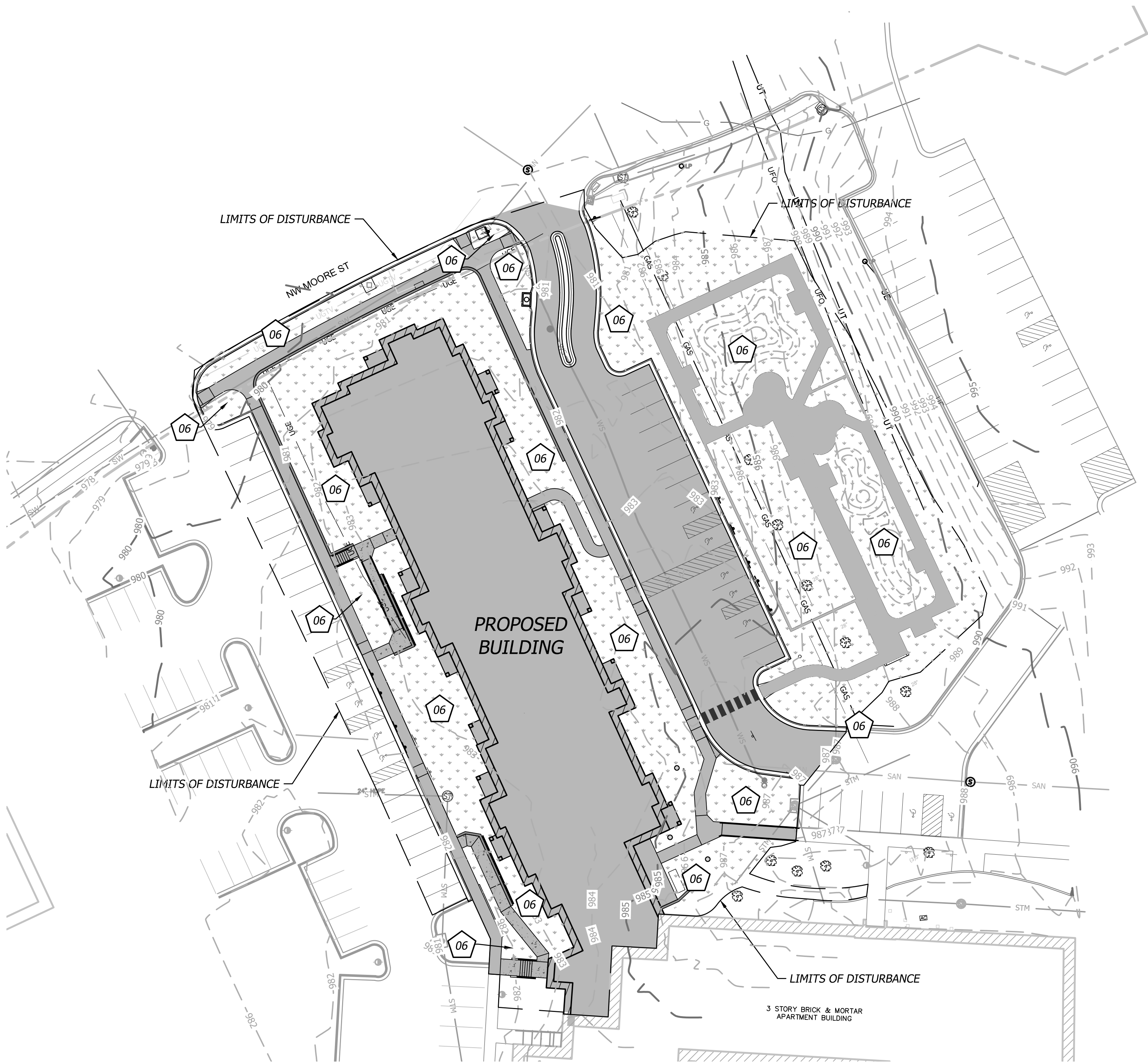
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NO.	REVISION DESCRIPTION DATE

DRAWING TITLE

### MID-CONSTRUCTION EROSION CONTROL PLAN

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	C5.1



**EROSION & SEDIMENT CONTROL STAGING CHART**

Phase	Project Stage	BMP Plan Ref. No.	BMP Description	Remove After Stage:	Notes:
Phase I (PRE-CON)	A – Place BMP's Prior to Land Disturbance	01	Perimeter Silt Fence	C	Place as shown on plan
		02	Construction Entrance & Staging Area	C	Place as shown on plan
		03	Concrete Wash-Out	C	Place as shown on plan
		04	Existing Inlet Protection	C	Place as shown on plan
Phase II (MID-CON)	B – After Utility Storm Sewer Construction		Storm Inlet Protection	C	Place as shown on plan
Phase III (POST-CON)	C – Final Grading, Paving & Landscaping	06	Final Seeding, Sod, and Landscaping	N/A	Silt fencing & inlet protect may be removed once seed & sodded areas are established on 80% of site.



**FINAL  
DEVELOPMENT PLAN**

PROJECT TITLE



COURTYARDS - BUILDING E



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ENGINEER : ERB	APPROVED : ERB	
NO.	REVISION DESCRIPTION	DATE

DRAWING TITLE

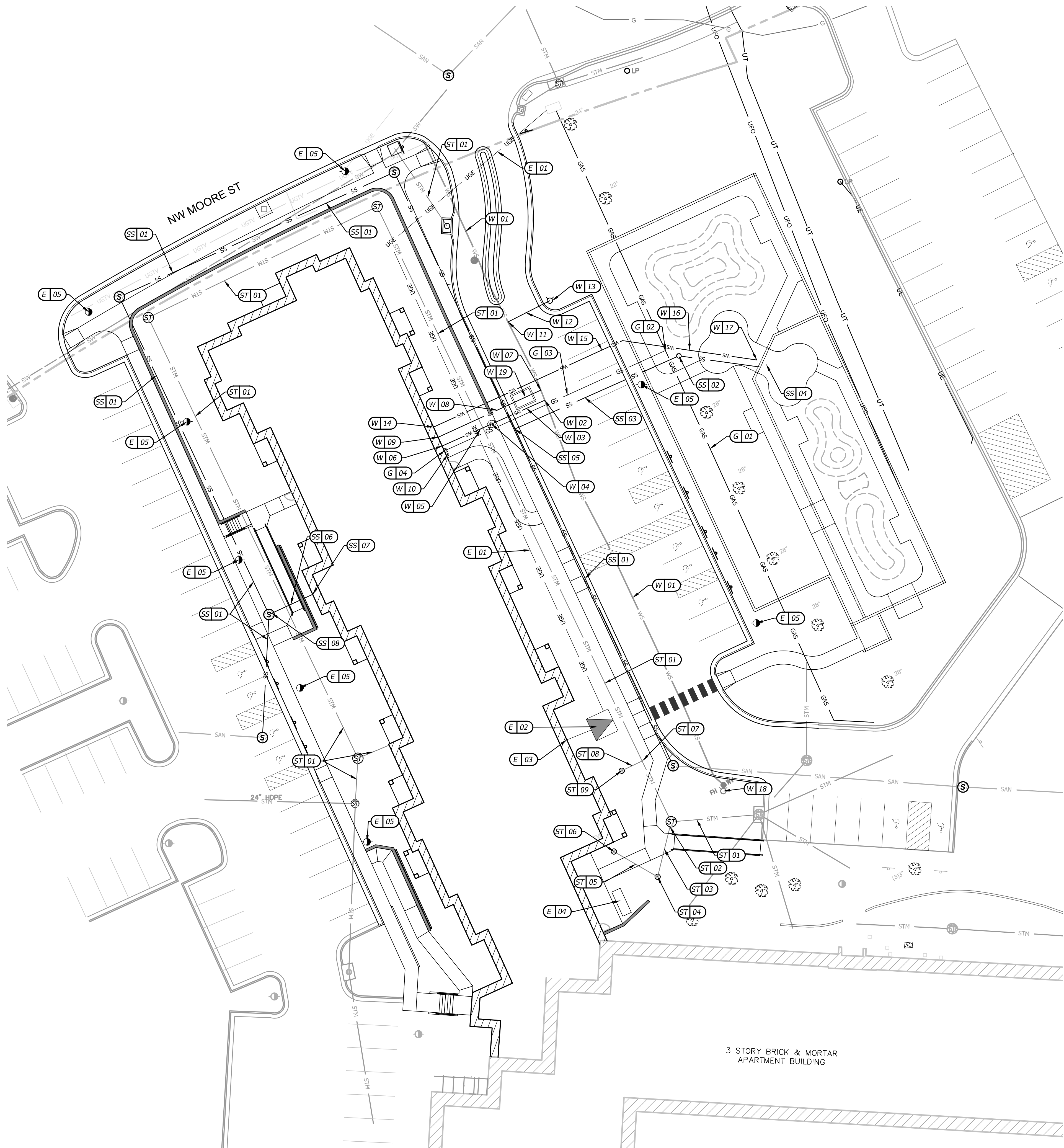
**POST-CONSTRUCTION  
EROSION CONTROL PLAN**

DATE: December 1, 2023

COMM. NO. 23104.00

DRAWING

**C5.2**



**UTILITY CONSTRUCTION NOTES**

- W - WATER SERVICE INFORMATION - LEE'S SUMMIT WATER UTILITIES
- 01 EXISTING 6" WATER MAIN LINE.
  - 02 CONNECT TO WATER MAIN WITH 2" CORPORATION STOP; REFER TO CONNECTION DETAIL.
  - 03 INSTALL 22 LF OF 2" C-900 PVC SERVICE LINE WITH MINIMUM DEPTH OF COVER OF 42".
  - 04 INSTALL 2" METER IN PIT AND 2"x3" REDUCER AFTER METER.
  - 05 INSTALL 21 LF OF 3" C-900 PVC SERVICE LINE WITH MINIMUM DEPTH OF COVER OF 42"
  - 06 CONNECT WATER SERVICE TO BUILDING; SEE PLUMBING PLANS.
  - 07 CONNECT TO WATER MAIN WITH 6"x6" TEE AND 6" GATE VALVE.
  - 08 INSTALL 43 LF OF 6" C-900 FIRE PROTECTION LINE WITH MINIMUM DEPTH OF COVER OF 42".
  - 09 CONNECT FIRE PROTECTION LINE TO BUILDING PLUMBING ; SEE MEP PLANS.
  - 10 FIRE DEPARTMENT CONNECTION.
  - 11 CONNECT TO WATER MAIN WITH 6"x6" TEE AND 6" GATE VALVE.
  - 12 INSTALL 18 LF OF 6" C-900 FIRE PROTECTION LINE WITH MINIMUM DEPTH OF COVER OF 42"
  - 13 INSTALL FIRE HYDRANT ASSEMBLY.
  - 14 CONNECT WATER SERVICE TO BUILDING; SEE PLUMBING PLANS
  - 15 INSTALL 79 LF OF 3/4" COPPER WATER SERVICE WITH MINIMUM DEPTH OF COVER OF 42"
  - 16 INSTALL 51 LF OF 3/4" COPPER WATER SERVICE WITH MINIMUM DEPTH OF COVER OF 42"
  - 17 CONNECT WATER SERVICE TO DOG WATER FOUNTAIN; SEE INSTALLATION GUIDE
  - 18 EXISTING FIRE HYDRANT ASSEMBLY.
  - 19 INSTALL 6" DOUBLE CHECK DETCTOR ASSEMBLY IN CONCRETE VAULT; SEE DETAIL ON DETAIL SHEETS. VAULT SUMP TO INCLUDE 2-FOOT DIAMETER HOLE LINED WITH FILTER FABRIC AND FILL WITH CLEAN 3/4-INCH ROCK.

- E - ELECTRIC SERVICE INFORMATION - EVERGY
- 01 CONTRACTOR TO INSTALL PRIMARY UNDERGROUND ELECTRIC SERVICE FROM EXISTING ELECTRIC STRUCTURE TO TRANSFORMER PAD.
  - 02 PROPOSED TRANSFORMER PAD.
  - 03 CONTRACTOR TO INSTALL SECONDARY UNDERGROUND ELECTRIC SERVICE LINE FROM PROPOSED TRANSFORMER TO BUILDING; REF. ELECTRICAL PLAN.
  - 04 PROPOSED GENERATOR; REFER TO MEP
  - 05 PROPOSED RELOCATED LIGHT POLE; REFER TO MEP

- G - GAS SERVICE INFORMATION - SPIRE
- 01 EXISTING 4" GAS MAIN.
  - 02 TAP EXISTING GAS MAIN FOR SERVICE LINE; COORDINATE W/ SPIRE.
  - 03 INSTALL 92 LF GAS SERVICE LINE.
  - 04 GAS CONNECTION TO BLDG.; RE: PLUMBING PLAN.

- ST - STORM SEWER INFORMATION - LEE'S SUMMIT PUBLIC WORKS
- 01 STORM SEWER LINE; RE: SHEET C6.2
  - 02 CONNECT TO STORM STRUCTURE; FL = 981.00
  - 03 INSTALL 21 LF 6" HDPE @ 2% SLOPE
  - 04 INSTALL 12" NYLOPLAST DRAIN BASIN WITH DOME GRATE; RIM = 984.00; FL = 981.42
  - 05 INSTALL 19 LF 6" HDPE @ 2% SLOPE
  - 06 INSTALL 8" NYLOPLAST DRAIN BASIN WITH DOME GRATE; RIM = 984.20; FL = 981.80
  - 07 CONNECT TO STORM PIPE WITH INSERTA TEE; FL = 980.00
  - 08 INSTALL 8 LF 6" HDPE @ 2% SLOPE
  - 09 INSTALL 12" NYLOPLAST DRAIN BASIN WITH DOME GRATE; RIM = 983.50; FL = 980.16

- SS - SANITARY SEWER INFORMATION - LEE'S SUMMIT PUBLIC WORKS
- 01 RELOCATED SANITARY SEWER MAIN; RE: SHEET C6.1
  - 02 INSTALL SANITARY SEWER CLEANOUT
  - 03 INSTALL 98 LF OF 4" PVC-SDR26 SANITARY SERVICE LINE @ 2% MIN. SLOPE
  - 04 CONNECT SANITARY LINE TO DOG WATER FOUNTAIN; REFER TO INSTALLATION GUIDE
  - 05 CONNECT TO SANITARY MAIN WITH 10"x4" TEE; FL = 973.44
  - 06 INSTALL 18 LF OF 8" PVC-SDR26 SANITARY SERVICE LINE @ 1% MIN. SLOPE
  - 07 CONNECT TO BUILDING PLUMBING; REFER TO MEP
  - 08 CONNECT TO SANITARY MANHOLE; FL = 970.42

**UTILITY CONTACTS**  
CITY OF LEE'S SUMMIT, MO

<b>PLANNING AND DEVELOPMENT</b> CITY HALL 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 TEL: (816) 969-1600 FAX: (816) 969-1619	<b>CODES ADMINISTRATION</b> CITY HALL 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 TEL: (816) 969-1200 FAX: (816) 969-1201	<b>ELECTRIC COMPANY</b> EVERGY TEL: (888) 471-5275	<b>PLANNING AND DEVELOPMENT</b> CITY HALL 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 TEL: (816) 969-1600 FAX: (816) 969-1619
<b>PUBLIC WORKS</b> CITY HALL 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 TEL: (816) 969-1800 FAX: (816) 969-1809	<b>WATER UTILITIES</b> CITY HALL 1200 SE HAMBLEN RD LEE'S SUMMIT, MO 64063 TEL: (816) 969-1900 FAX: (816) 969-1935	<b>GAS COMPANY</b> SPIRE TEL: (816) 756-5252	<b>PUBLIC WORKS</b> CITY HALL 220 SE GREEN STREET LEE'S SUMMIT, MO 64063 TEL: (816) 969-1800 FAX: (816) 969-1809

**UTILITY NOTES**

- CONTRACTOR SHALL REFER TO ALL SPECIFICATIONS, GUIDELINES, AND INSTALLATION DRAWINGS FROM THE CITY OF LEE'S SUMMIT, EVERGY, AND SPIRE FOR THE INSTALLATION OF ALL SERVICE LINES.
- THE INFORMATION SHOWN ON THESE PLANS CONCERNING THE TYPE AND LOCATION OF UNDERGROUND UTILITIES IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR FIELD LOCATION OF ALL UNDERGROUND UTILITY LINES PRIOR TO ANY EXCAVATION AND FOR MAKING HIS OWN VERIFICATION AS TO TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.
- CONTRACTOR TO ENSURE 6" MINIMUM SEPARATION BETWEEN UTILITIES AT CROSSINGS. CONTRACTOR TO CALL CIVIL IF ANY CONFLICTS BETWEEN UTILITIES ARE FOUND.
- FIRE LINE NOTES:
  - 4.1. ALL PRIVATE FIRE LINES SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 24, AND OTHER APPLICABLE CODES AND STANDARDS.
  - 4.2. CONTACT THE FIRE DEPARTMENT TO SCHEDULE INSPECTIONS PRIOR TO PRIVATE FIRE LINES BEING BACKFILLED.
  - 4.3. CONTACT THE FIRE DEPARTMENT TO WITNESS SCHEDULED HYDROSTATIC TESTS AND FLUSHES OF PRIVATE FIRE LINES.
- STUB ALL CONNECTIONS TO WITHIN 5' OF THE BUILDING TO PROVIDE CONNECTION INTO THE BUILDING BY MECHANICAL/PLUMBING CONTRACTOR.
- CONTRACTOR TO ENSURE MIN. 18" VERTICAL SEPARATION BETWEEN UTILITIES AT CROSSING. CONTRACTOR TO CALL ENGINEER IF ANY CONFLICTS BETWEEN UTILITIES ARE FOUND.



**FINAL DEVELOPMENT PLAN**



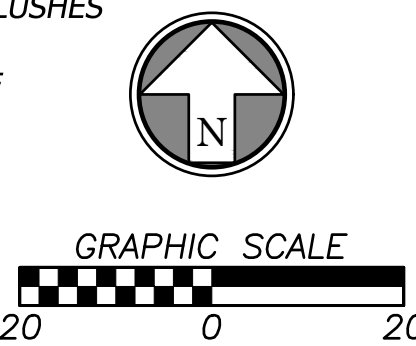
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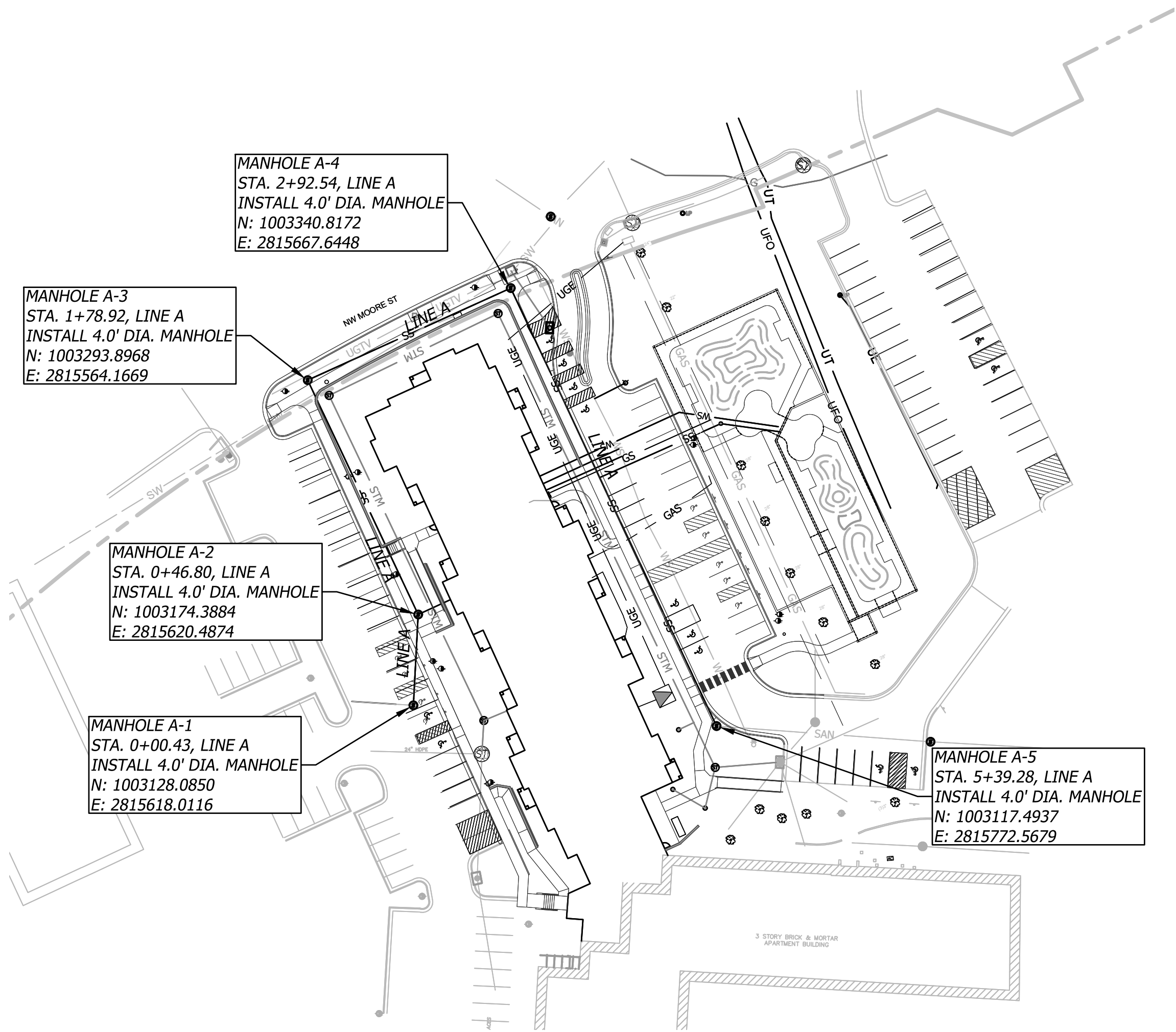
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NO.	REVISION DESCRIPTION	DATE

**UTILITY PLAN**

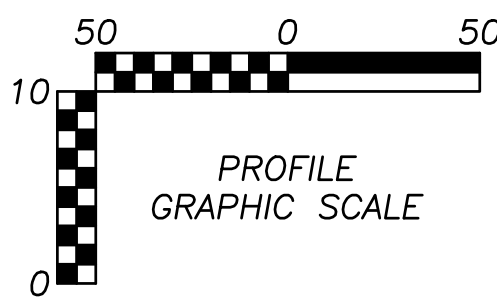
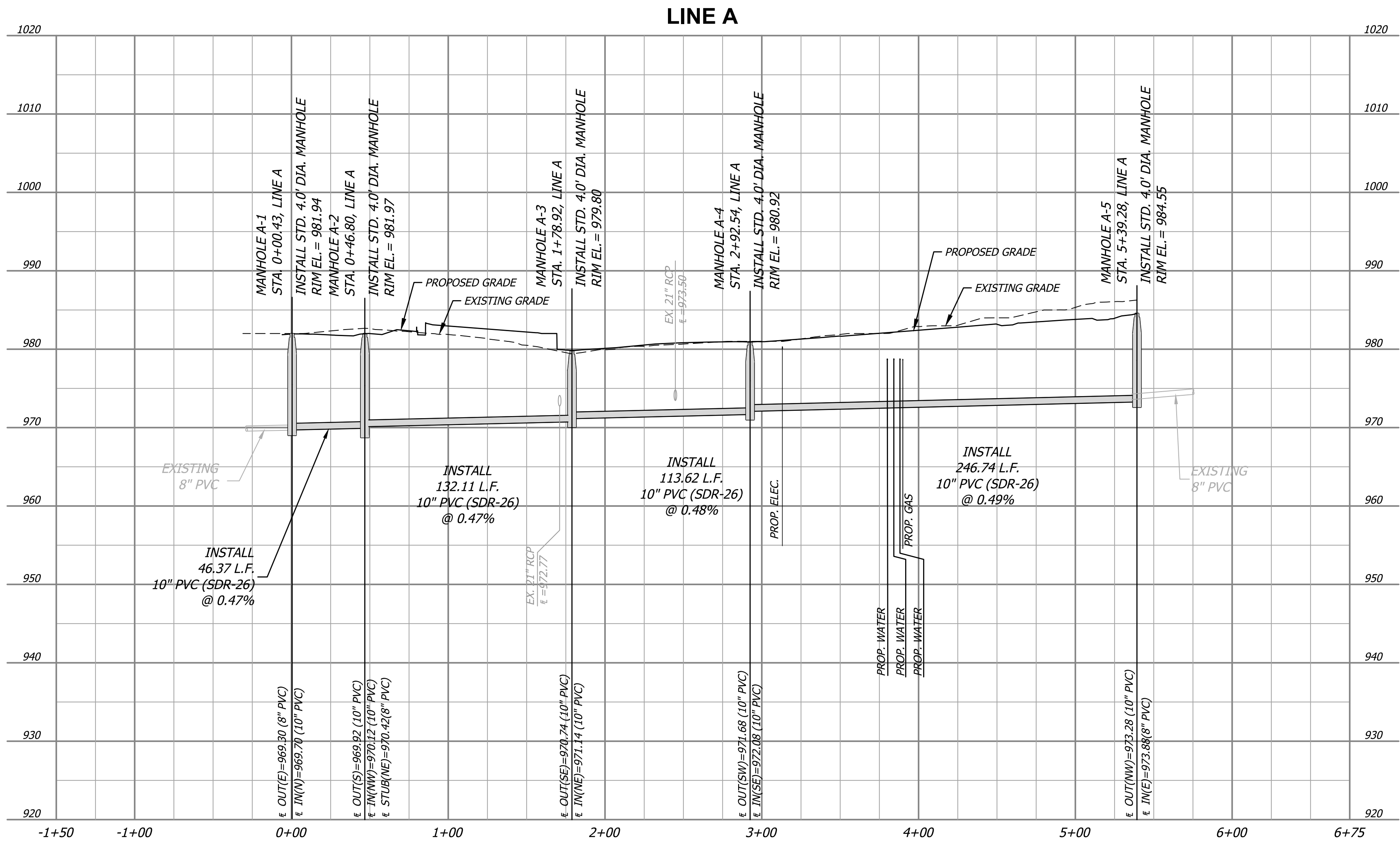
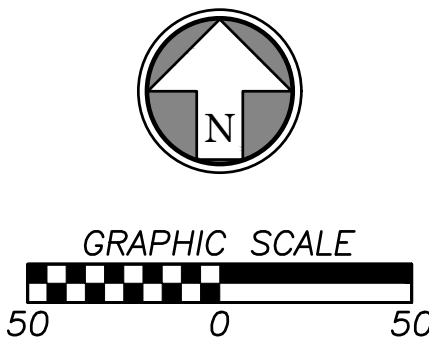
DATE: December 1, 2023  
COMM. NO. 23104.00

DRAWING  
**C6.0**





**SANITARY NOTE**  
ALL NORTHINGS, EASTINGS, AND ALIGNMENT STATIONING FOR SANITARY STRUCTURES ARE TO CENTER OF STRUCTURE UNLESS STATED OTHERWISE.



FINAL  
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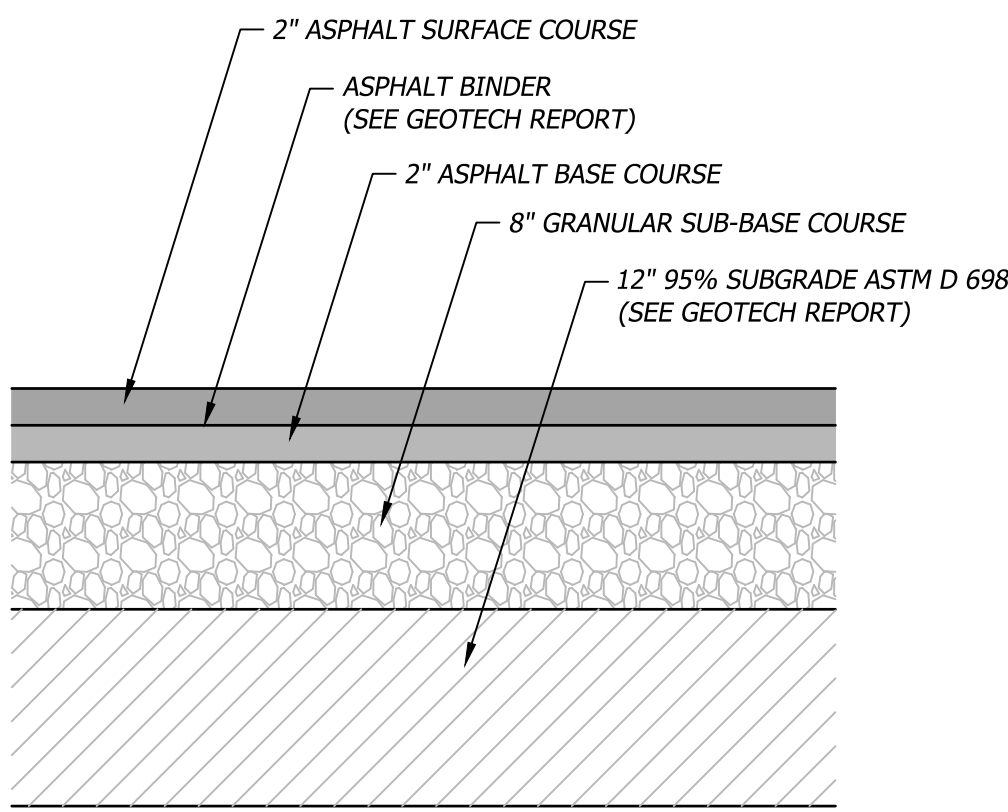
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ENGINEER : ERB	APPROVED : ERB
NO.	REVISION DESCRIPTION

DRAWING TITLE  
SANITARY PLAN & PROFILE

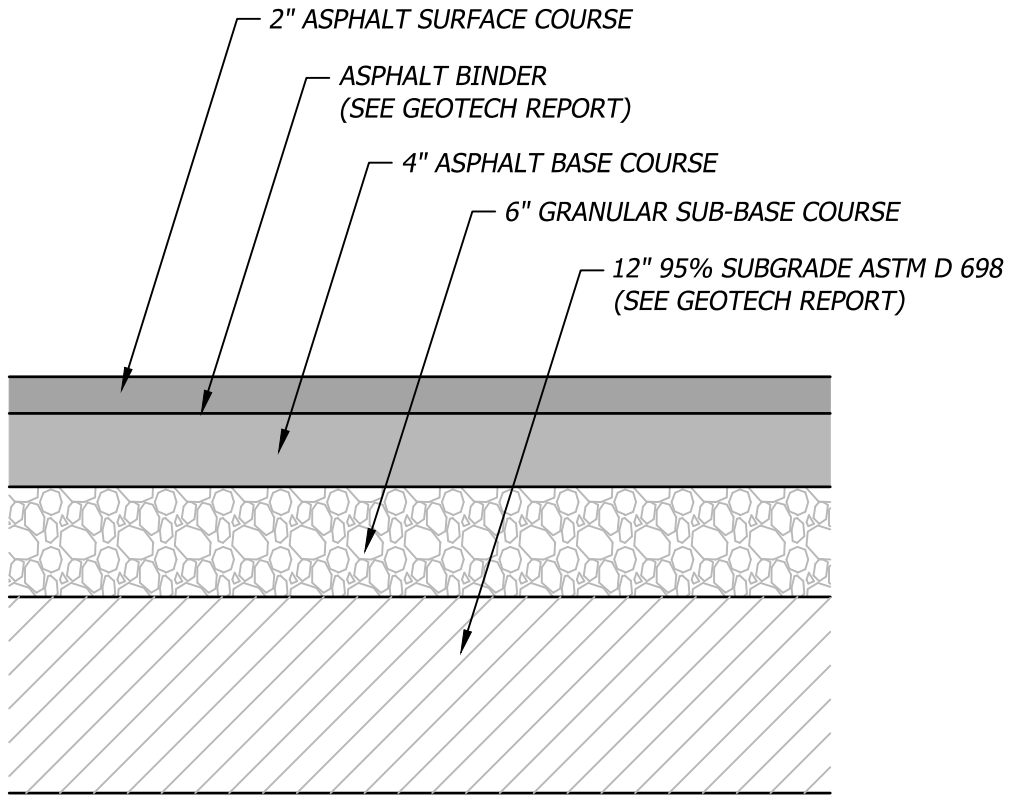
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COMM. NO. 23104.00

DRAWING  
C6.1

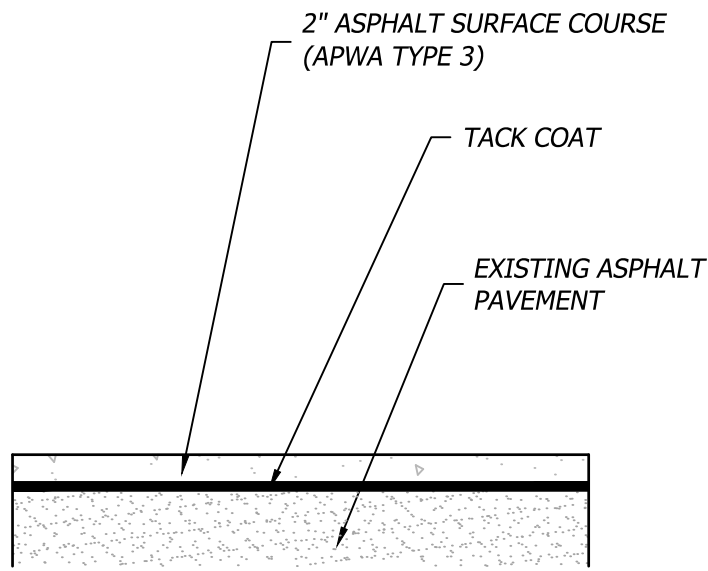




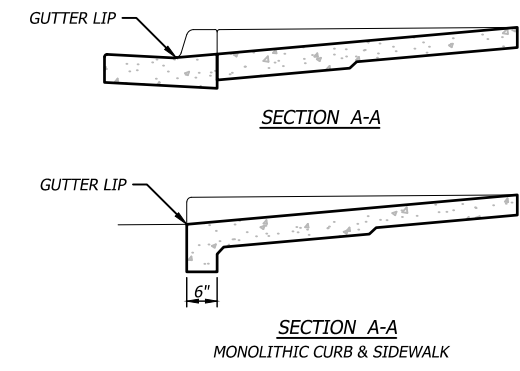
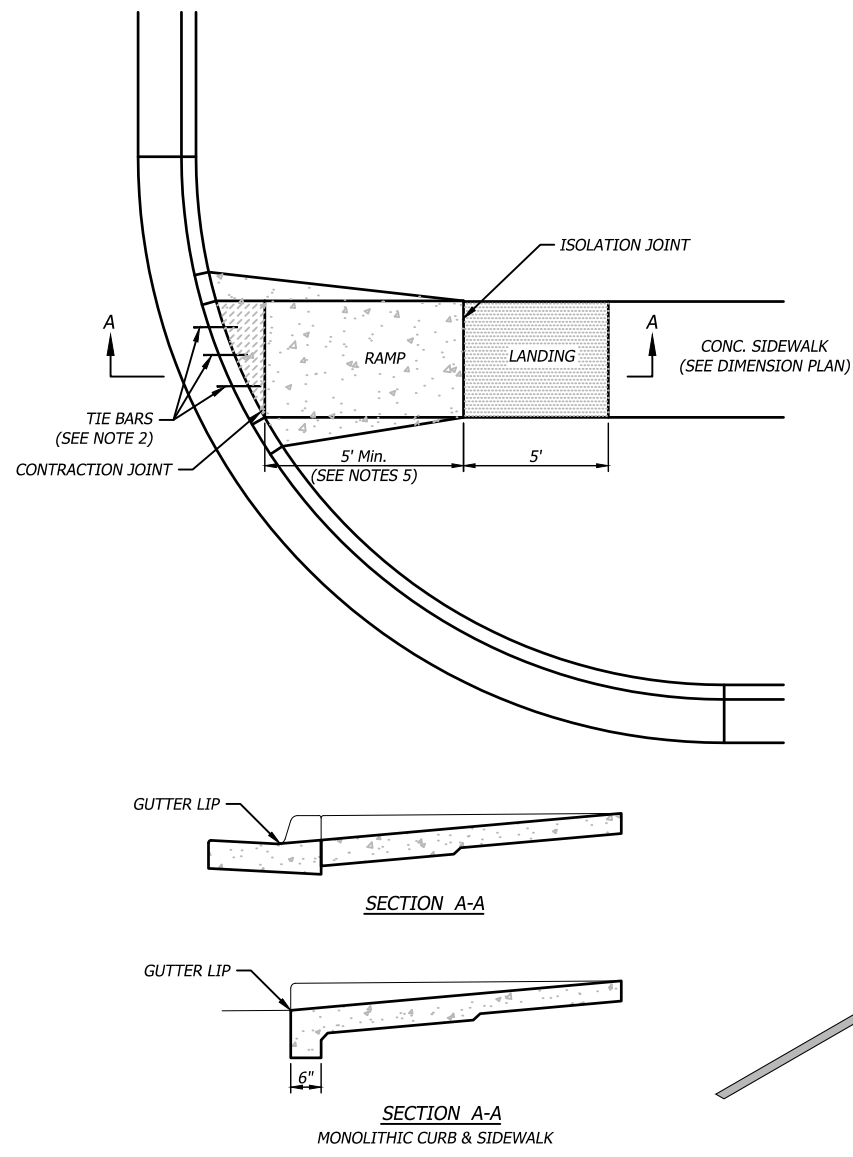
005 Light Duty Asphalt Pavement  
Not to Scale



006 Medium Duty Asphalt Pavement  
Not to Scale

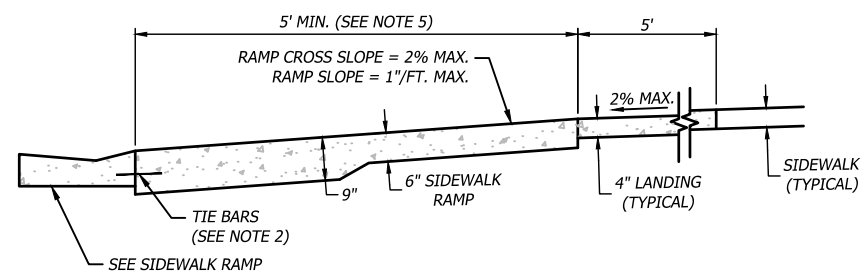


010 Asphalt Pavement Overlay  
Not to Scale



- GENERAL NOTES:
1. PLACE TYPICATED DOME DETECTABLE WARNING PANELS @ BASE OF CURB RAMP. INSTALL ACROSS FULL WIDTH OF RAMP 24" MIN. DEPTH.
  2. TOOLED JOINTS ARE REQUIRED AT ALL SIDEWALK RAMP SLOPE BREAKS.
  3. THICKEN CONCRETE UNDER DETECTABLE WARNING PANEL.
  4. IN FREEZE THAW ZONES, LEAVE 1/4" GAP IN BETWEEN PANELS & SEAL W/ SIKAFLEX 1A SEALANT OR APPROVED EQUAL.

- NOTES:
1. SIDEWALK RAMP LOCATION DETERMINED FROM THE INTERSECTION OF THE EXTENSION OF BACK OF SIDEWALK AND BACK OF CURB & GUTTER.
  2. TIE BARS #4 EPOXY COATED @ 12" OC.
  3. LONGITUDINAL JOINT SPACING TO MATCH WIDTH OF SIDEWALK.
  4. ISOLATION JOINTS SHALL BE PLACED WHERE WALK ABUTS DRIVEWAYS AND SIMILAR STRUCTURES, AND 250' CENTERS MAX.
  5. SIDEWALK RAMP SHALL BE LENGTHENED TO PROVIDE ADA COMPLIANCE SLOPE BUT NEED NOT EXCEED 15'.
  6. ADA RAMP SLOPE MAX. = 1/11 FT. ADA CROSS SLOPE MAX. = 2%.
  7. SEE DETECTABLE WARNING DETAIL FOR THE INSTALLATION REQUIREMENTS.



019 Sidewalk Ramp (Private)  
Not to Scale

NOTE: OTHER STYLES OF ACCESSIBLE SIGNAGE MAY BE ACCEPTABLE. SUBMIT ALTERNATIVE SIGNAGE AS A SHOP DRAWING FOR REVIEW.

INTERNATIONAL SYMBOL OF ACCESSIBILITY  
12"x18" SIGN

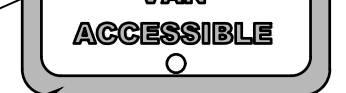


1/2" NUT & BOLT  
(2 PER SIGN)

LOCAL OR STATE REGULATIONS MAY REQUIRE POSTING OF FINES OR OTHER VERBIAGE. INCLUDE VERBIAGE ON SIGNS AS REQUIRED.

SIGNS SHALL BE BAKED ENAMEL ON 0.063 ALUMINUM SHEETING W/ROUNDED CORNERS, TWO MOUNTING HOLES, WHITE BORDER, SYMBOL & LETTERING ON BLUE BACKGROUND

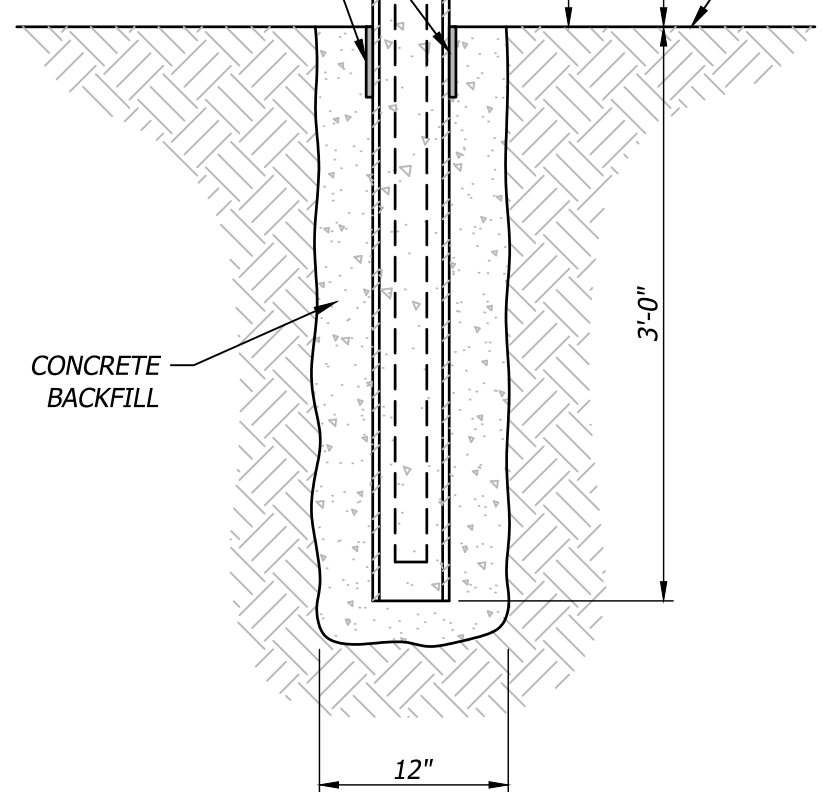
12"x6" SIGN  
INSTALL THIS SIGN AT VAN ACCESSIBLE STALLS (8'-0" WIDE AISLES)



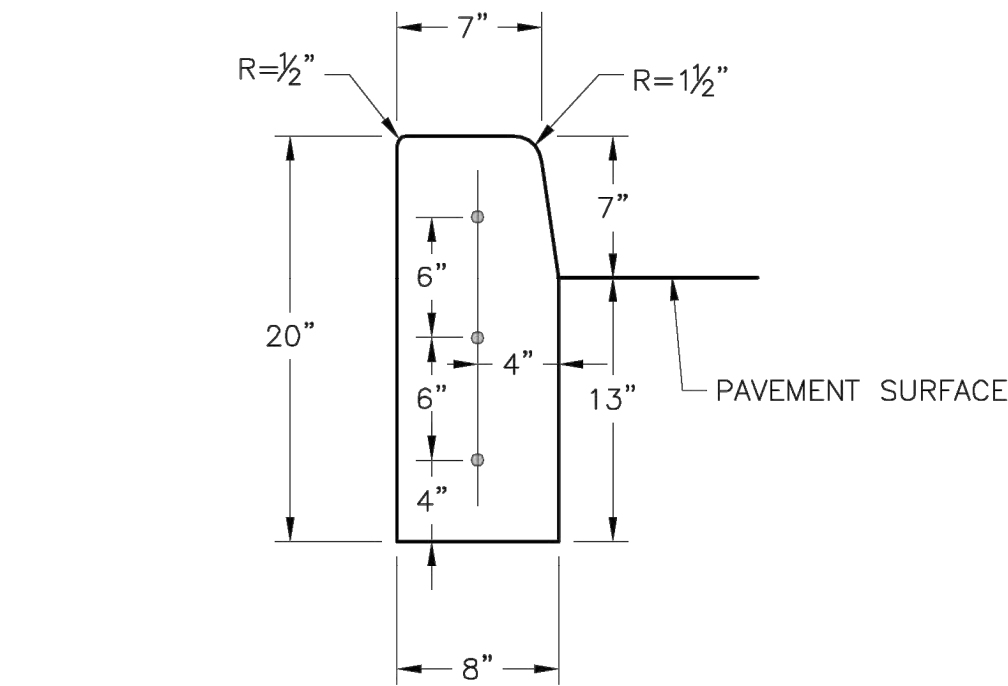
STEEL U-CHANNEL POSTS SHALL BE HOT-ROLLED HIGH TENSILE RAIL STEEL, 2 LBS/FT, PERFORATED WITH 3/8" DIAMETER HOLES AT 1" CENTERS FINISH WITH GREEN BAKED ENAMEL

6" DIAMETER STEEL PIPE PAINTED YELLOW FILLED W/CONCRETE

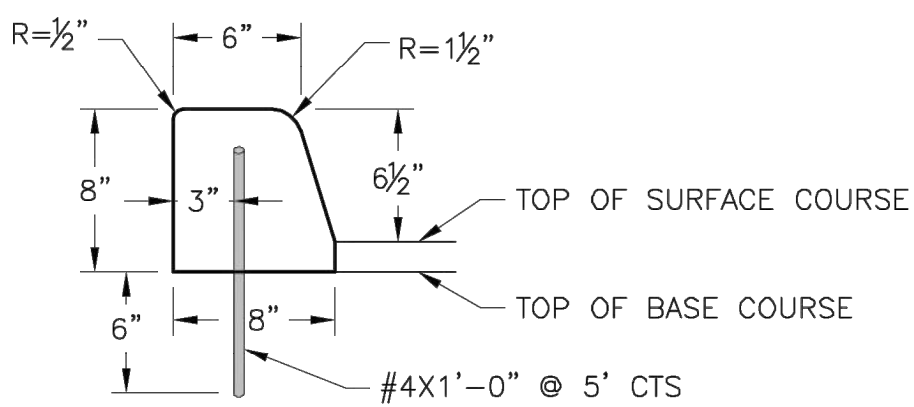
APPLY EXPANSION JOINT MATERIAL (FOR BOLLARDS IN HEAVY DUTY CONCRETE AREAS ONLY)



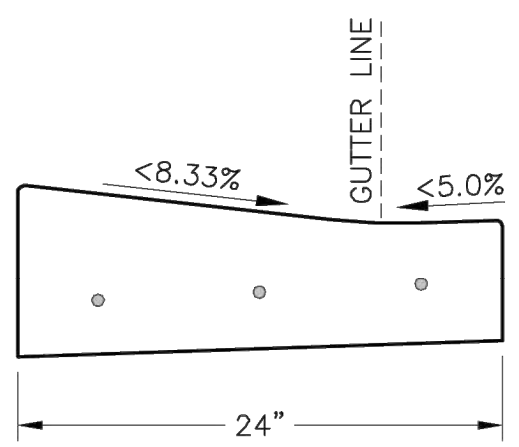
022 (ADA) Handicap Parking Signage  
Not to Scale



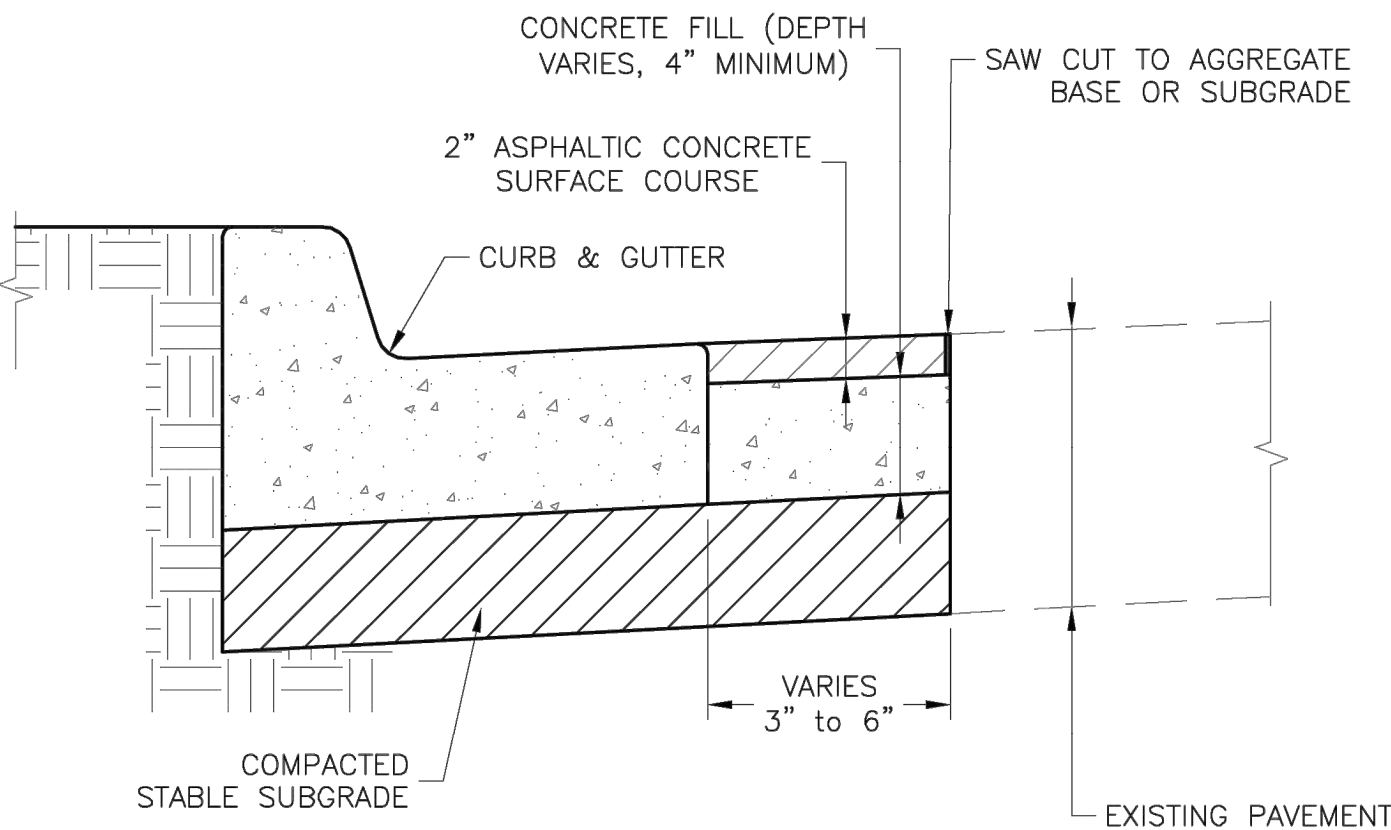
STRAIGHT CURB  
(TYPE C-1)



DOWELLED CURB  
(TYPE DC)



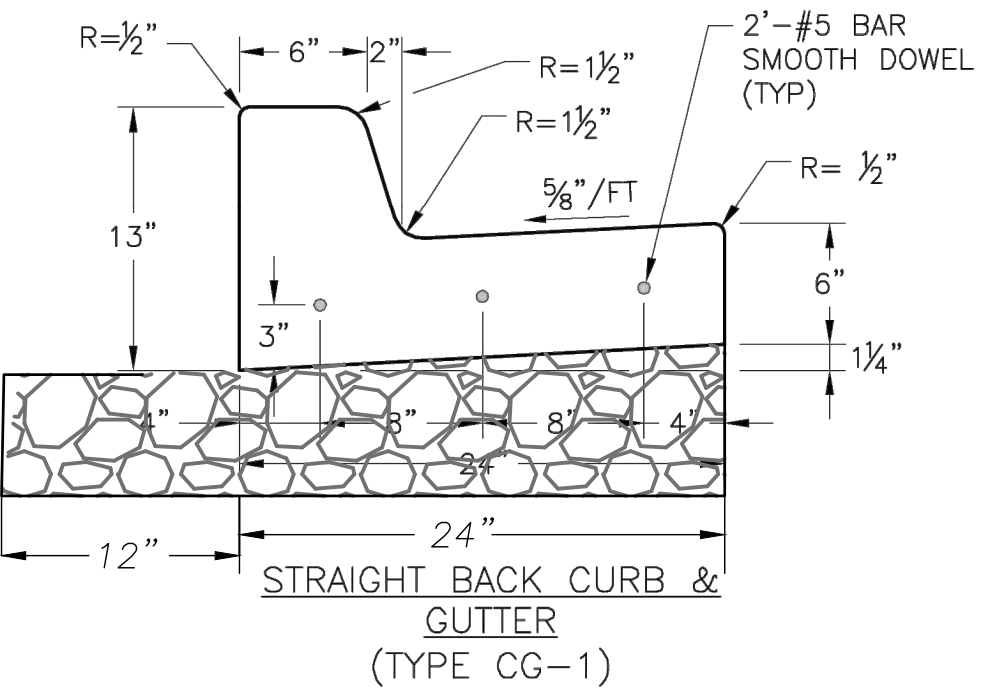
CURB & GUTTER DETAIL AT RAMP  
(ADA SLOPE REQUIREMENTS)



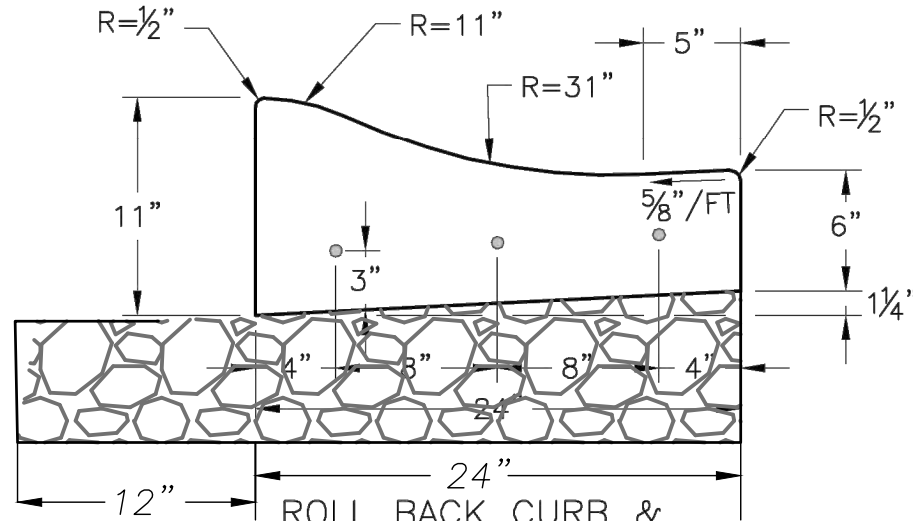
CURB REPLACEMENT DETAIL

GENERAL NOTES

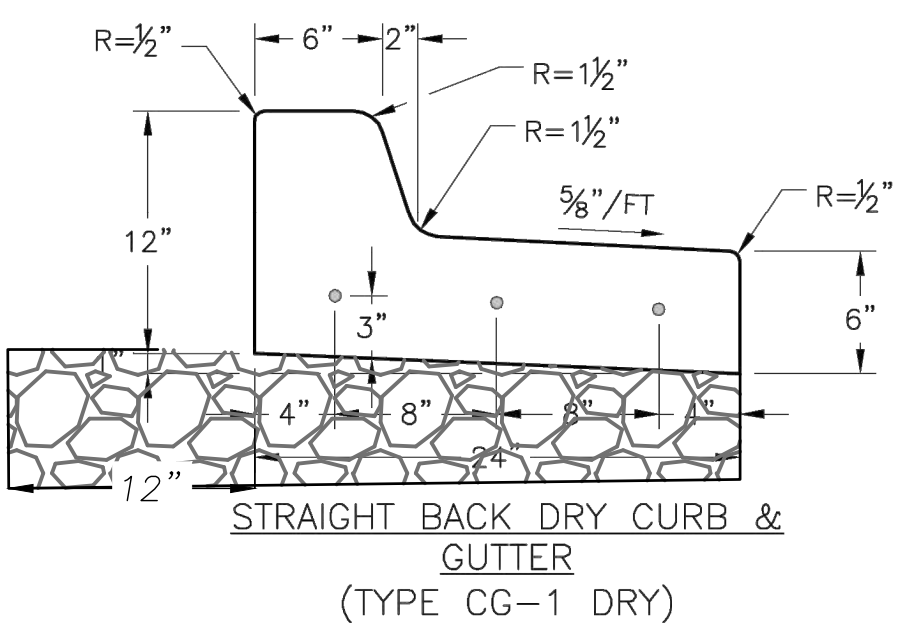
1. 3/4" ISOLATION JOINTS WITH 3 (2'-#5 BAR) SMOOTH DOWELS SHALL BE PLACED AT RADIUS POINTS AND AT 150' INTERVALS. THESE DOWEL BARS SHALL BE GREASED AND WRAPPED ON ONE END WITH EXPANSION TUBES.
2. 3" DEEP CONTRACTION JOINTS SHALL BE INSTALLED AT APPROXIMATELY 10' INTERVALS. THESE JOINTS SHALL PASS ACROSS THE ENTIRE CURB SECTION.
3. CONCRETE FILL SHALL HAVE UNIFORM AND SMOOTH FINISH
4. KCMMB 4K CONCRETE SHALL BE USED FOR ALL CURB.
5. ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM TO STANDARD SPECIFICATIONS SECTION 2205.2.
6. CURBS FOR NEW STREETS SHALL BE BUILT ON ASPHALT OR AGGREGATE BASE AS SHOWN IN TYPICAL SECTION DETAIL.
7. WHITE CURING COMPOUND MUST BE APPLIED UNIFORMLY TO THE CONCRETE SURFACE IMMEDIATELY AFTER FINAL FINISHING.



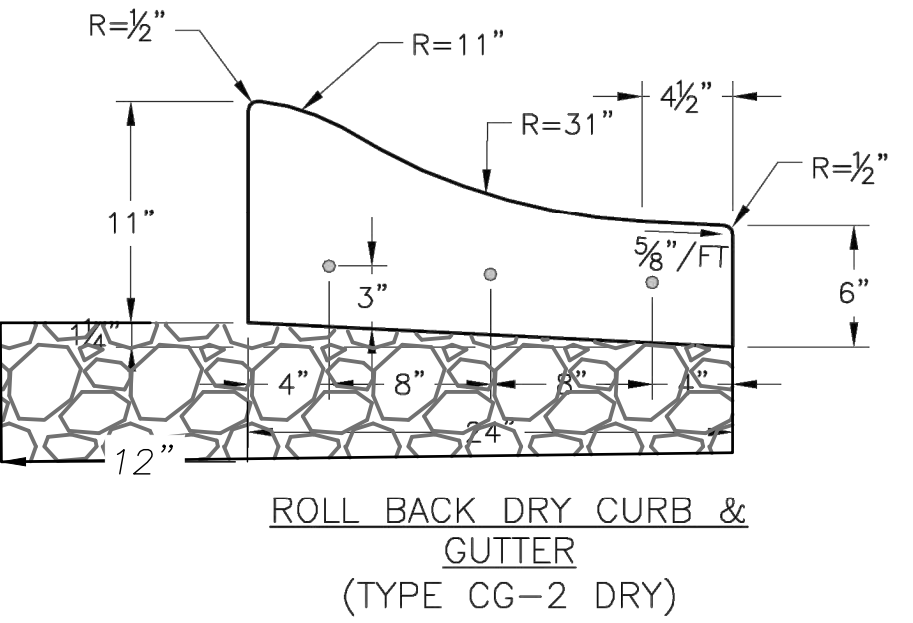
STRAIGHT BACK CURB & GUTTER  
(TYPE CG-1)



ROLL BACK CURB & GUTTER  
(TYPE CG-2)



STRAIGHT BACK DRY CURB & GUTTER  
(TYPE CG-1 DRY)



ROLL BACK DRY CURB & GUTTER  
(TYPE CG-2 DRY)

002 Concrete Curb and Gutter  
Not to Scale

LEE'S SUMMIT  
MISSOURI

STANDARD DETAILS  
CITY OF LEE'S SUMMIT, MO  
LEE'S SUMMIT, JACKSON COUNTY, MO

Drawn By: MIF  
Checked By: DL  
Date: 04/17  
Proj. #:

GEN-4



FINAL  
DEVELOPMENT PLAN



COURTYARDS - BUILDING E

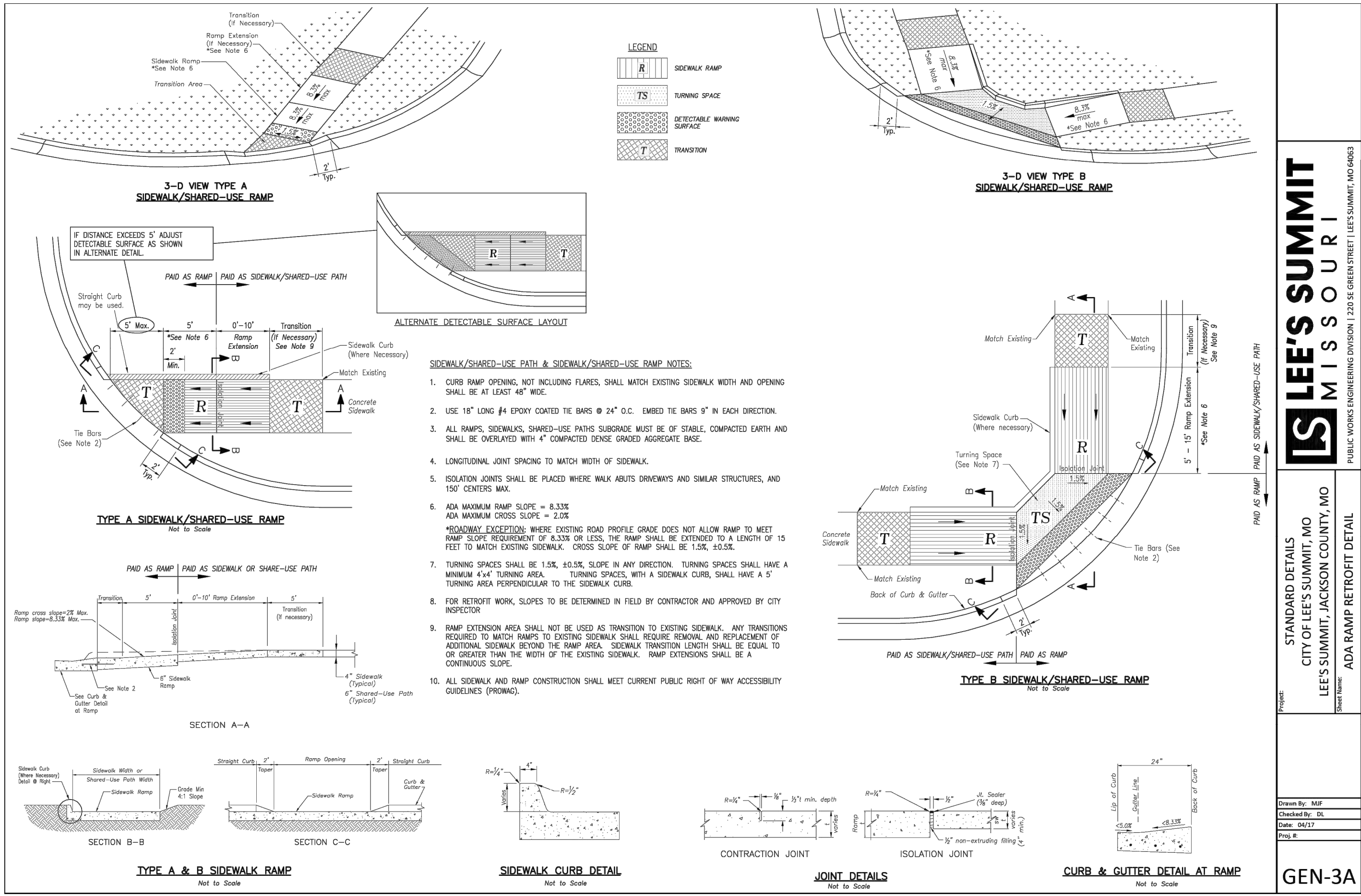


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ARCHITECT : DAS	CHECKED : ERB
ENGINEER : ERB	APPROVED : ERB
NO.	REVISION DESCRIPTION

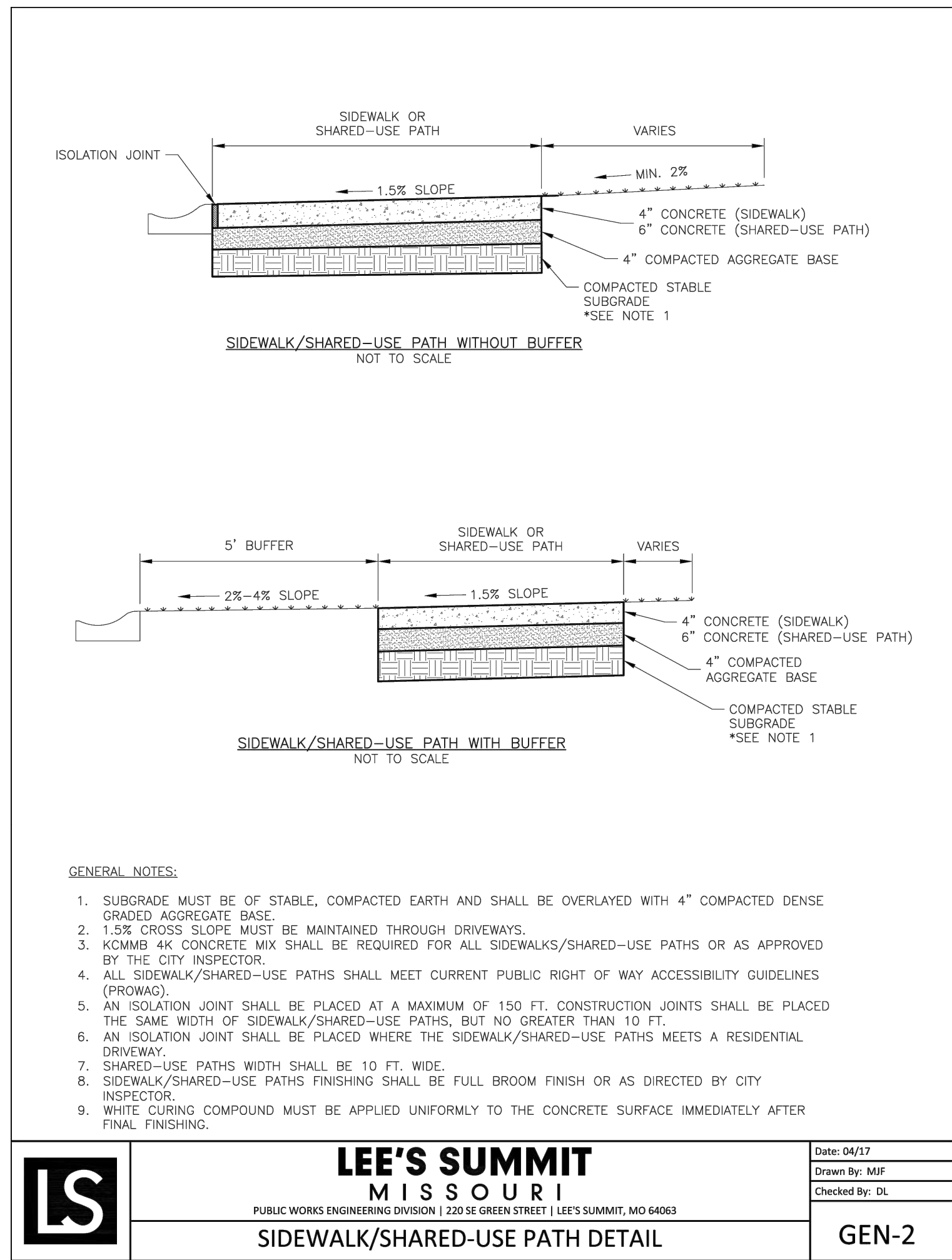
DRAWING TITLE  
CONSTRUCTION DETAILS

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	C7.0



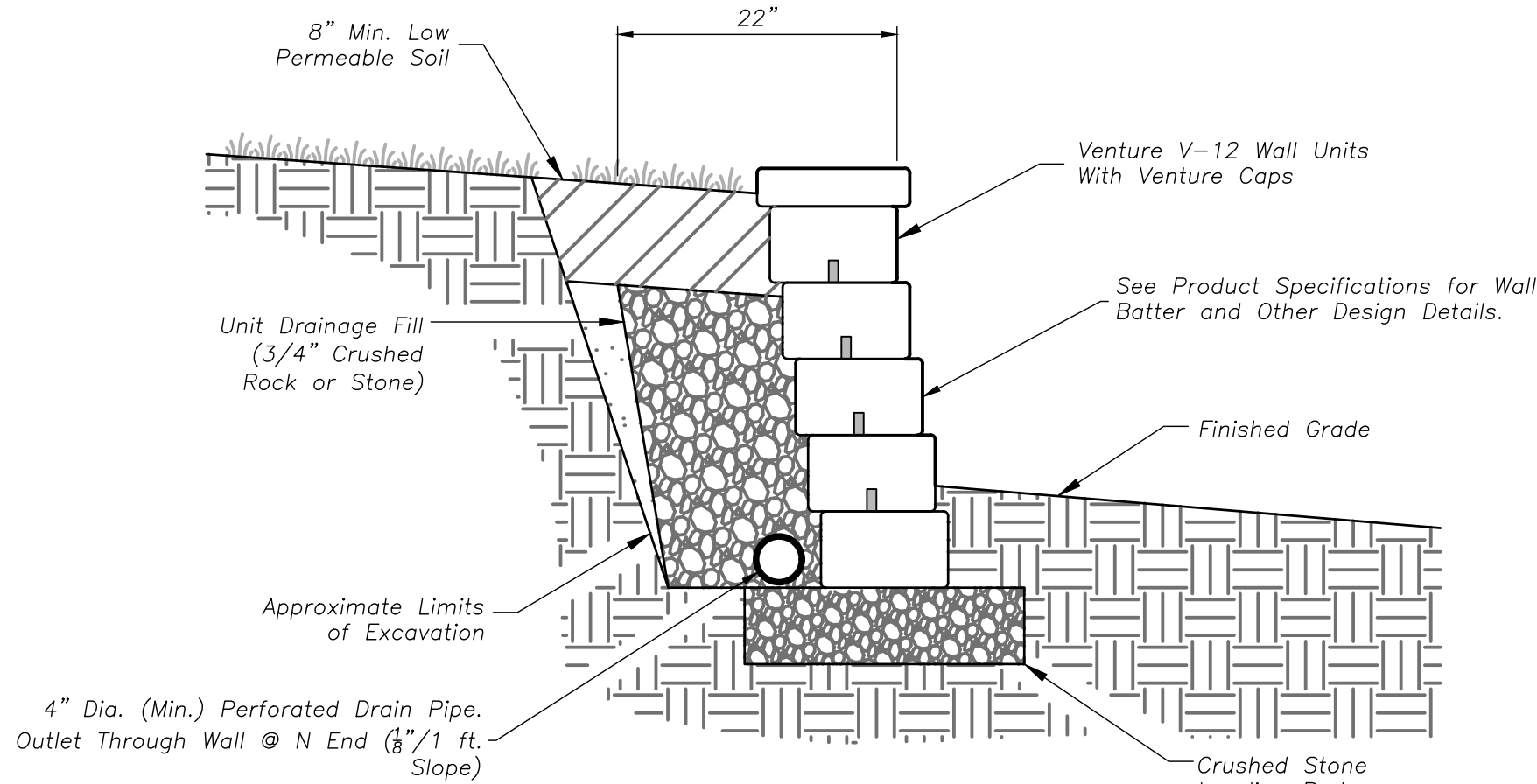
018 Sidewalk Ramp (Public)

Not to Scale



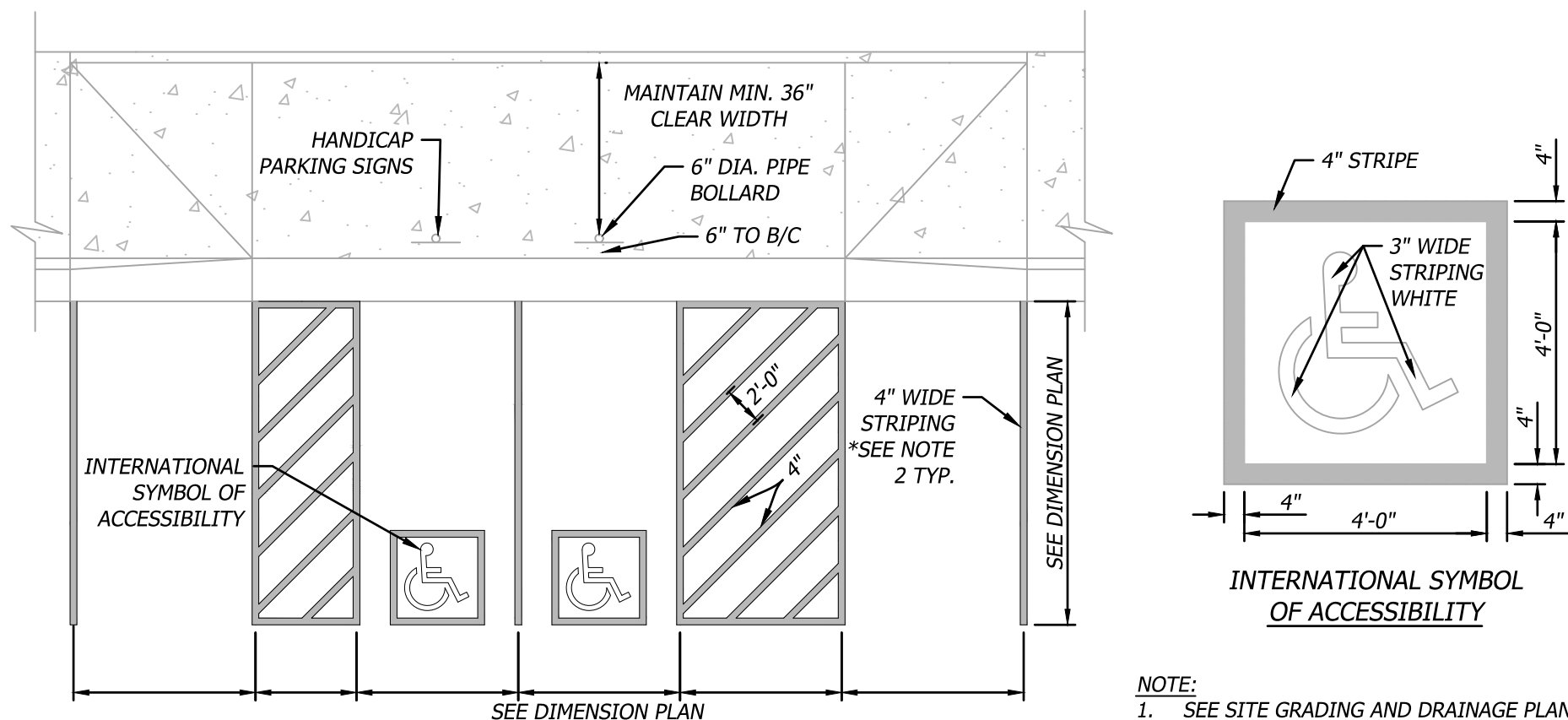
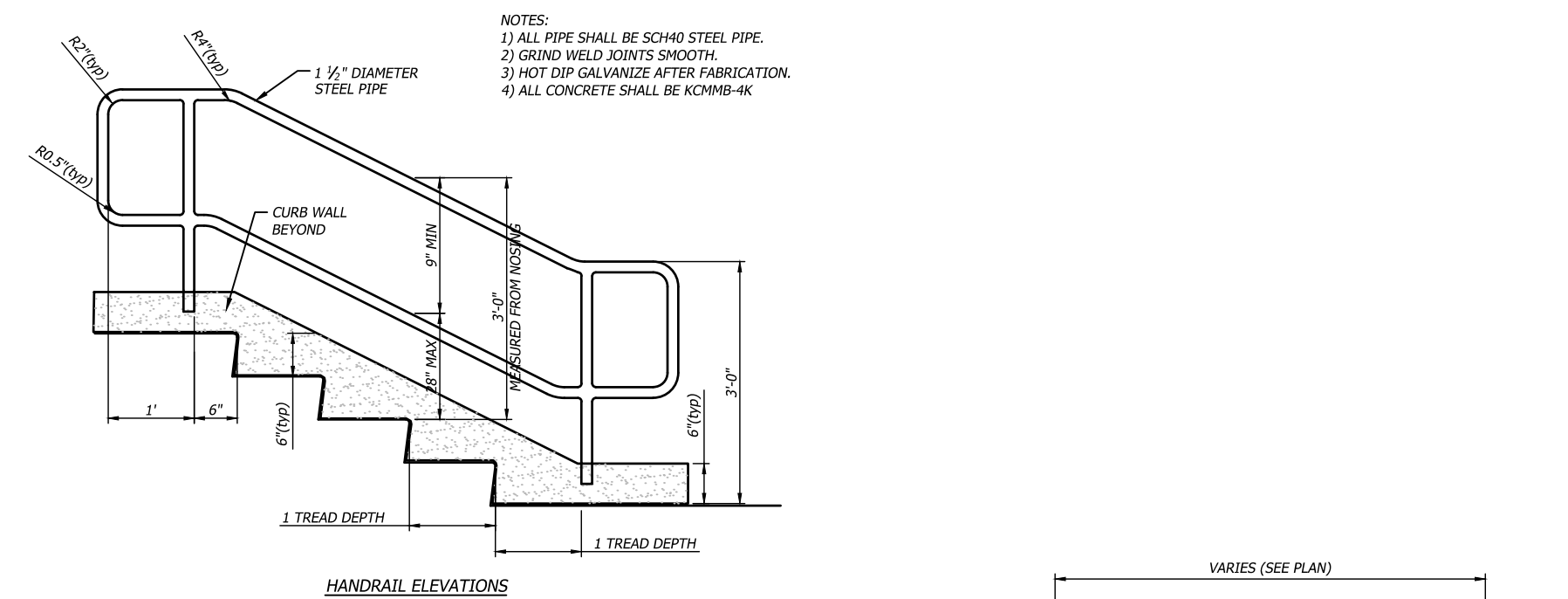
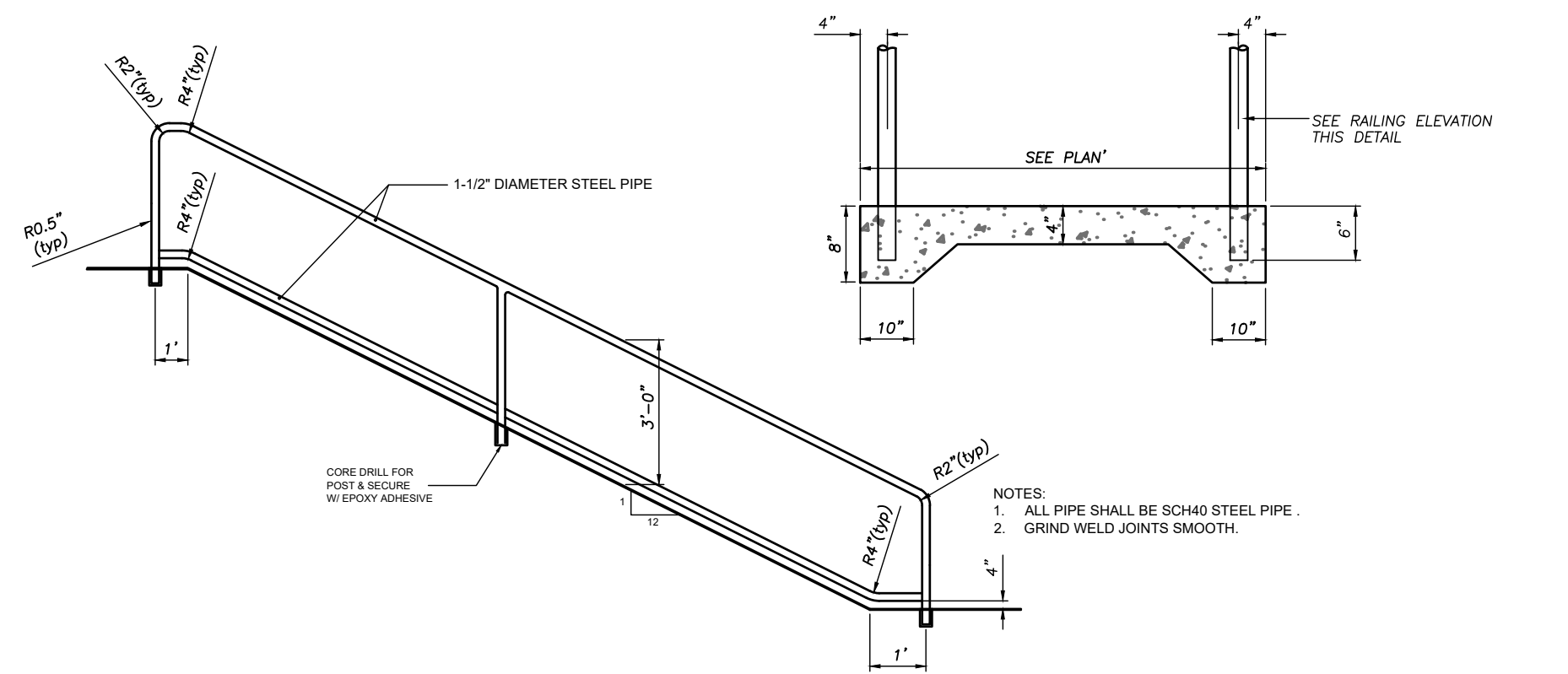
014 Concrete Sidewalk

Not to Scale



050 Modular Block Retaining Wall

Not to Scale



021 (ADA) Handicap Parking Striping

Not to Scale



## FINAL DEVELOPMENT PLAN

PROJECT TITLE



COURTYARDS - BUILDING E



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NO.	REVISION DESCRIPTION	DATE

DRAWING TITLE

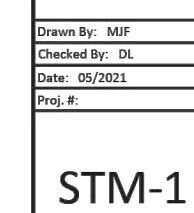
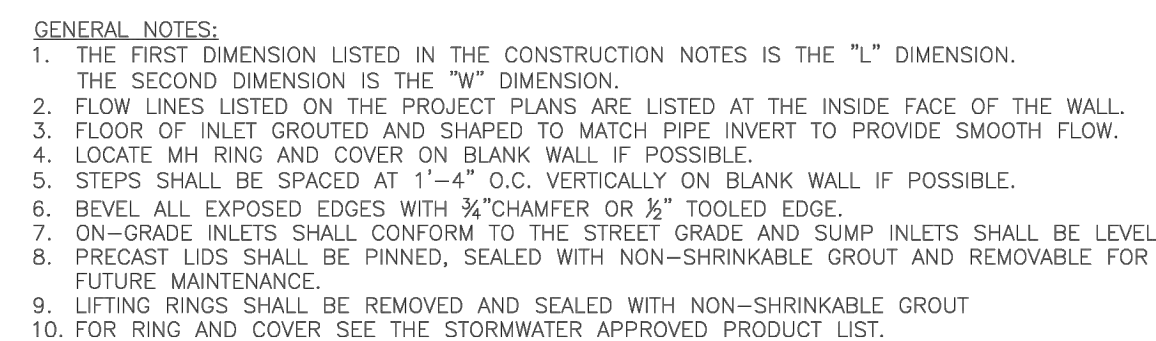
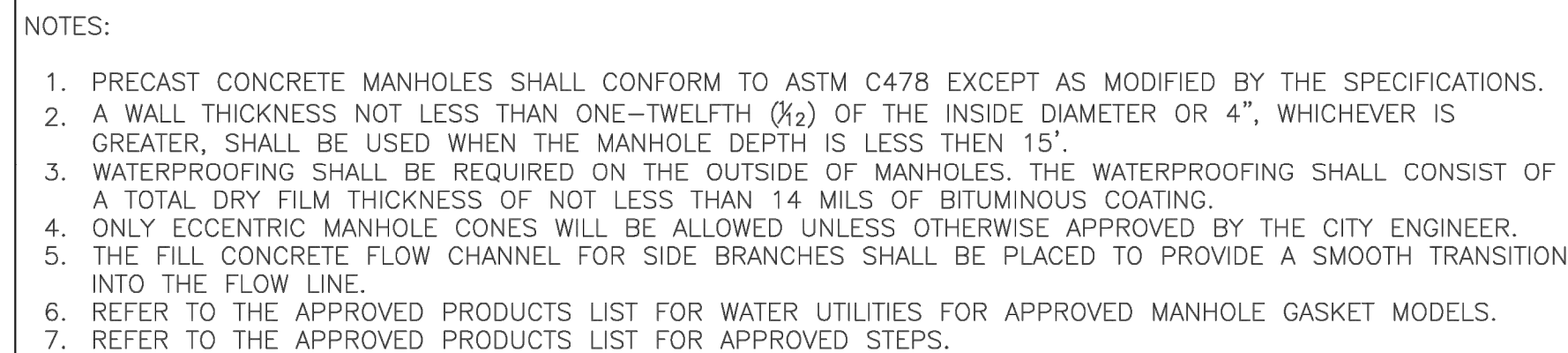
## CONSTRUCTION DETAILS 2

DATE: December 1, 2023

COMM. NO. 23104.00

DRAWING

C7.1



John Knox Village

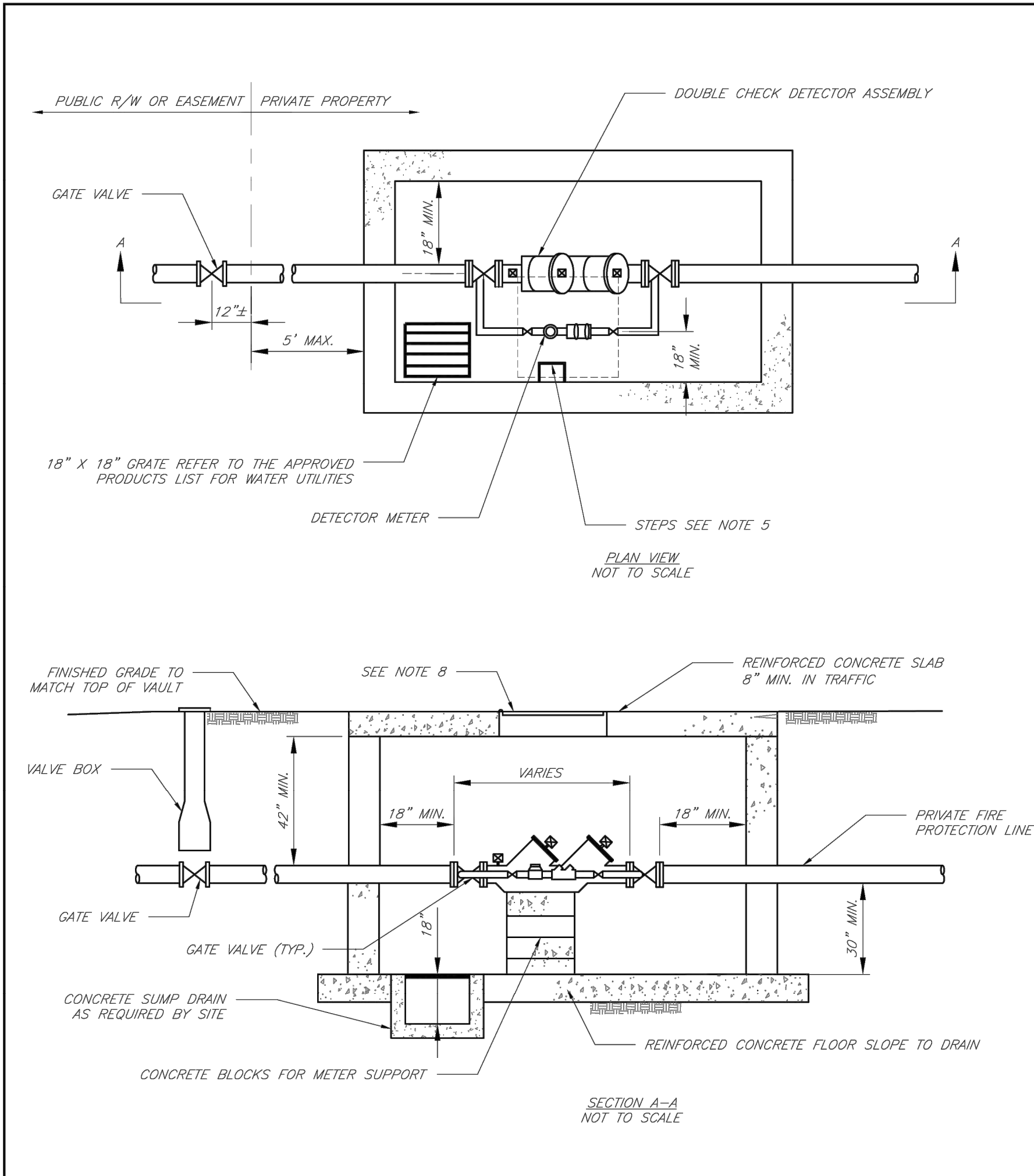
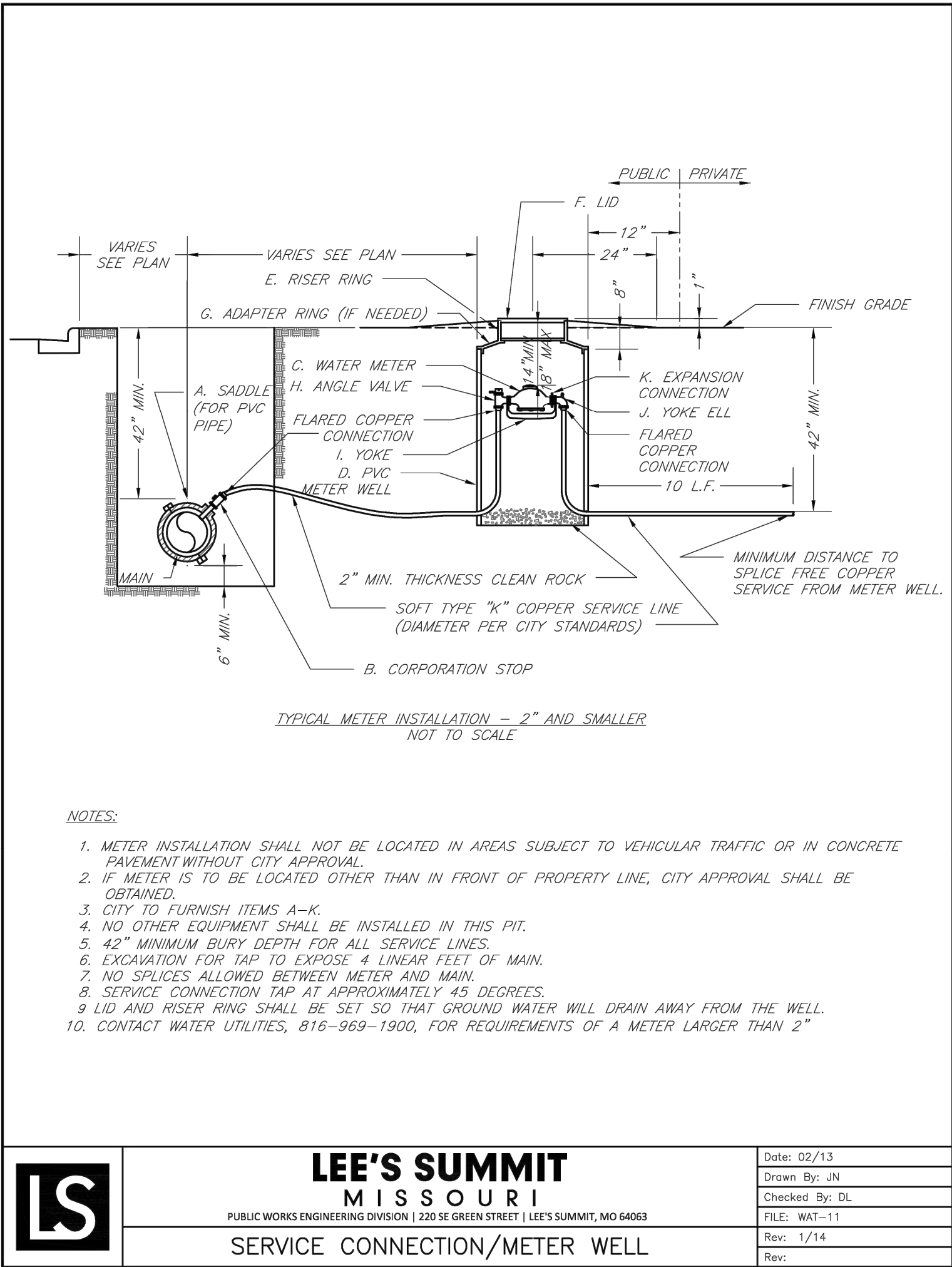
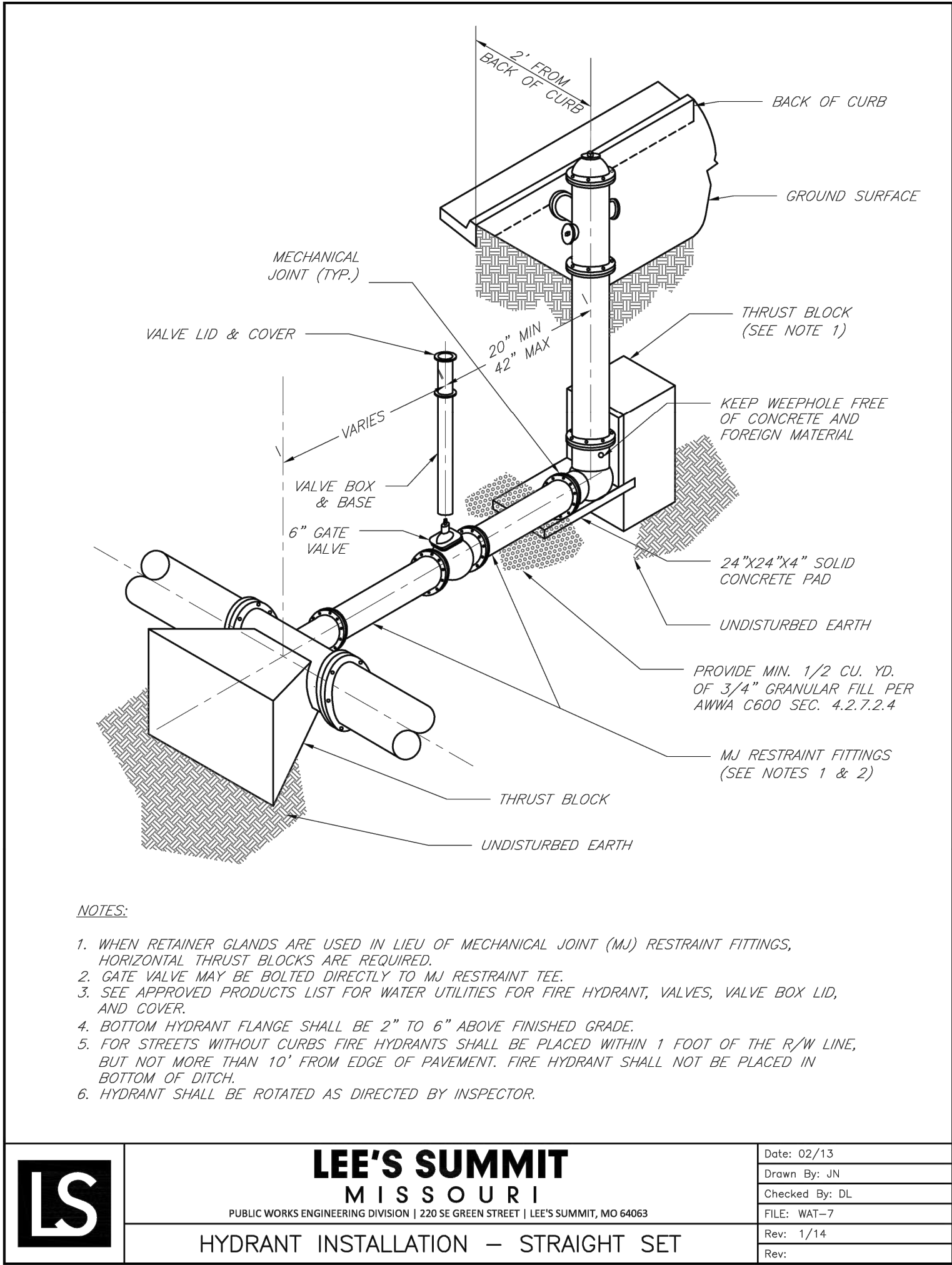
**S F C S** | Architecture  
Engineering  
Planning  
Interiors

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DRAWING TITLE

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	C7.2





- GENERAL NOTES:
1. METER VAULT WALLS TO BE POURED OR PRECAST CONCRETE. METER VAULT ROOF TO BE REINFORCED CONCRETE WITH OPENING CENTERED OVER DETECTOR METER. REINFORCED WALLS AND SLABS ARE TO BE DESIGNED BY THE OWNER'S ENGINEER OR PRECAST ENGINEER.
  2. METER VAULT TO BE LOCATED, WHEN POSSIBLE, OUTSIDE TRAFFIC AREA AND WHERE SURFACE WATER WILL NOT DRAIN INTO IT. PROVIDE CONCRETE SUMP TO DRAIN TO AN ABOVE GROUND DISCHARGE POINT.
  3. ALL PIPE AND FITTINGS FROM THE CITY WATER MAIN THROUGH THE VAULT SHALL BE PROVIDED WITH RESTRAINED JOINT FITTINGS.
  4. ALL FITTINGS FOR THE DETECTOR METER TO BE BRASS.
  5. STEPS SHALL BE IN ACCORDANCE WITH THE APPROVED PRODUCTS LIST FOR WATER UTILITIES AND SHALL BE ON 16\"/>

CITY OF LEE'S SUMMIT, MO  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION  
LEE'S SUMMIT, MO 64063



STANDARD DRAWINGS  
PROJECT: VAULT FOR DOUBLE CHECK DETECTOR CHECK

Drawn By: JAS  
Checked By: JIL  
Date: 1/14  
Rev: 1/14  
or  
WAT-12



## FINAL DEVELOPMENT PLAN

PROJECT TITLE



COURTYARDS - BUILDING E

SFCS

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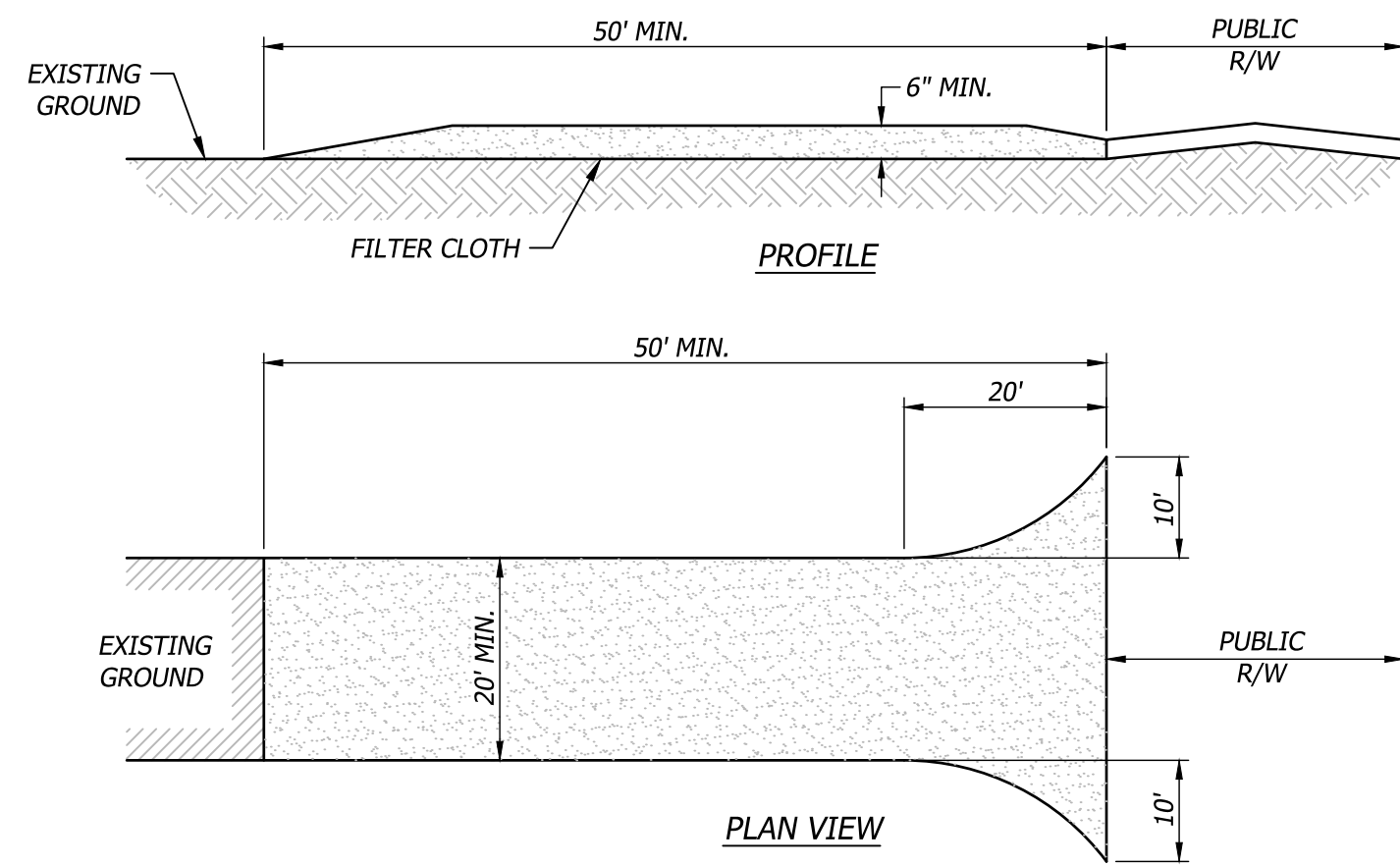
DESIGNER : DAS	DRAWN : ARK
ARCHITECT : DAS	CHECKED : ERB
ENGINEER : ERB	APPROVED : ERB

NO.	REVISION DESCRIPTION	DATE
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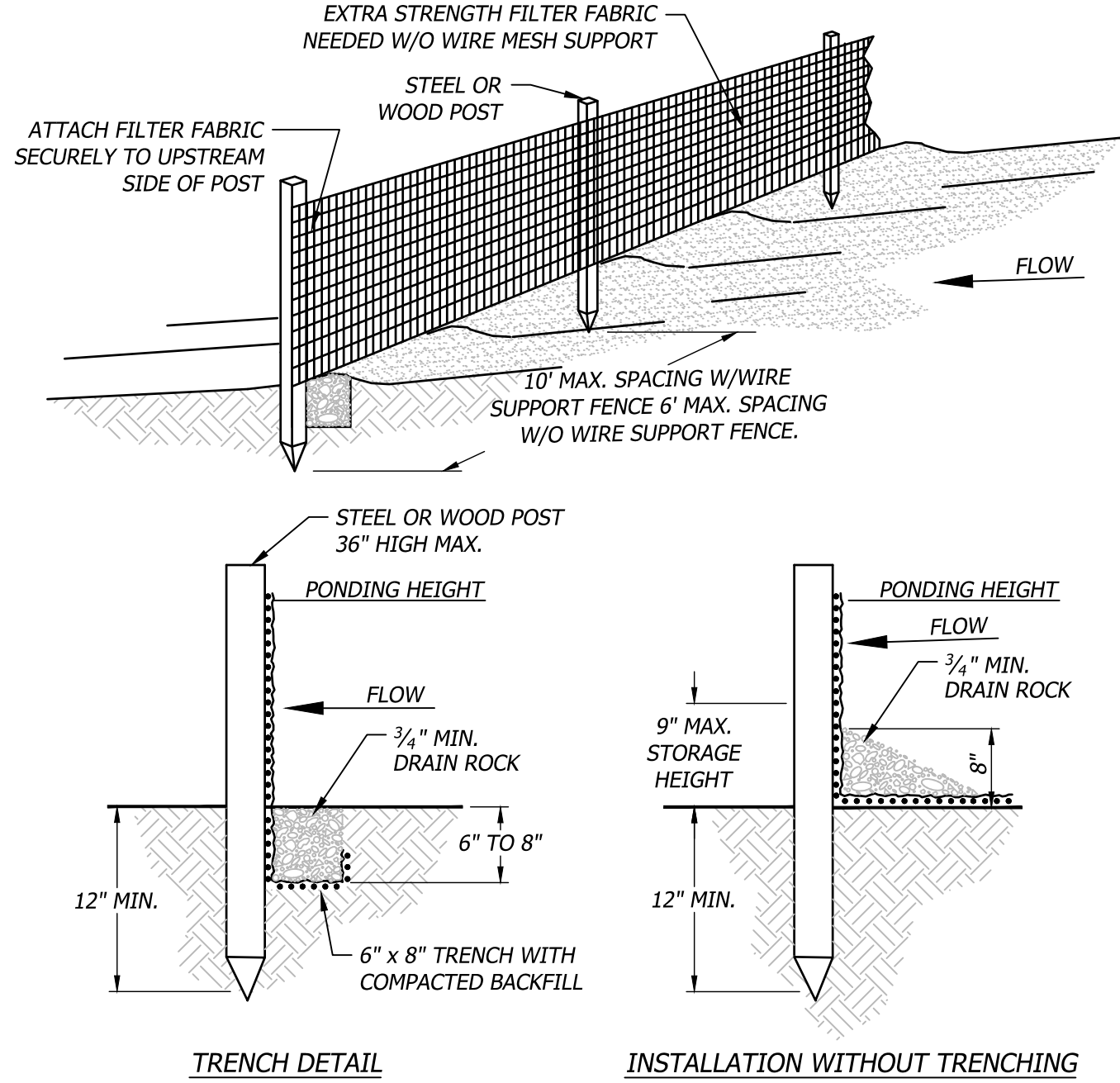
## CONSTRUCTION DETAILS 4

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	C7.3



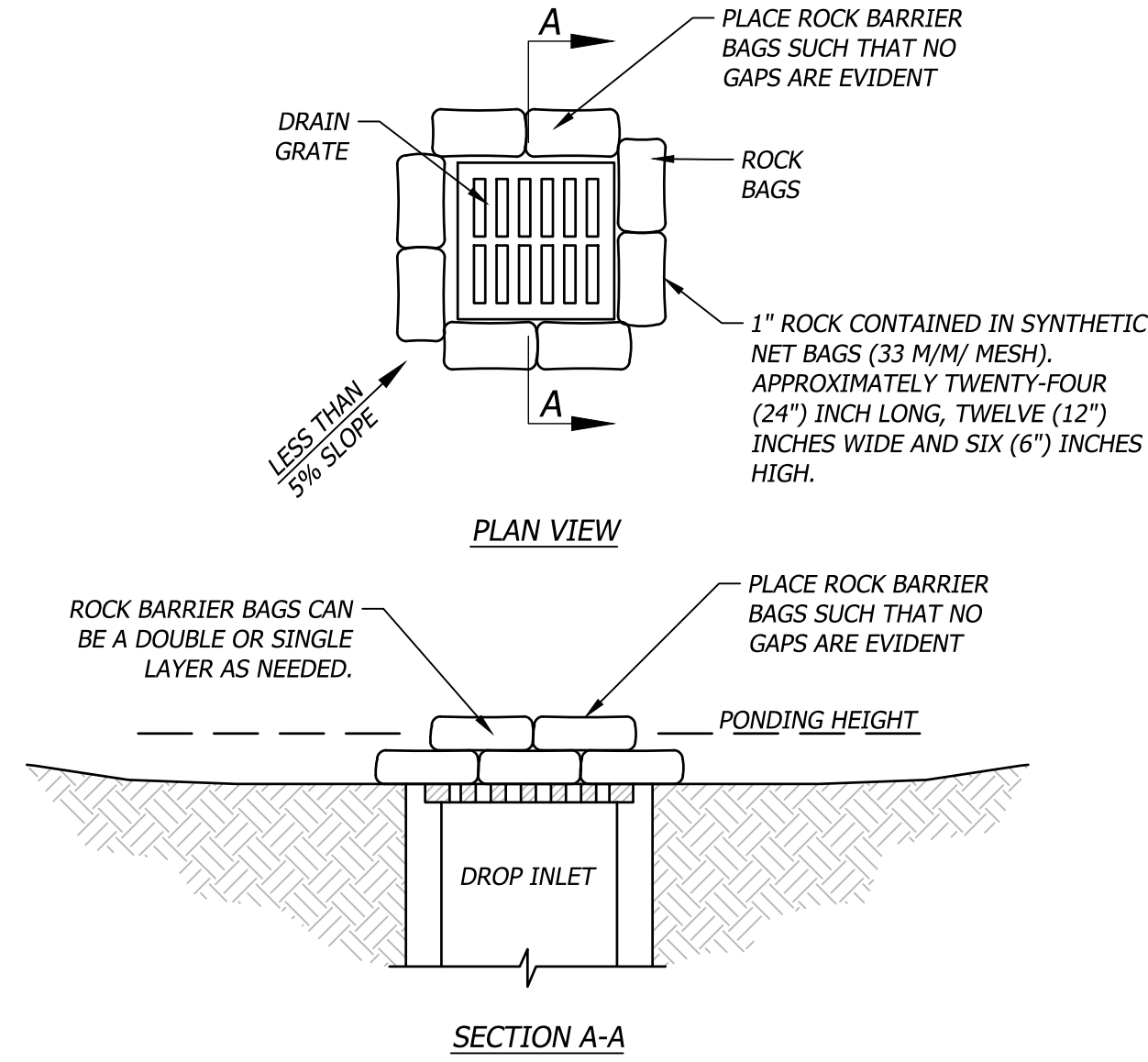
- CONSTRUCTION SPECIFICATIONS:**
1. STONE SIZE - USE (2) INCH STONE, OR RECLAIMED OR RECYCLED EQUIVALENT.
  2. LENGTH - AS REQUIRED, BUT NOT LESS THAN (50) FEET.
  3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
  4. WIDTH - TWENTY (20) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
  5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
  6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 3:1 SLOPES WILL BE PERMITTED.
  7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
  8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
  9. PERIODIC INSPECTION AS NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

**600** Temporary Construction Entrance  
Not to Scale



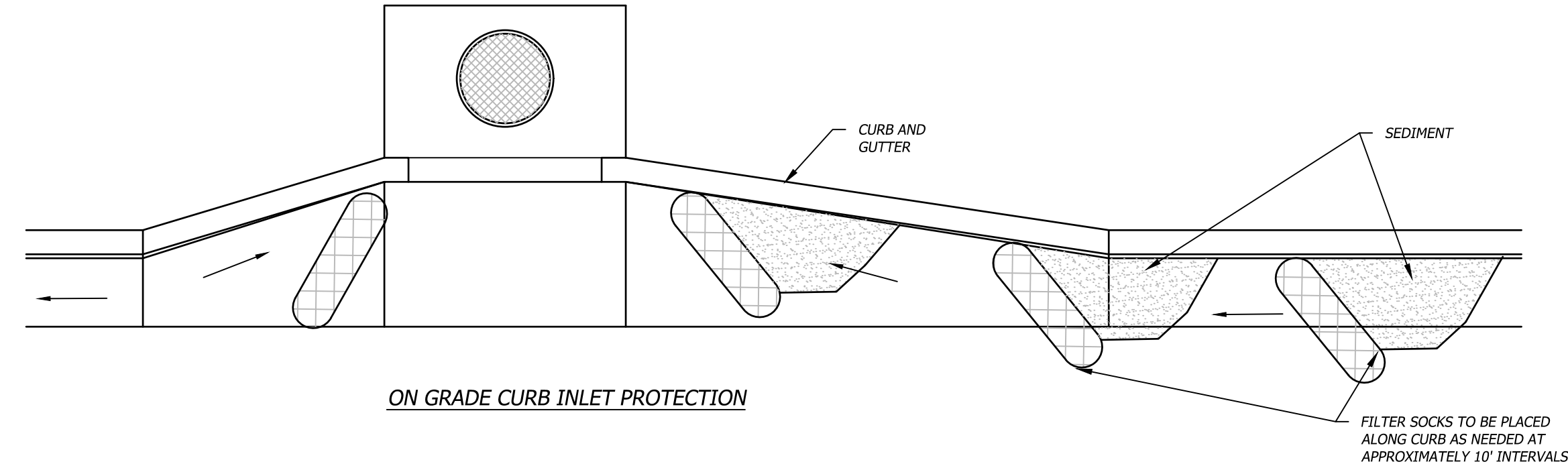
- NOTES:**
1. MUST BE INSTALLED PROPERLY TO AVOID NOTICE OF VIOLATION.
  2. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE POUNDING EFFICIENCY.
  3. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
  4. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

**601** Filter Fabric Silt Fence  
Not to Scale

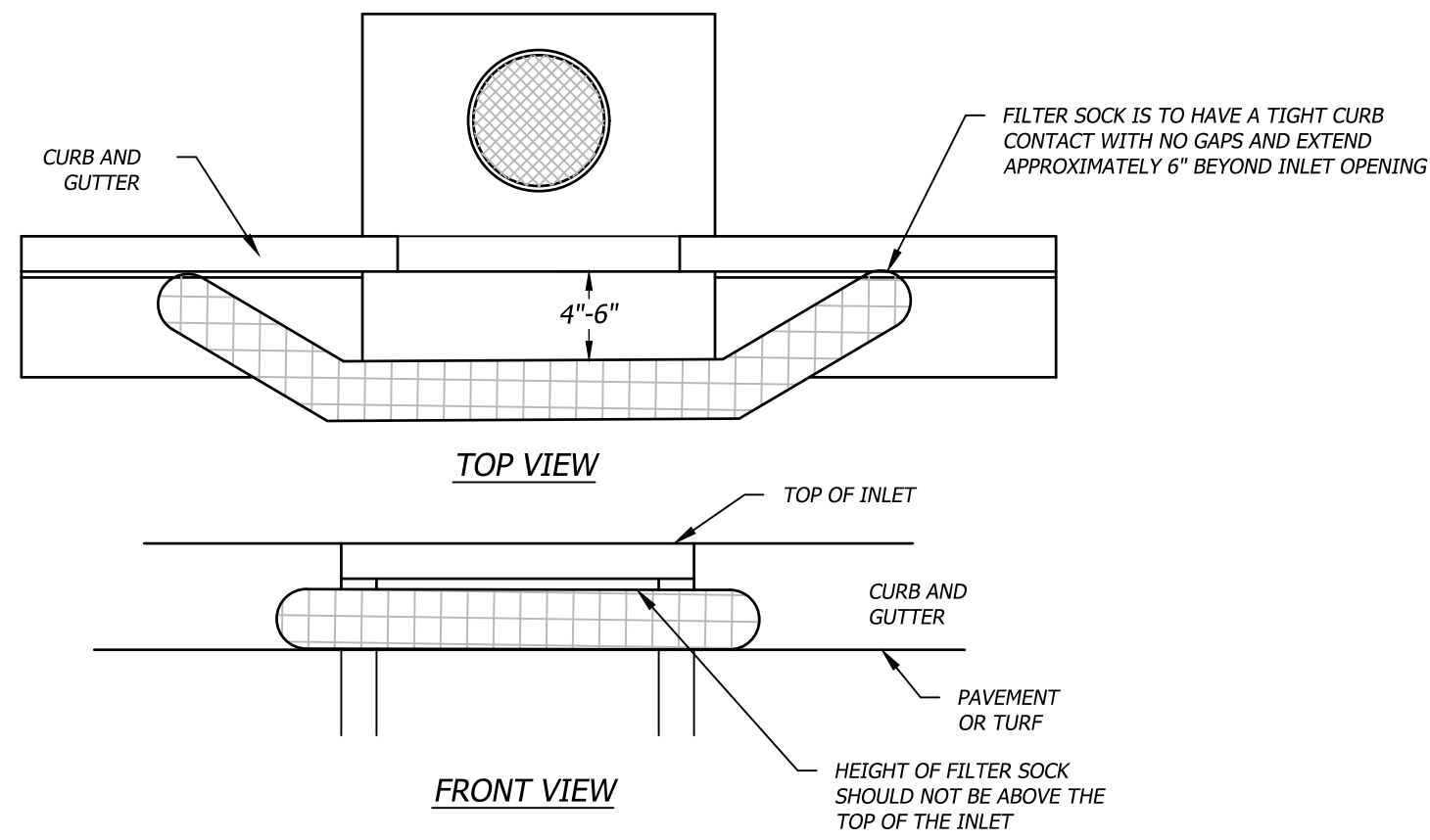


- NOTES:**
1. DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS. (LESS THAN 5%.)
  2. A "REASONABLE" DESIGN SIZE PARTICLE TO CAPTURE MUST BE SELECTED.
  3. SIZE DISTRIBUTION OF UPSTREAM SOIL PARTICLES MUST BE EVALUATED.
  4. INFLOW AND OUTFLOW FROM THE SYSTEM FOR A SPECIFIC FREQUENCY STORM MUST BE KNOWN.
  5. POND VOLUME IS DIRECTLY PROPORTIONAL TO THE DISCHARGE RATE OF WATER FROM THE SYSTEM.
  6. POND VOLUME IS INVERSELY PROPORTIONAL TO THE MASS OF THE DESIGN SIZE SUSPENDED PARTICLE.
  7. A SYSTEM MUST PROVIDE SUFFICIENT FLOW TO ALLOW FOR DEPOSITION OF DESIGN SIZE PARTICLES.
  8. THE PONDING HEIGHT MUST BE WELL BELOW THE GROUND ELEVATION DOWNSLOPE TO PREVENT RUNOFF FROM BYPASSING THE INLET. A TEMPORARY DIKE MAY BE NECESSARY ON THE DOWNSLOPE SIDE OF THE STRUCTURE.

**603** Rock Bag Drop Inlet Barrier  
Not to Scale

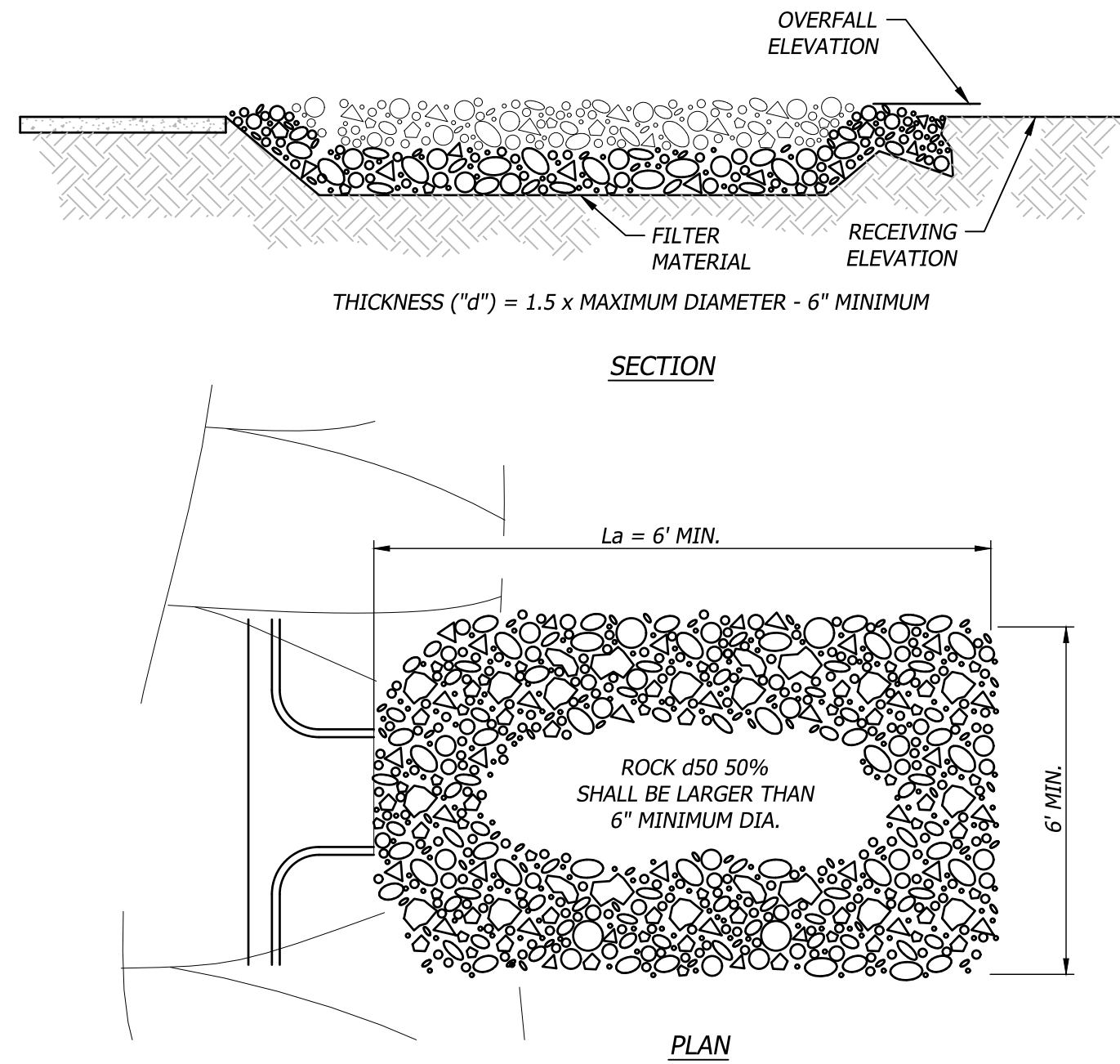


**ON GRADE CURB INLET PROTECTION**



**SUMP INLET SEDIMENT FILTER**

**617** Inlet Filter Bags  
Not to Scale



- NOTES:**
1. 'La' = LENGTH OF APRON. DISTANCE 'La' SHALL BE OF SUFFICIENT LENGTH TO DISSIPATE ENERGY.
  2. APRON SHALL BE AT A ZERO GRADE AND ALIGNED STRAIGHT.
  3. FILTER MATERIAL SHALL BE FILTER FABRIC OR 6" THICK MINIMUM GRADED GRAVEL LAYER.
  4. SIDE SLOPES SHALL BE 4:1 UNLESS NOTED OTHERWISE.
  5. ROCK SHALL CONFORM TO MODOT SECTION 1114.2(b) STONE FOR AGGREGATE DITCH LINING.

**605** Concrete Washout  
Not to Scale



## FINAL DEVELOPMENT PLAN

PROJECT TITLE



COURTYARDS - BUILDING E



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ENGINEER : ERB	APPROVED : ERB
NO.	REVISION DESCRIPTION DATE

DRAWING TITLE

## EROSION CONTROL DETAILS

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	C8.0

TREE PROTECTION & REMOVAL NOTES

GUIDELINES:

- 1. Tree Caliper (TrCa) shall be documented at the outset of construction activities. TrCa measurement shall follow standards found in "Timber Cruising Handbook," chapter 10 produced by the U.S. Forest Service.
- 2. Tree Protection Zone (TPZ) is to be calculated and clearly marked around each Existing Trees to Remain (ExTR) prior to construction. The TPZ is 1.5 feet away in radial distance from the tree trunk for every inch in Tree Caliper. (example: 28" TrCa x 1.5 = 42' TPZ)
- 3. Within the TPZ, critical areas such as flood plains and steep slopes should be left in their pre-construction condition.
- 4. Tree protection & preservation provides proactive management of ExTR throughout construction and other activities that may adversely affect ExTR and to manage and minimize damage from construction practices. Tree maintenance shall be performed only be an ISA Certified arborist who is familiar with the practices and hazards of aboriculture and equipment used in such operations.
- 5. Out the outset of construction, all trees indicated for removal shall have their trunks marked with bright orange paint on all visible sides.

TREE PROTECTION MEASURES:

- 1. Temporary Fencing: Install temporary fencing around tree protection zones (TPZ) to protect Existing Trees to Remain (ExTR) from construction damage. Maintain temporary fence and remove when construction is complete. Fencing should be the last item removed after completion of project. This fencing will be erected at the TPZ for each ExTR. Fencing shall comply with 02/L0.2. Fencing will be rigidly supported and maintained during all construction periods at the detailed minimum height above grade.
- 2. Laminated signs stating "No Entry, Tree Protection Area" in both English and Spanish are to be posted at thirty foot (30') intervals or on all four (4) cardinal sides--whichever is greater.
- 3. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials.
- 4. Protect root systems from ponding, eroding, or excessive wetting caused by watering operations.
- 6. Do not store construction materials, debris, or excavated material inside tree protection zones.
- 7. Do not permit vehicles or foot traffic within TPZs; prevent soil compaction over root systems.
- 8. Maintain TPZs free of weeds and trash.

TREE PRUNING:

- 1. Trees to remain that are affected by temporary and permanent construction shall be pruned according to current ANSI A300 pruning standards.
- 2. Trees to remain shall be pruned by an ISA Certified arborist to remove dead limbs, to achieve a more uniform appearance, and to keep them in a healthy state throughout construction proceedings.

EXCAVATION:

- 1. Do not excavate within tree protection zones, unless otherwise indicated and approved. Before excavation, pad preparation, or grading for foundations, footings, walls, or trenching, relevant trees shall be root pruned 1 foot outside the tree protection zone as described below.
- 2. Where excavation for new construction is required within tree protection zones and approved, hand prune or utilize root pruning techniques described below prior to excavation.
- 3. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with organic material and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.
- 4. Where utility trenches are required near tree protection zones, tunnel under or around roots by drilling, auger boring, pipe jacking, or digging by hand around individual roots to mitigate damage to the root system and tree. A Supersonic Air tool (air spade) can also be used safely to open trenches without severing roots. See 03/L0.2.
- 5. Root Pruning: where required and approved, shall be done mechanically with a root pruning machine, vibratory plow, or with a narrow trencher with sharp blades. Once a trench is opened up, all exposed roots will be hand pruned to provide clean-cut ends. Do not cut main lateral roots or buttress roots; cut only smaller roots that interfere with installation of utilities. Cut roots with sharp pruning instruments; do not break or pull with backhoe or similar equipment.

DAMAGE MITIGATION AND REPLACEMENT:

- 1. Promptly repair trees damaged by construction operations within 24 hours. Treat damaged trunks, limbs, and roots according to arborist's written instructions.
- 2. Remove and replace trees indicated to remain that die or are damaged during construction operations that the arborist determines are incapable of restoring to normal growth pattern.
- 3. Provide new trees of caliper size and species selected by owner when damaged trees are required to be replaced. Plant and maintain new trees as specified.
- 4. Aerate surface soil, compacted during construction, 10 feet beyond the drip line and no closer than 36 inches to the tree trunk using vertical mulching techniques or radial aeration techniques as instructed by Landscape Architect.

DISPOSAL OF WASTE MATERIALS:

- 1. Remove excess excavated material and displaced tree's from owner's property and dispose according to City guidelines.

TREE REPLACEMENT:

- 1. In the event that a tree or trees designated for preservation are severely damaged, destroyed or removed, they shall be replaced upon notice by the Landscape Architect at the rates agreed upon.

EXTERIOR IRRIGATION SYSTEM SPECIFICATION

- A. System Design and Performance Requirements
  - 1. Provide an automatic, electrically-and centrally-controlled irrigation system for all new planting areas, unless otherwise directed by Owner's Representative.
  - 2. The irrigation system should be designed to provide complete coverage and prevent overspray on paving and adjacent structures.
  - 3. Irrigation Contractor must provide an irrigation design for the irrigation lines, sprinkler heads, and drip emitters. The irrigation designer must determine and document the existing water pressure and flow available at each hookup location.
  - 4. Drip systems are encouraged in planting beds.
  - 5. Pop-up type sprinkler heads are required.
  - 6. Base sprinkler selection and spacing on a wind velocity of 10 mph.
  - 7. Provide a soil moisture sensor for all systems.
  - 8. Before starting construction, submit a design drawing to Landscape Architect for review and approval.
- B. Submittals: Submit the following design and construction documents to Landscape Architect.
  - 1. Design Documents
    - a. Provide record drawings showing the location and type of all lines, heads, and valves. Use the site landscape drawing background as a base drawing to complete the record drawings. In addition, provide a reduced plan set to be left at the irrigation controller.
    - b. Before starting construction, Irrigation Contractor must submit a list of irrigation systems designed by their irrigation designer over the last five years.
  - 2. Construction Documents
    - a. Before starting construction, submit:
      - A list of materials
      - Manufacturer specifications and installation procedures
      - Flow and test reports
    - b. Provide the following operation and maintenance documentation:
      - A watering log (left at the irrigation controller)
      - A list of the closed suppliers for all heads, valves, and the irrigation system controller
      - Two copies of an operational manual (submit upon project completion)
- C. Product Standards
  - 1. Provide Owner's Representative with a product guarantee for the valves, heads, and drip lines used on the project.
- D. Materials
  - 1. All exterior irrigation pipe and fittings must be Class 200-DR 21 polyvinyl chloride (PVC) water pipe, extruded from virgin parent material, that conform to ASTM 2241 standards.
  - 2. All sprinkler heads must be:
    - Industrial-grade
    - Full or adjustable, part-circle rotary pop-up, with a single or double nozzle
    - Driven by a hydraulic turbine-type motor or oscillating impact-type drive
    - Hydraulic valve-in-head model, normally closed
  - 3. Automatic remote control valves must be electric solenoid-type, with globe screwed patterns, using 24 VAC, 60 Hz power with a running current of 2 W. The valve solenoids must be completely epoxy-encapsulated for positive waterproofing and must include a stainless steel shunt band. The valves must open and close slowly (in not less than 5 seconds) by means of a potential fluid resistor to avoid damage or surge pressures. All wiring in PVC conduits.
  - 4. The automatic controller must be capable of 14-day programmability, with infinite timing from 0 to 60 seconds on each station, and no time lag between stations. The controller must be UL-listed, with a plug-in transformer using 115 VAC to 24 V circuit breaker protection. The cabinet must be lockable and waterproof.
- E. Special Requirements
  - 1. Booster pumps may be required when the existing water pressure and flow will not operate the irrigation system properly.
  - 2. All irrigation systems must have a water meter from the Lee's Summit, Missouri, installed on the water service line inside the building. The purchase of the meter must be part of the Irrigation Contractor's bid.
  - 3. Provide an air connection (for blowing out the system) and a backflow preventer on all irrigation systems.
- F. Preparation
  - 1. If existing water to a building will be shut down to provide water for the irrigation system, the Irrigation Contractor, in conjunction with the Owner's Representative, must prepare a shutdown procedure document before starting construction that outlines scheduling and notification requirements.
- G. Installation Guidelines
  - 1. Where possible, provide a uniform pipe bedding of suitable on-site material. If suitable material is not available, backfill the trench with sand. Using a material similar to the bedding, backfill the entire trench width evenly in 6" lifts to 6" above the top of the pipe. Compact the lifts to at least a 95% Standard Proctor density, meeting ASTM D1556 standards at optimum moisture (or as recommended by the soils engineer). Backfill the remaining trench in lifts not to exceed 12" up to the sub-grade height for the surface condition encountered. Compact the lifts to a 95% Standard Proctor density, meeting ASTM D1556 standards at optimum moisture (or as recommended by the soils engineer). Backfilling and compacting above the subgrade must be determined by the soils engineer or by the recommended paving design for the project.
  - 2. Bury pressure irrigation lines at a minimum depth of 18". Bury non-pressure lines at a minimum depth of 12".
- H. Quality Control
  - 1. Work on exterior irrigation systems must conform to the following quality control standards.
    - a. Testing Laboratory: Owner's Representative and/or General Contractor will retain the services of a qualified, independent testing laboratory to perform soil compaction tests, as directed, during construction.

- b. Testing Methodology and Extent: Conduct a coverage test when the sprinkler system is completed.
- I. Cleaning and Adjusting
  - 1. With the participation of Owner's Representative personnel, the system must be operated before acceptance by Owner's Representative.
- J. Startup and Training
  - 1. Irrigation Contractor must operate the irrigation system with Owner's Representative maintenance staff present to observe its operation.
  - 2. Irrigation Contractor must adjust the system over a preventative maintenance period of 90 days and guarantee the system for one year upon acceptance of the system by Owner's Representative.



FINAL DEVELOPMENT PLAN

PROJECT TITLE



John Knox Village

COURTYARDS - BUILDING E



Architecture  
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Interiors

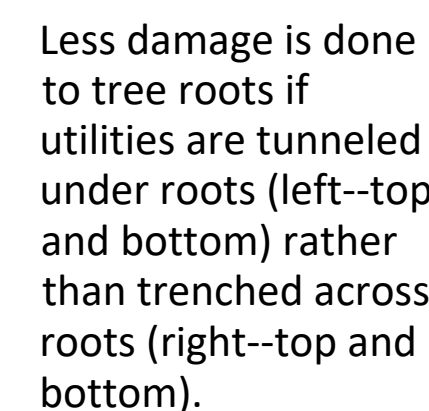
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ARCHITECT : DAS	CHECKED : ADM	
ENGINEER : ERB	APPROVED : CDW	
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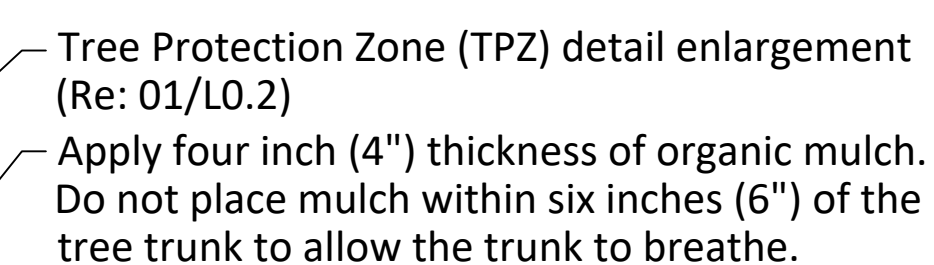
DRAWING TITLE

LANDSCAPE PLAN NOTES

DATE: December 1st, 2023	DRAWING
COMM. NO. 23104.00	L0.1



03	Undergro
	Not to Scale



Tree Protection fence: to be installed at perimeter of TPZ. Orange-colored high-density polyethylene fencing with 3.5" x 1.5" openings. Steel posts installed at six feet (6') o.c.

2"Ø steel posts or approved equal

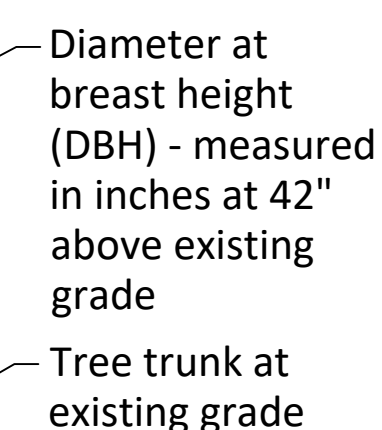
— Maintain existing grade within the tree protection fence unless otherwise indicated on the plans.

— Edge of Tree Protection Zone

Notes:

1. See L0.1 for additional information.
2. No equipment shall operate inside the protective fencing including during fence installation and removal.

02	Free Flow
	Not to Scale



TPZ Formula:

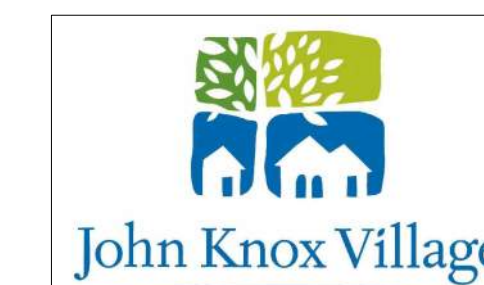
$$\text{DBH} \times 1.5 = \text{X feet } \emptyset$$

Example: DBH = 20"

20 x 1.5 = 30' Ø TPZ

01	Free Flow
	Not to Scale

	EXISTING - TO BE PROTECTED & REMAIN	10
	EXISTING - TO BE REMOVED	18
	EXISTING - TO BE SAVED IF POSSIBLE	1



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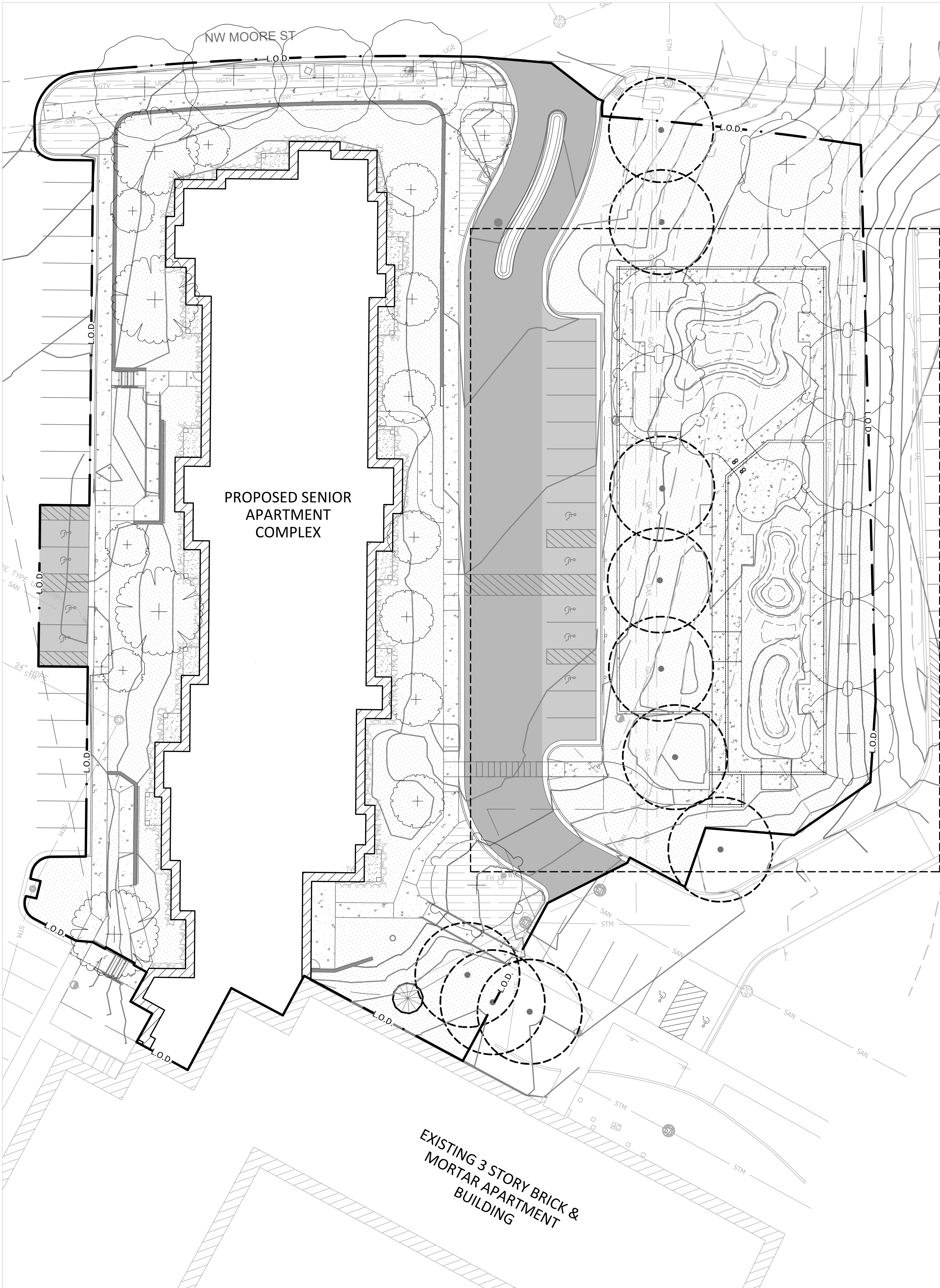
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DRAWING TITLE

TREE  
PROTECTION &  
REMOVAL

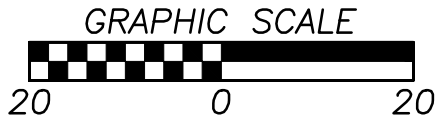
DATE: December 1st, 2023	DRAWING <b>L0.2</b>
COMM. NO. 23104.00	



**SITE REFERENCE LEGEND**

SYMBOL	DESCRIPTION
	LIMITS OF DISTURBANCE
	DOG PARK ENLARGEMENT AREA (RE: L1.1, L1.2, L1.3, L1.4)
	PLANTING AREA (RE: L2.1, L2.2, L2.3)
	MAINTENANCE STRIP (RE: 03/L3.1)
	CONCRETE PAVING
	CONCRETE PAVING (RE: CIVIL)
	PARKING (RE: CIVIL)
	ROADWAY (RE: CIVIL)
	PROPOSED BUILDING OUTLINE (RE: ARCH)
	GROUND LEVEL PATIOS (RE: ARCH)

**A - SITE REFERENCE PLAN**



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**FINAL  
DEVELOPMENT PLAN**

PROJECT TITLE

**John Knox Village**

COURTYARDS - BUILDING E

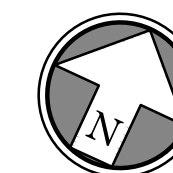
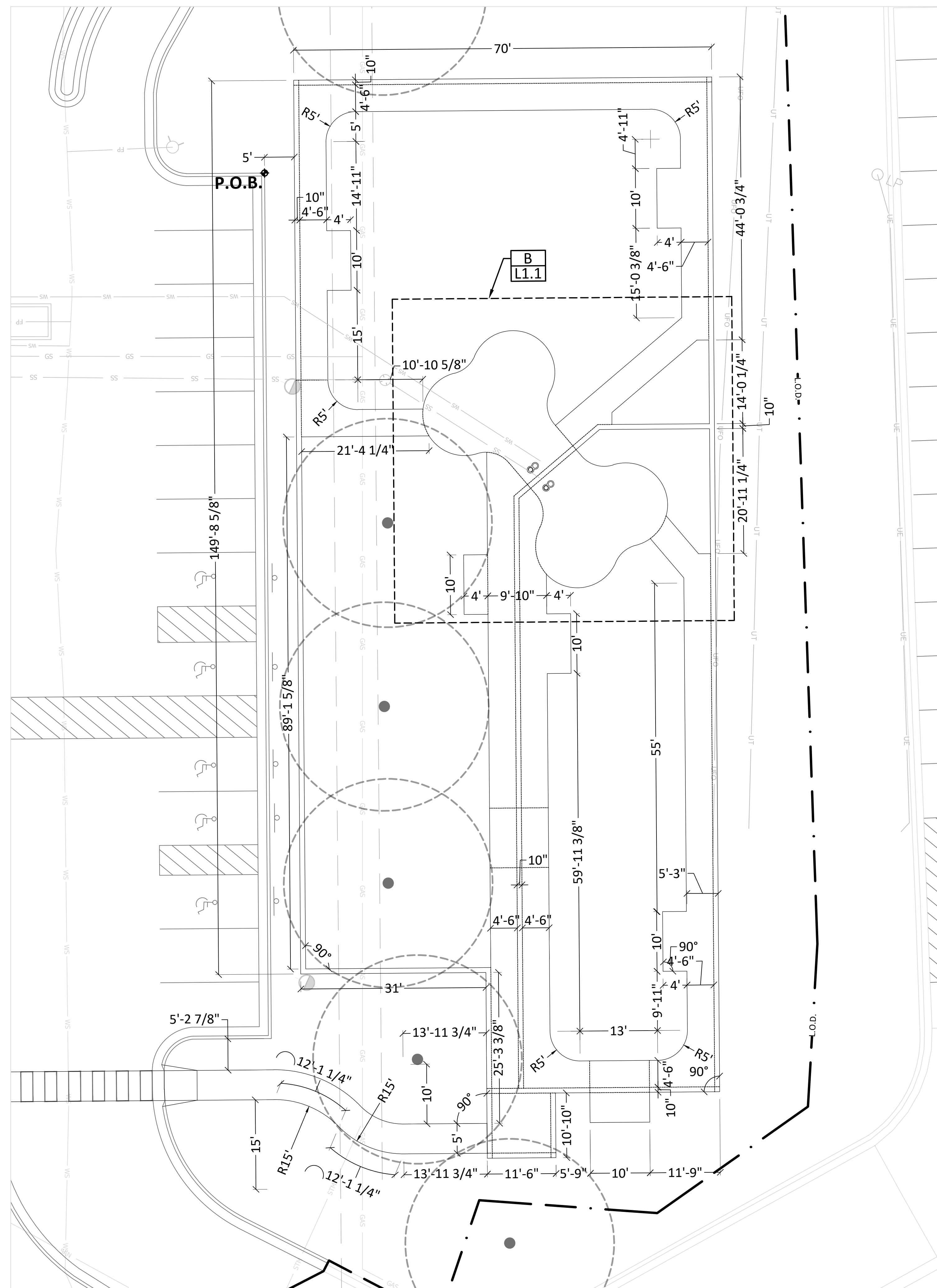
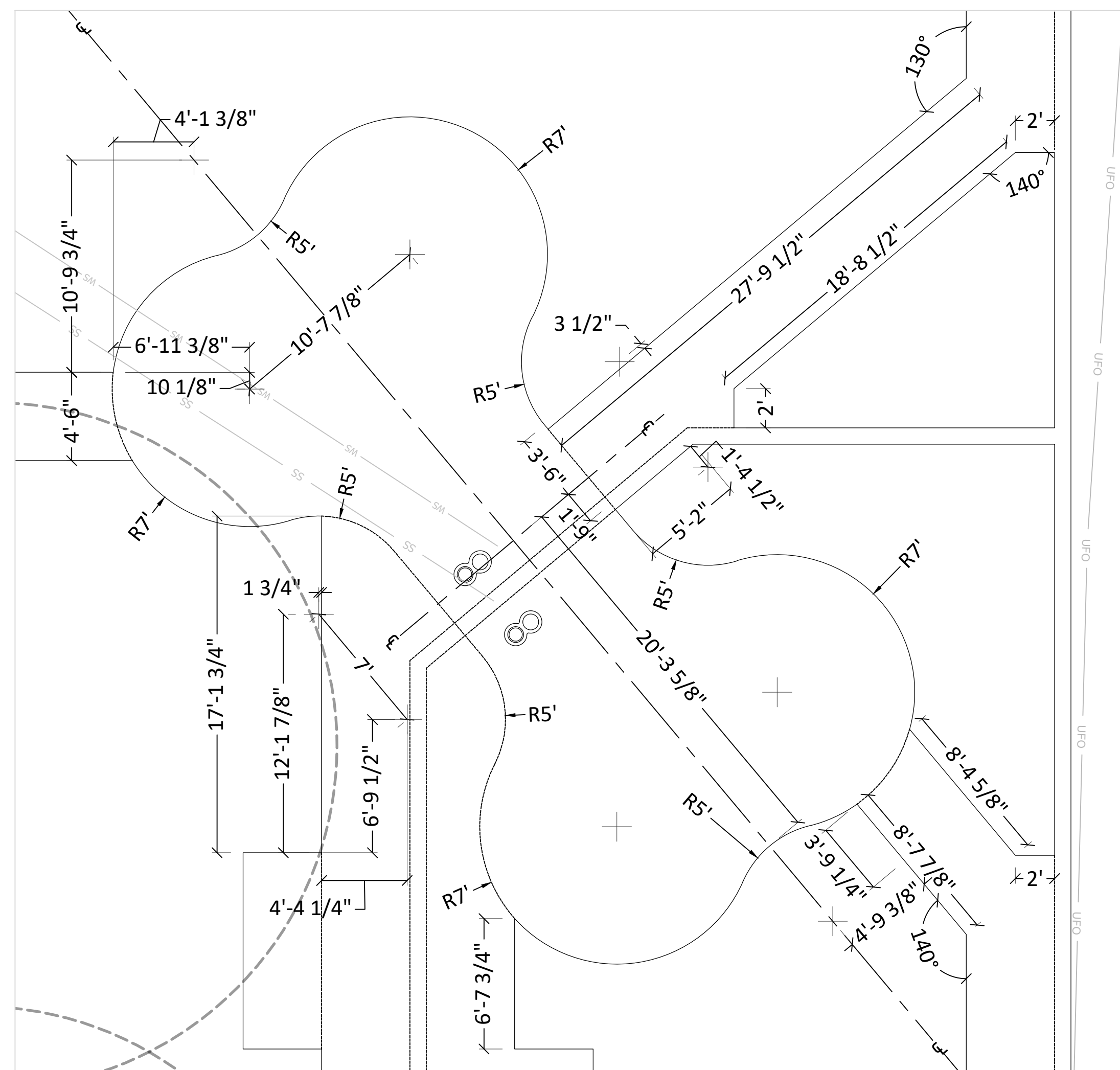
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**SITE REFERENCE  
PLAN**

DATE: December 1st, 2023	DRAWING
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## FINAL DEVELOPMENT PLAN

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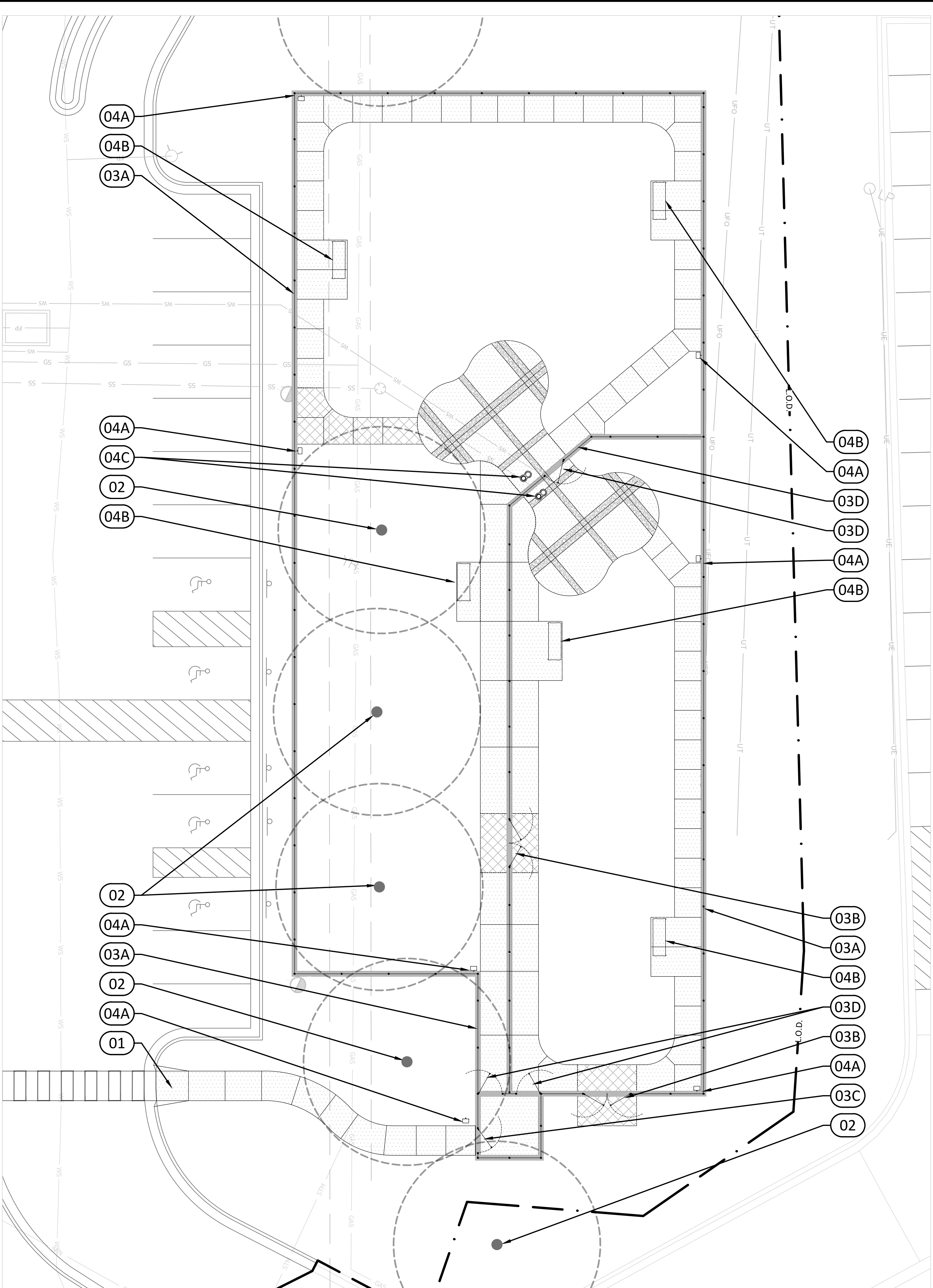
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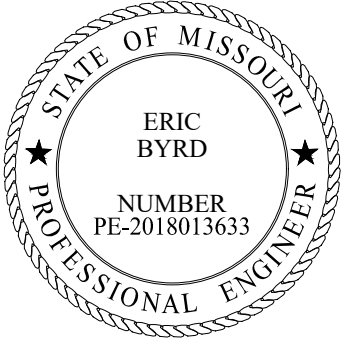
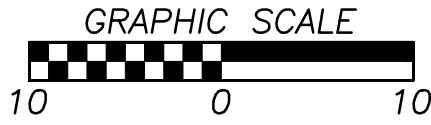
## DOG PARK DIMENSION PLAN

DATE: December 1st, 2023	DRAWING <b>L1.1</b>
COMM. NO. 23104.00	

DOG PARK AMENITIES SCHEDULE		
Symbol	Description	Approx. Qty.
01	ADA CURB RAMP (RE: CIVIL)	
02	EXISTING TREE TO REMAIN (RE: L0.2)	
03A	DOG PARK FENCING (RE: L1.4)	84 PANELS 89 POSTS
03B	DOG PARK SERVICE GATES (RE: 03/L3.2)	2 SETS
03C	DOG PARK PRIMARY ENTRY GATE (RE: 04/L3.2)	1 UNITS
03D	DOG PARK SECONDARY ENTRY GATE (RE: 05/L3.2)	3 UNITS
04A	DOG WASTE STATION (RE: 01/L3.1)	7 UNITS
04B	6' PARK BENCH (RE: 02/L3.2)	5 UNITS
04C	WATER FOUNTAIN (RE: 03/L3.3)	2 UNITS



A - DOG PARK SITE AMENITIES PLAN



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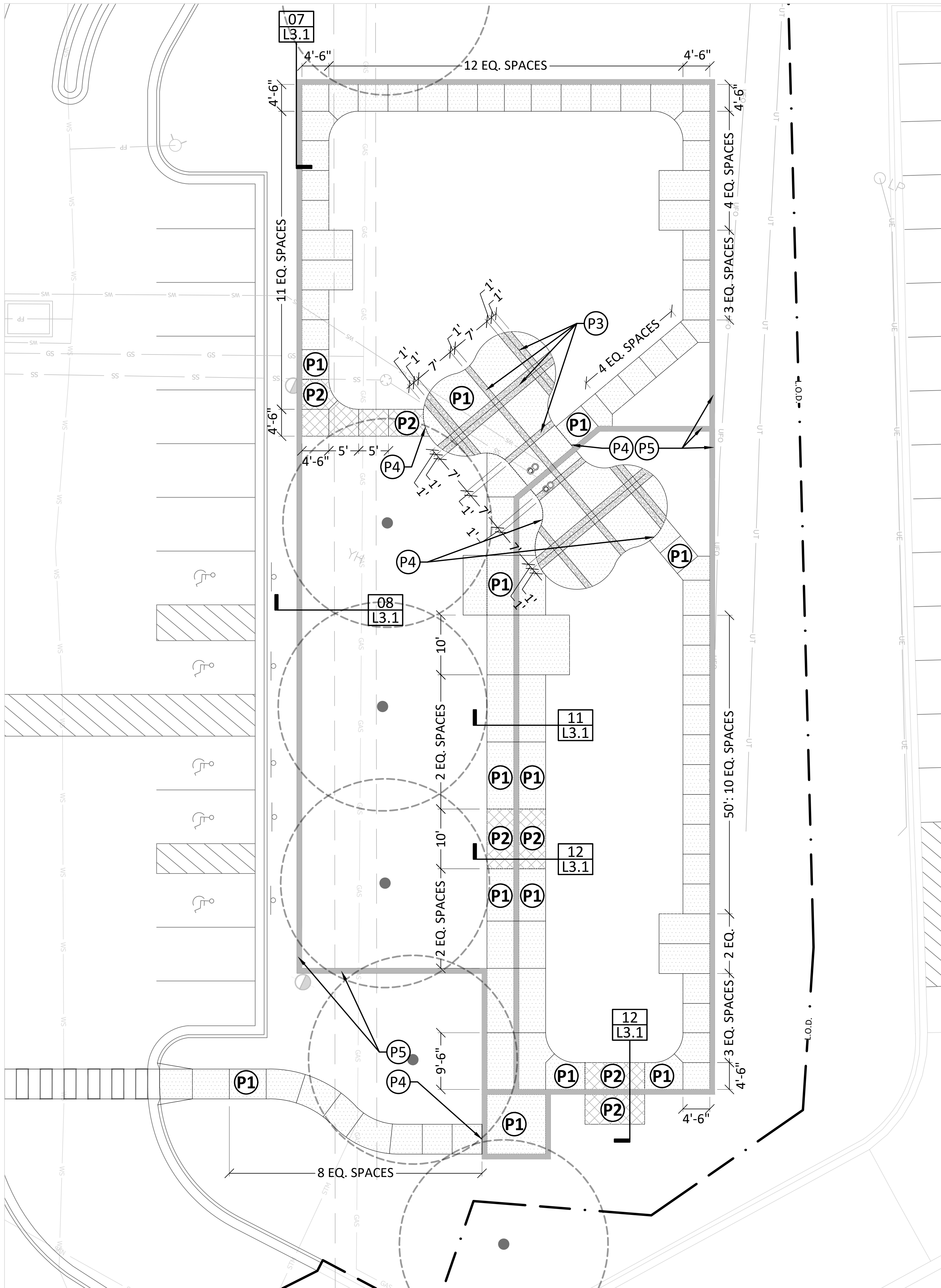
DOG PARK  
AMENITIES PLAN

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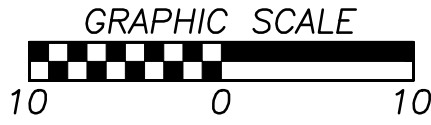
DRAWING  
L1.2

PAVING SCHEDULE					
Symbol	Type	Color / Product	Finish / Size	Joints / Additional Notes	Approx. Qty.
	LIGHT-DUTY CONCRETE	KCMMB 4K; STANDARD GRAY	MEDIUM BROOM FINISH	TOOLED CONTROL JOINTS SPACED AS SHOWN RE: 04/L3.1	3241 SF
	HEAVY DUTY CONCRETE	KCMMB 4K; STANDARD GRAY	MEDIUM BROOM FINISH	TOOLED CONTROL JOINTS SPACED AS SHOWN RE: 04/L3.1	323 SF
	"DOG BONE" PATIO STRIPES	KCMMB 4K; STANDARD GRAY	MEDIUM SANDBLAST	SAWCUT CONTROL JOINTS SPACED AS SHOWN RE: 04/L3.1	756 SF (OVERALL) 420 LF SAWCUT JOINTS 222 SF SANDBLAST
	ISOLATION JOINT	CLOSED-CELL POLYETHYLENE FLAT BACKER ROD		WHERE INDICATED ON PLAN AND PER DETAILS; ADD AT ALL VERTICAL SURFACES RE: 05 & 06/L3.1	
	10" CONCRETE MOW STRIP UNDER FENCE	KCMMB 4K; STANDARD GRAY	MEDIUM BROOM FINISH	ISOLATION JOINTS WHERE INDICATED PER DETAILS 11 & 12/L3.1	537 SF

- NOTES:
- Clay soils should be pre-wet before compaction and laying cementitious mixture.
  - Concrete pours should end at joint locations. All construction joint locations to become expansion joints.
  - Place expansion joints wherever the sidewalk abuts another rigid structure.
  - Concrete mix shall use type and kind for current weather conditions and shall be protected while curing as required. (RE: Civil)



A - DOG PARK PAVING PLAN



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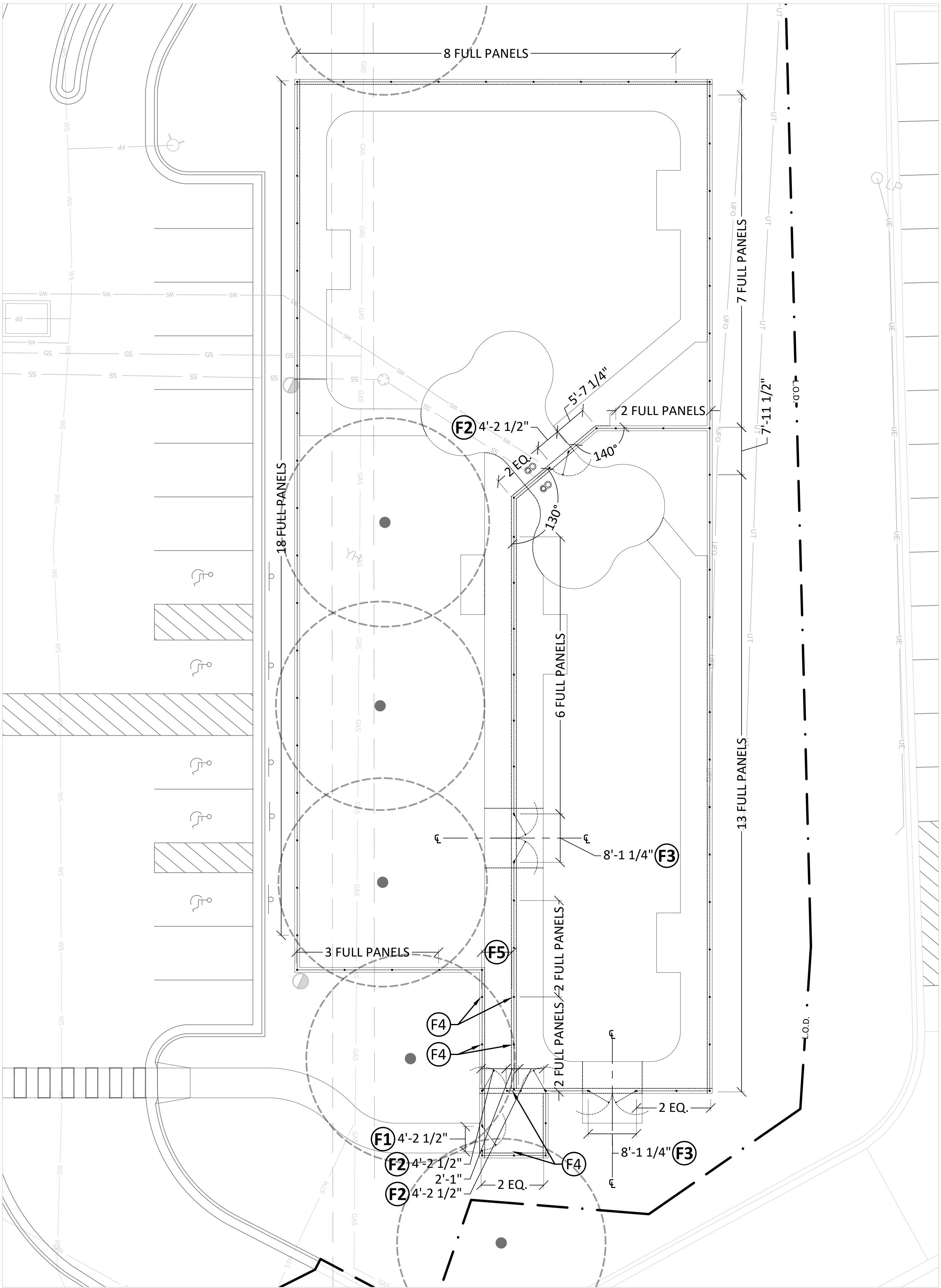
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DOG PARK  
PAVING PLAN

DATE: December 1st, 2023	DRAWING
COMM. NO. 23104.00	L1.3

DOG PARK FENCING NOTES	
Symbol	Description
F1	VERIFY PRIMARY ENTRY GATE POST SPACING W/ FENCE MANUFACTURER
F2	VERIFY SECONDARY ENTRY GATE POST SPACING W/ FENCE MANUFACTURER
F3	VERIFY SERVICE GATE POST SPACING W/ FENCE MANUFACTURER; CENTER FENCE ON REINFORCED PAVING AREA
F4	ALIGN POSTS
F5	5' MIN. FACE TO FACE CLEARANCE BETWEEN POSTS, TYP.



A - DOG PARK FENCING PLAN



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DOG PARK  
FENCING PLAN

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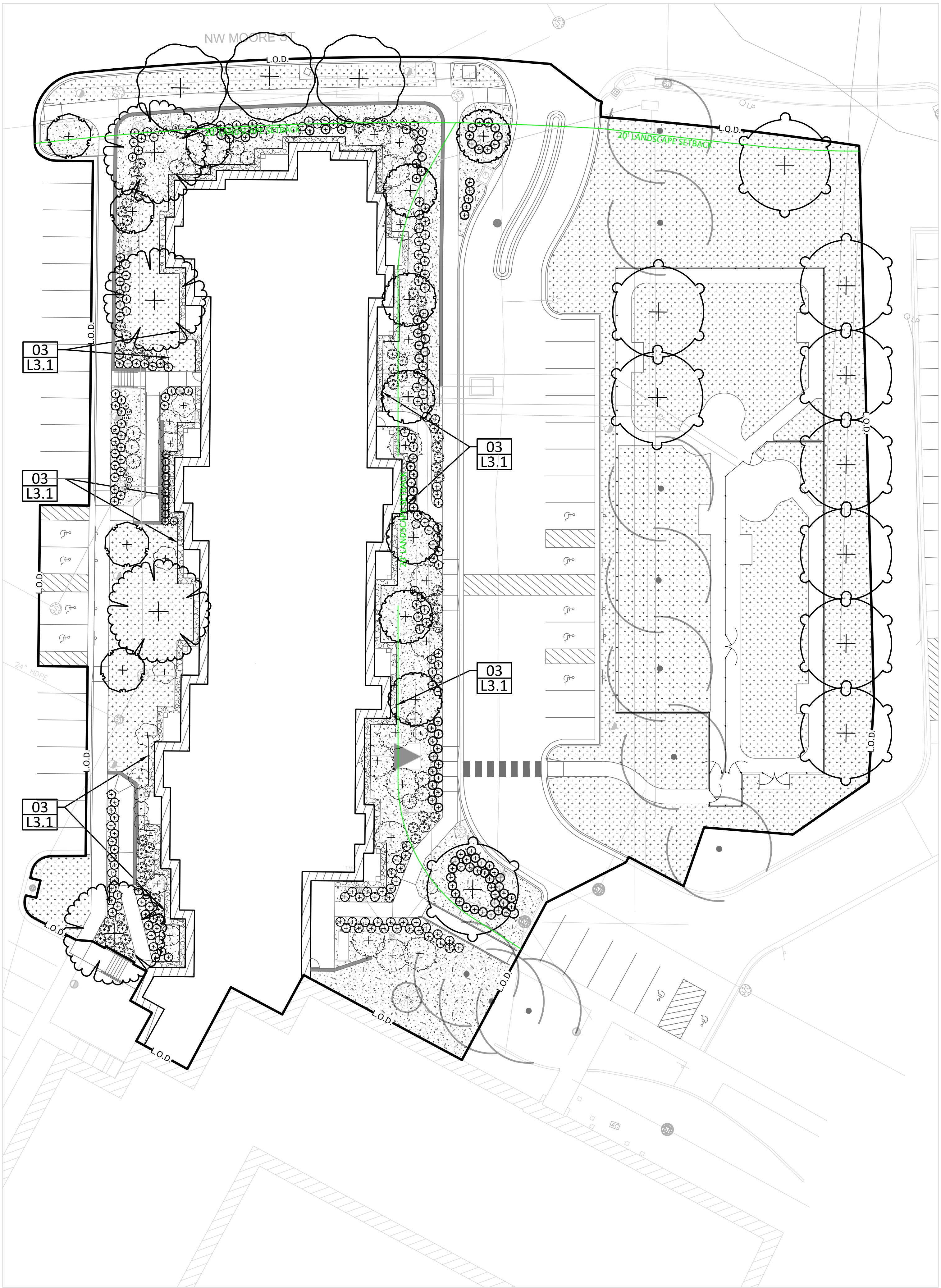
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L1.4

CODE REQUIRED LANDSCAPING		
Project Total	Required	Description of Requirement
440 LF	14.67	STREET FRONTAGE WITH 20' WIDE LANDSCAPE STRIP
	22	1 TREE PER 30'
76533 SF		1 SHRUB PER 20'
	15.31	OPEN YARD AREA
		2 SHRUBS PER 5000 SF OF TOTAL LOT

CODE REQUIRED 20' LANDSCAPE STRIP SCHEDULE

SYMBOL	QTY	BOTANICAL / COMMON NAME	CONT	CAL
DECIDUOUS TREES				
	14	Nyssa sylvatica `David Odom` / Afterburner® Tupelo	B & B	3"Cal
	2	Quercus muehlenbergii / Chinkapin Oak	B & B	3"Cal
	8	Quercus phellos / Willow Oak	B & B	3"Cal
SYMBOL	QTY	BOTANICAL / COMMON NAME	SIZE	PLANT HT.
SHRUBS				
	6	Aronia melanocarpa 'Autumn Magic' / Autumn Magic Black Chokeberry	5 gal	
	37	Buxus x 'Green Gem' / Green Gem Boxwood	2 gal	
	21	Callicarpa x 'NCCX2' / Pearl Glam® Beautyberry	5 gal	
	6	Hamamelis x intermedia `Diane` / Diane Witch Hazel	5 gal	
	25	Ilex glabra 'Compacta' / Compact Inkberry	5 gal	
	76	Itea virginica 'Sprich' / Little Henry Sweetspire	2 gal	
GRASSES				
	6	Chasmanthium latifolium `River Mist` / River Mist Variegated Northern Sea Oats	6" pot	



A - OVERALL PLANTING PLAN

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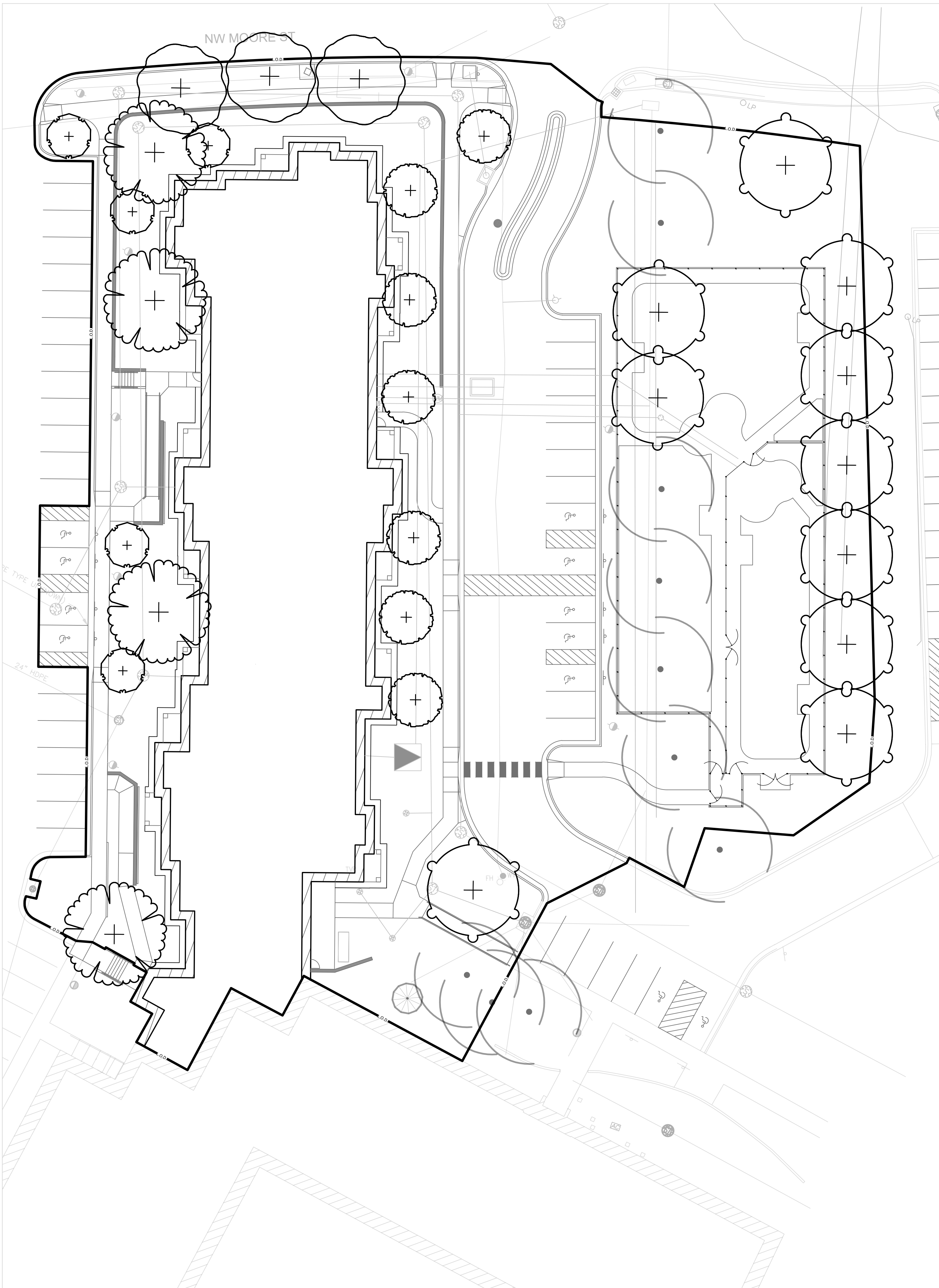
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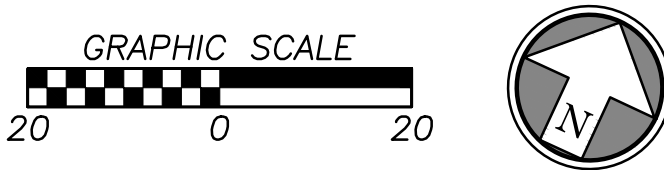
OVERALL  
PLANTING PLAN

DATE: December 1st, 2023	DRAWING
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TREE SCHEDULE				
SYMBOL	QTY	BOTANICAL / COMMON NAME	CONT	CAL
DECIDUOUS TREES				
	5	Acer ginnala `Flame` / Flame Amur Maple	B & B	1.5"Cal
	4	Gymnocladus dioica `Espresso` / Kentucky Coffeetree	B & B	3"Cal
	7	Nyssa sylvatica `David Odom` / Afterburner® Tupelo	B & B	3"Cal
	10	Quercus muehlenbergii / Chinkapin Oak	B & B	3"Cal
	3	Quercus phellos / Willow Oak	B & B	3"Cal



A - TREE PLANTING PLAN





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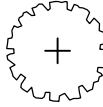
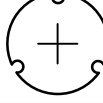






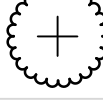
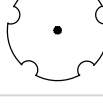
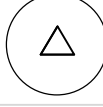
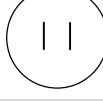

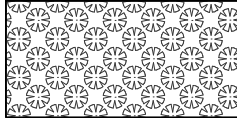
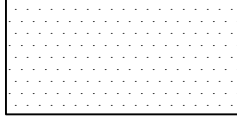
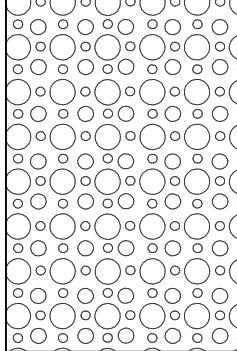
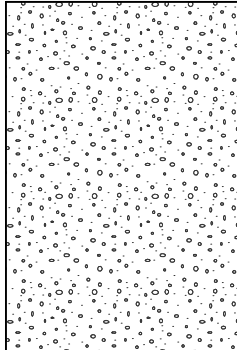
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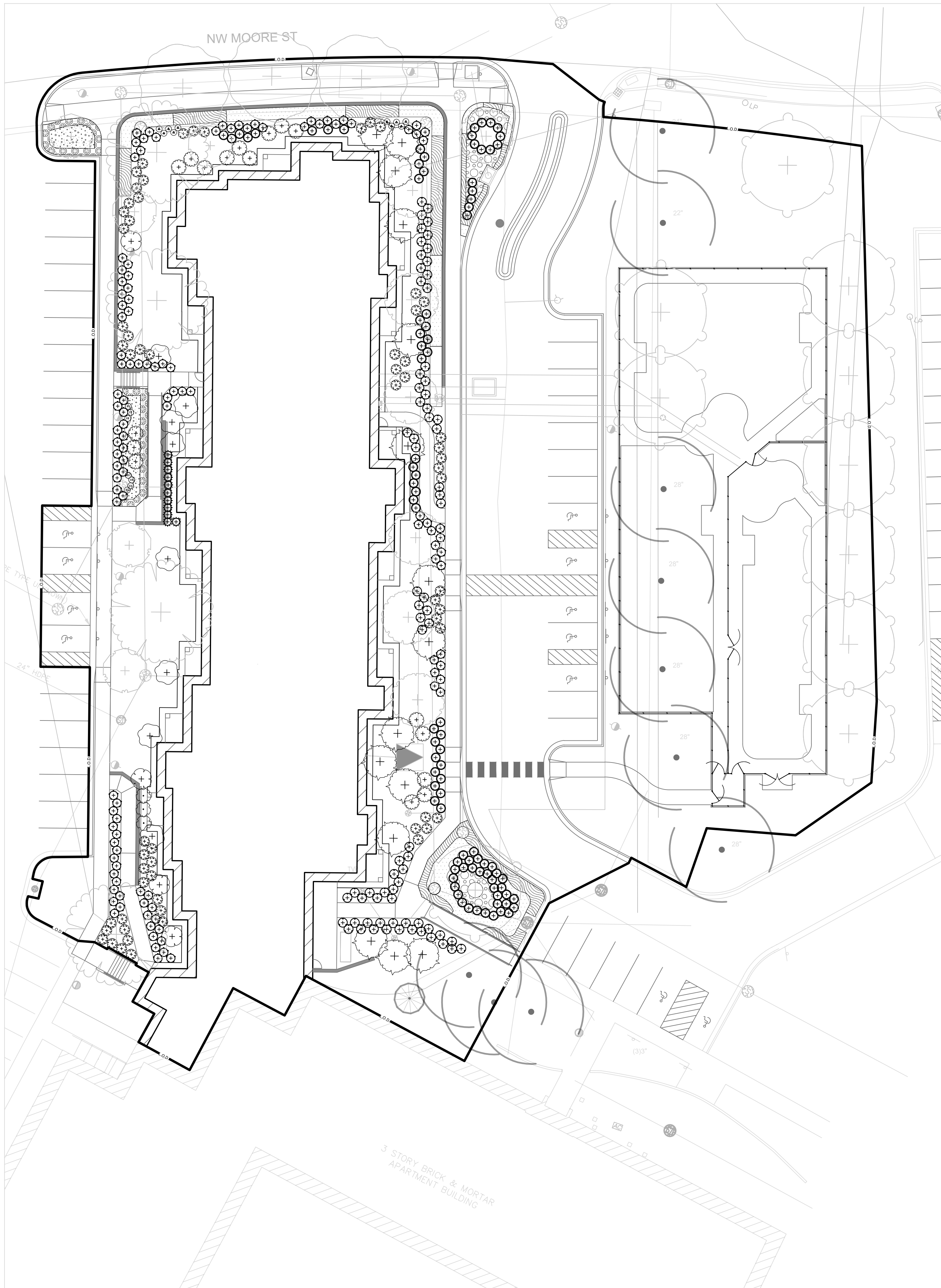
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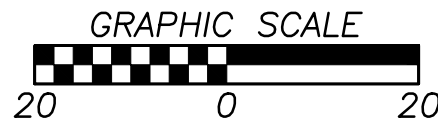
TREE PLANTING  
PLAN

DATE: December 1st, 2023	DRAWING
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SHRUB & PERENNIAL SCHEDULE				
SYMBOL	QTY	BOTANICAL / COMMON NAME	SIZE	
SHRUBS				
	17	Aronia melanocarpa 'Autumn Magic' / Autumn Magic Black Chokeberry	5 gal	
	72	Buxus x 'Green Gem' / Green Gem Boxwood	2 gal	
	63	Callicarpa x 'NCCX2' / Pearl Glam® Beautyberry	5 gal	
	8	Calycanthus floridus 'Burgundy Spice' / Burgundy Spice Sweetshrub	5 gal	
	4	Calycanthus floridus 'Michael Lindsey' / Michael Lindsey Sweetshrub	5 gal	
	15	Hamamelis x intermedia `Diane` / Diane Witch Hazel	5 gal	
	115	Ilex glabra 'Compacta' / Compact Inkberry ILEX glabra Gem Box® is acceptable substitute	5 gal	
	11	Ilex verticillata 'Little Goblin Red' / Little Goblin Red Female Winterberry Plant dwarf male pollinator within 20' of females ILEX verticillata Red Sprite is acceptable substitute	5 gal	
	89	Itea virginica 'Sprich' / Little Henry Sweetspire ITEA virginica Fizzy Mizzy® is acceptable substitute	2 gal	
	3	Rhus aromatica / Fragrant Sumac	5 gal	
GRASSES				
	10	Chasmanthium latifolium `River Mist` / River Mist Variegated Northern Sea Oats	6" pot	
	12	Muhlenbergia capillaris / Pink Muhly Grass	1 gal	
SYMBOL	QTY	BOTANICAL / COMMON NAME	CONT	SPACING
SHRUB AREAS				
	338	Epimedium `Pink Champagne` / Pink Champagne Barrenwort	1 gal	18" o.c.
	108	Iberis sempervirens 'Alexander's White' / White Evergreen Candytuft	1 gal	18" o.c.
	359	Liriope spicata `Silver Dragon` / Silver Dragon Creeping Lilyturf	1 gal	18" o.c.
	274 sf	SHADE PERENNIAL BLEND		
	63	Astilbe x arendsii 'Rheinland' / Rhienland Astilbe	1 gal	50% @ 18" o.c.
	63	Hosta x 'June' / June Hosta	1 gal	50% @ 18" o.c.
	257 sf	SUN PERENNIAL BLEND		
	59	Asclepias tuberosa / Butterfly Milkweed	1 gal	50% @ 18" o.c.
	59	Echinacea purpurea / Coneflower	1 gal	50% @ 18" o.c.



A - SHRUB & PERENNIAL PLANTING PLAN



FINAL  
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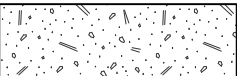
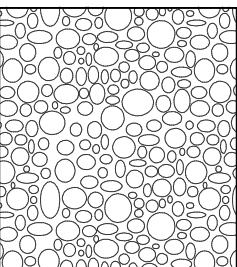
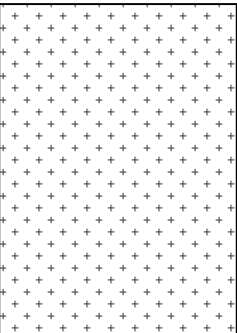
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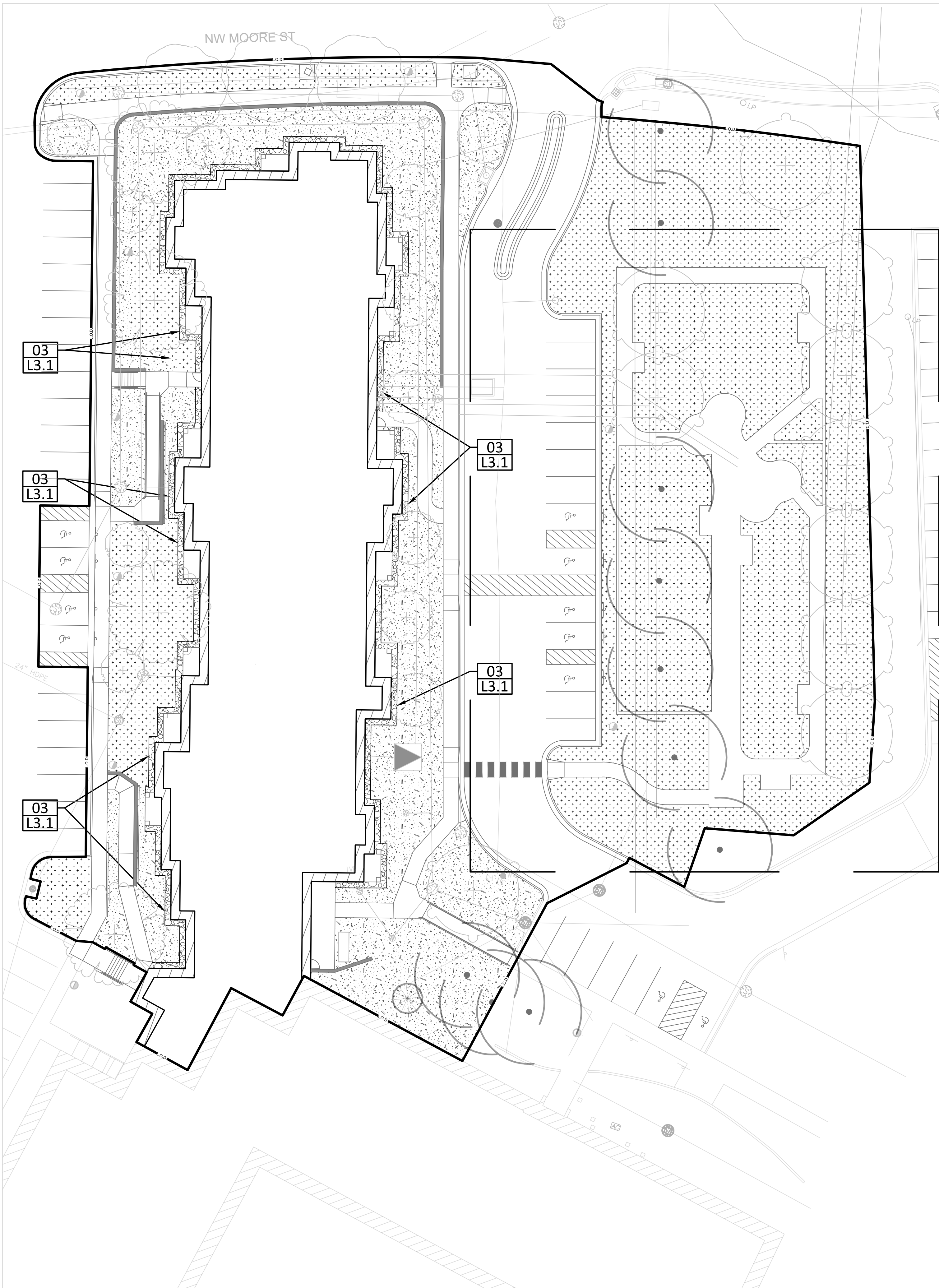
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SHRUB &  
PERENNIAL  
PLANTING PLAN

DATE: December 1st, 2023	DRAWING
COMM. NO. 23104.00	L2.2

TURF & MULCH SCHEDULE		
SYMBOL	QTY	BOTANICAL / COMMON NAME
GROUND COVERS		
	10,910 sf	MULCH - 100% NATURAL CEDAR
	1,428 sf	1/2" PEA FILL GRAVEL MULCH 1/2" max aggregate size, cleaned prior to installation on site. Install 3" depth over Landscape Filter Fabric after planting is complete. Bind mulch with PetraMax Mulch Glue Max applied according to manufacturer's recommended application rates and instructions.  Approximate Yield: 86/sf per ton
	21,989 sf	TURF SAVER RTF® – RHIZOMATOUS TALL FESCUE Sod shall be RTF (U.S. Patent NO. 6,677,507) as produced by members of the RTF Turf Producers Association. Prior to installation, the contractor shall provide written submittal with verification from the RTF Turf Producers Association that the selected local grower is licensed to produce and sell RTF sod.  In addition, an RTF SOD CERTIFICATE from the Association verifying the authenticity of the sod shall be provided with each delivery. Deliveries without the certificate will be rejected. No substitutions of sod will be accepted.



A - SHRUB & PERENNIAL PLANTING PLAN



1525 E. Douglas Wichita, KS 67218 | 316.265.9367 | glmv.com



CIVIL ENGINEERING / SURVEYING / UTILITIES  
7101 College Blvd., Suite 400  
Overland Park, Kansas 66210  
p. (913) 663-1900  
BHC is a trademark of Brueggemann Research & Company, P.A.

FINAL  
DEVELOPMENT PLAN

PROJECT TITLE



John Knox Village

COURTYARDS - BUILDING E



Architecture  
Engineering  
Planning  
Interiors

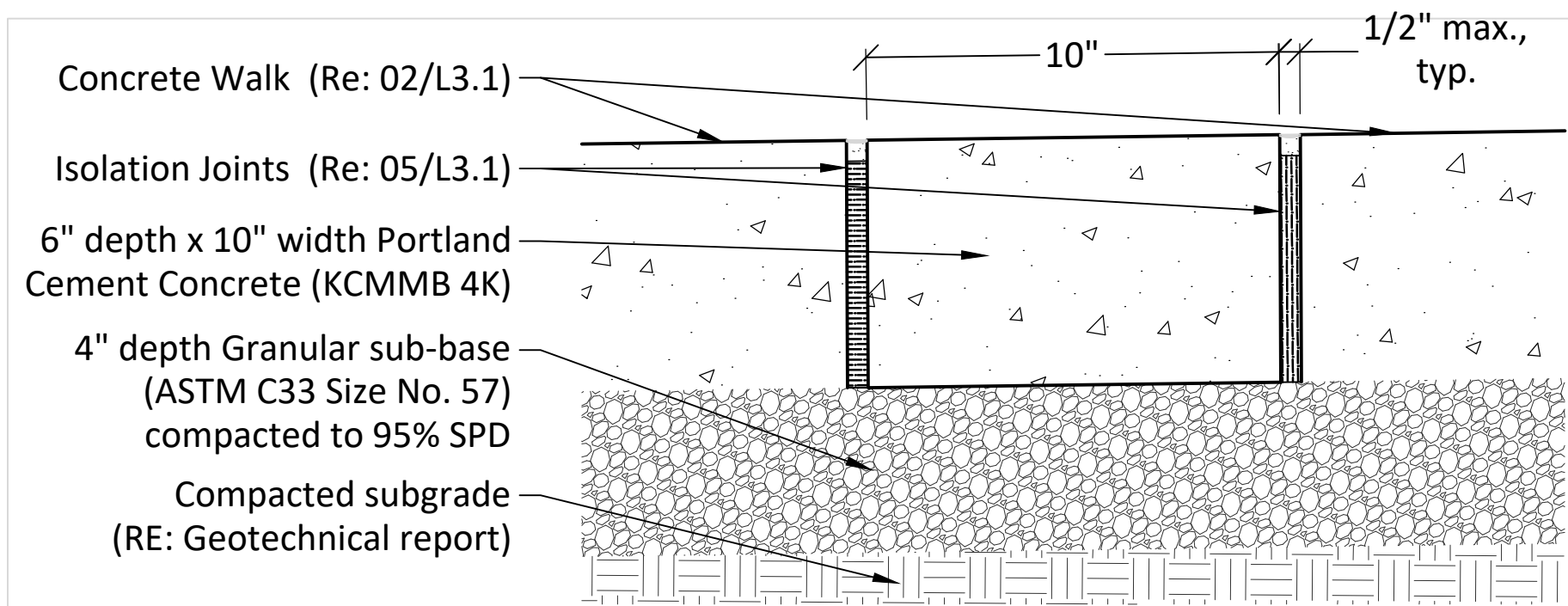
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Charlotte, North Carolina 28203.4633  
704.372.7327 ■ Fax 704.372.7369  
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DESIGNER : ERDM	DRAWN : ERDM	
ARCHITECT : DAS	CHECKED : ADM	
ENGINEER : ERB	APPROVED : CDW	
NO.	REVISION DESCRIPTION	DATE

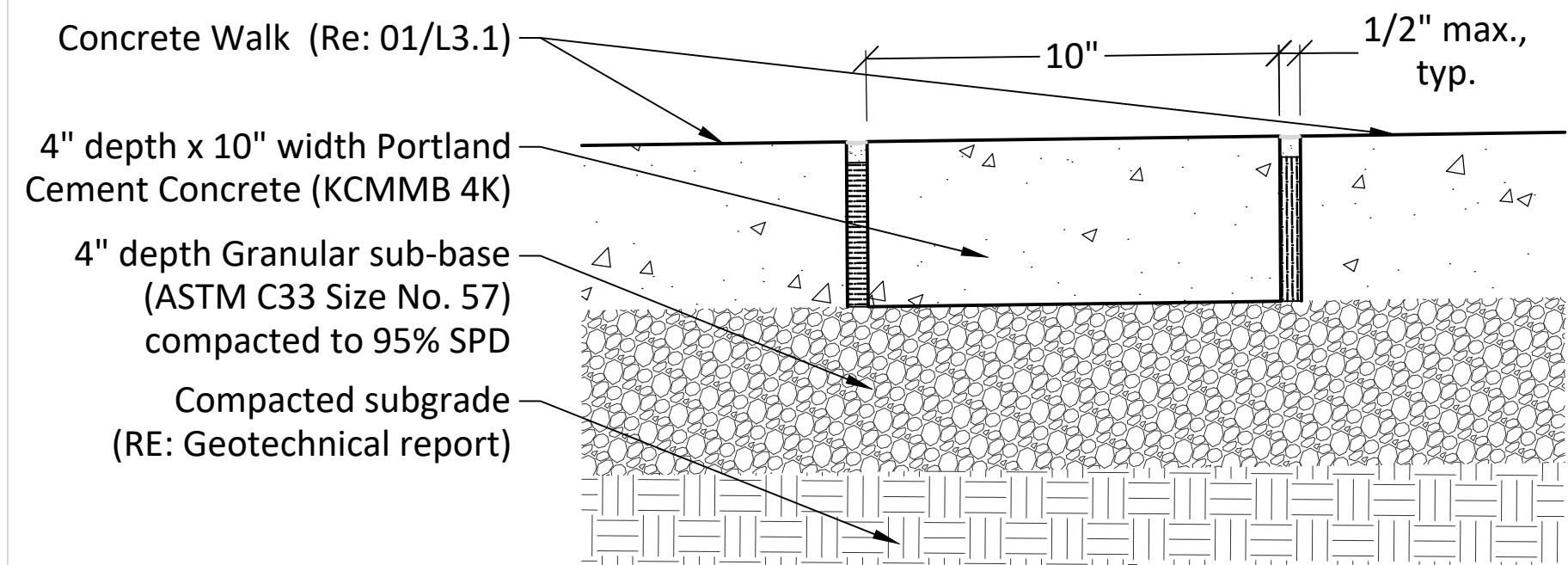
DRAWING TITLE

TURF & MULCH  
PLAN

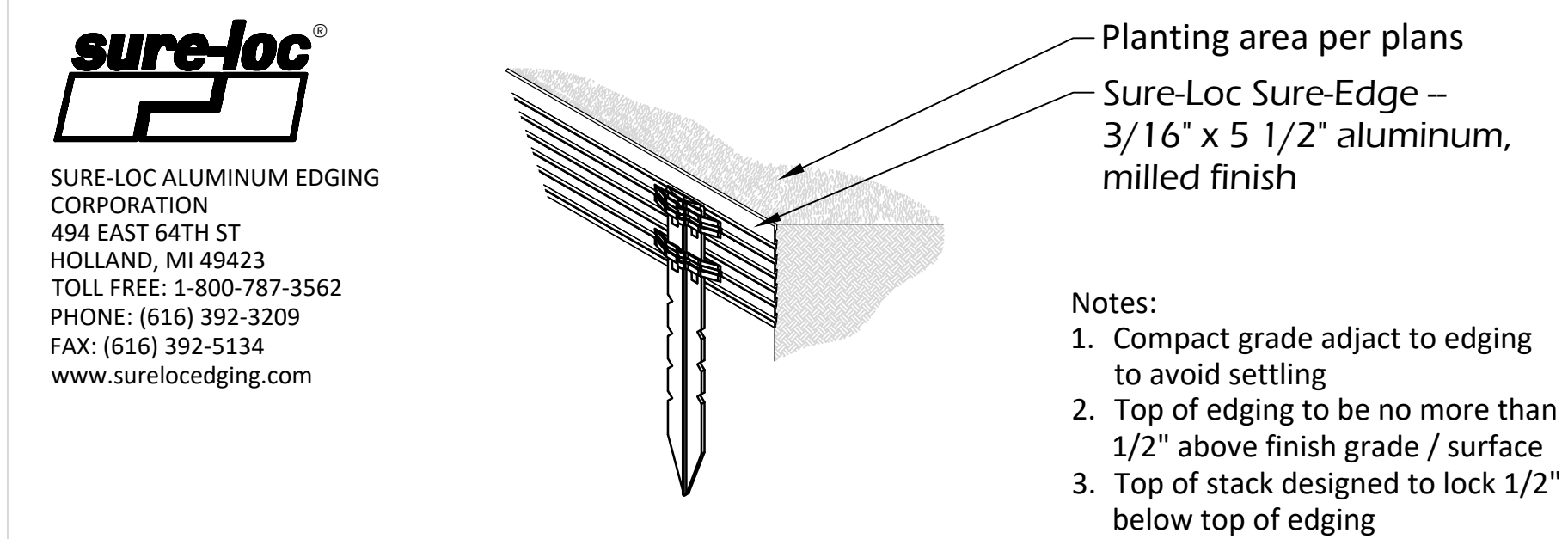
DATE: December 1st, 2023	DRAWING
COMM. NO. 23104.00	L2.3



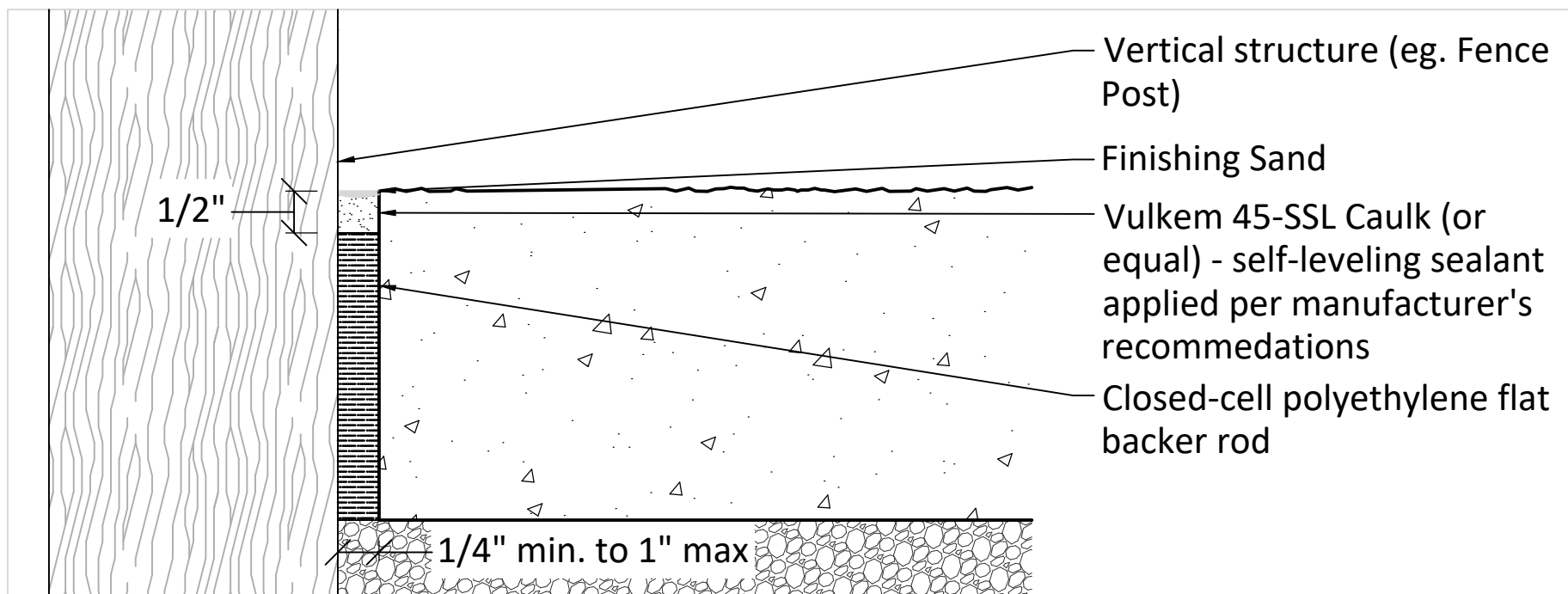
12 10" Concrete Mow Strip in Heavy Duty Sidewalk



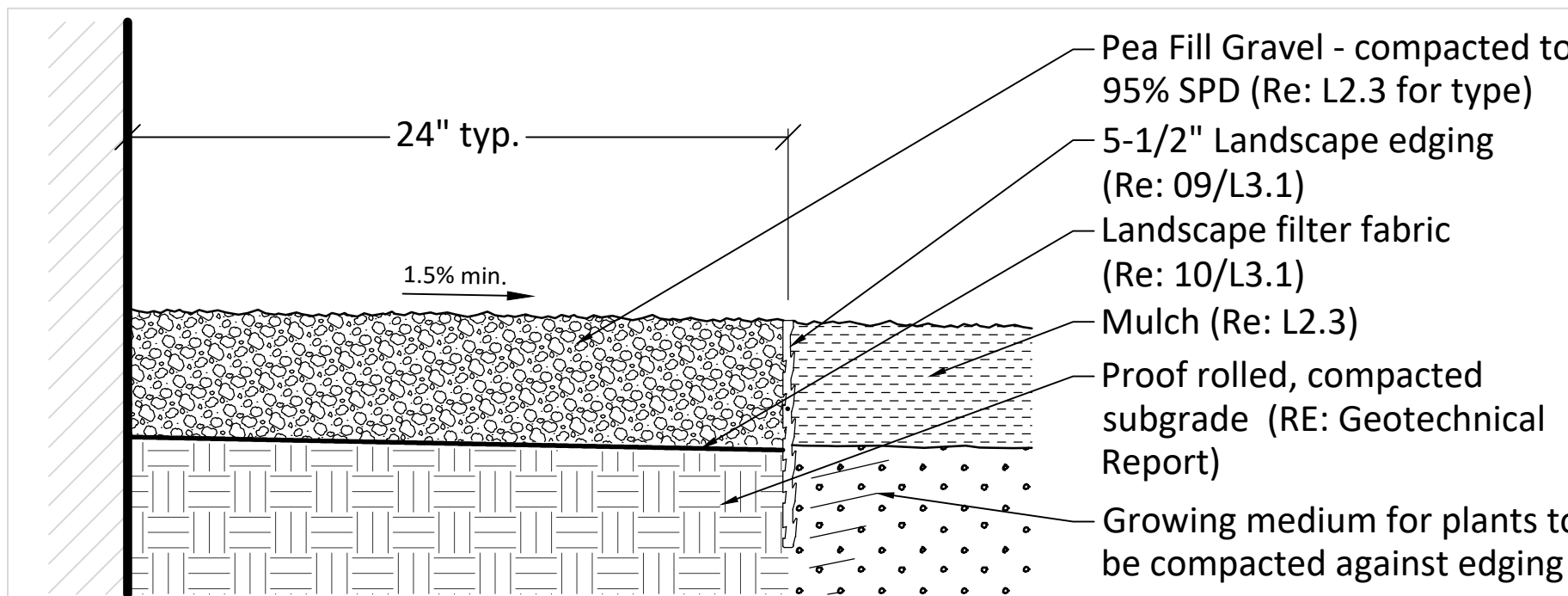
11 10" Concrete Mow Strip in Sidewalk



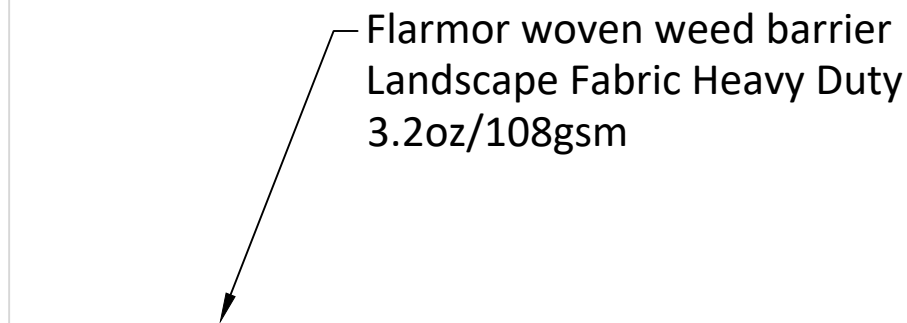
09 Sure-Loc Sure-Edge Aluminum Landscape Edging



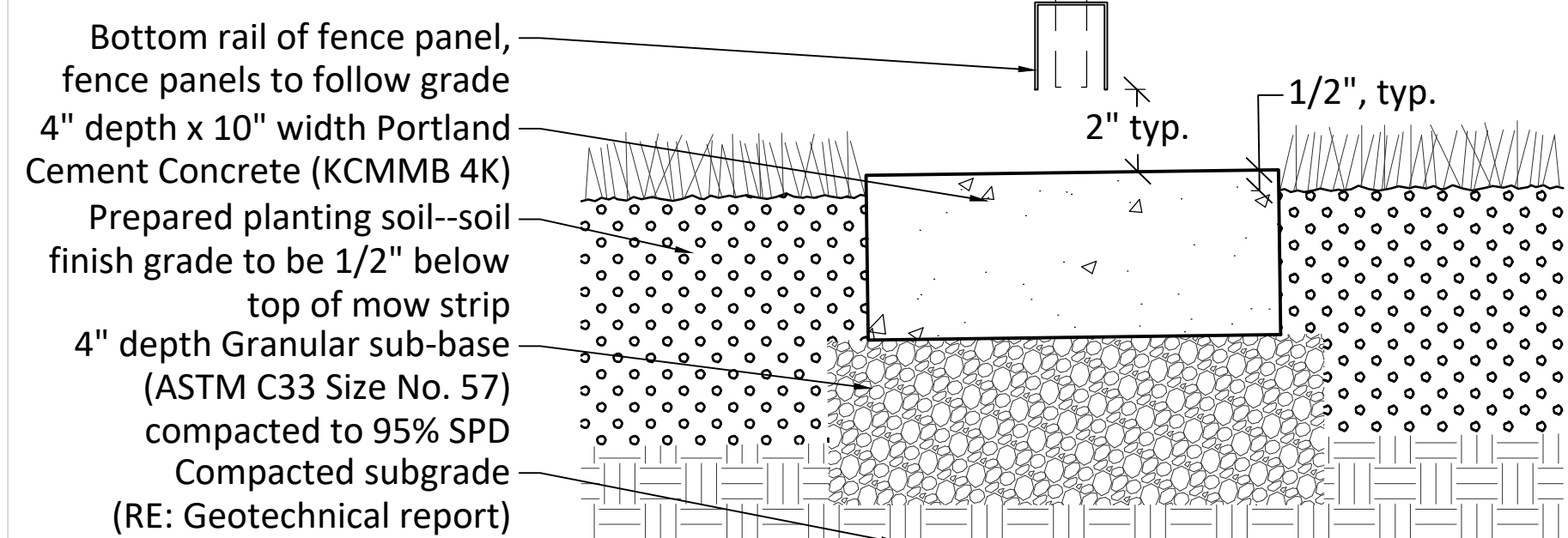
06 Concrete Expansion Joint at Vertical Break



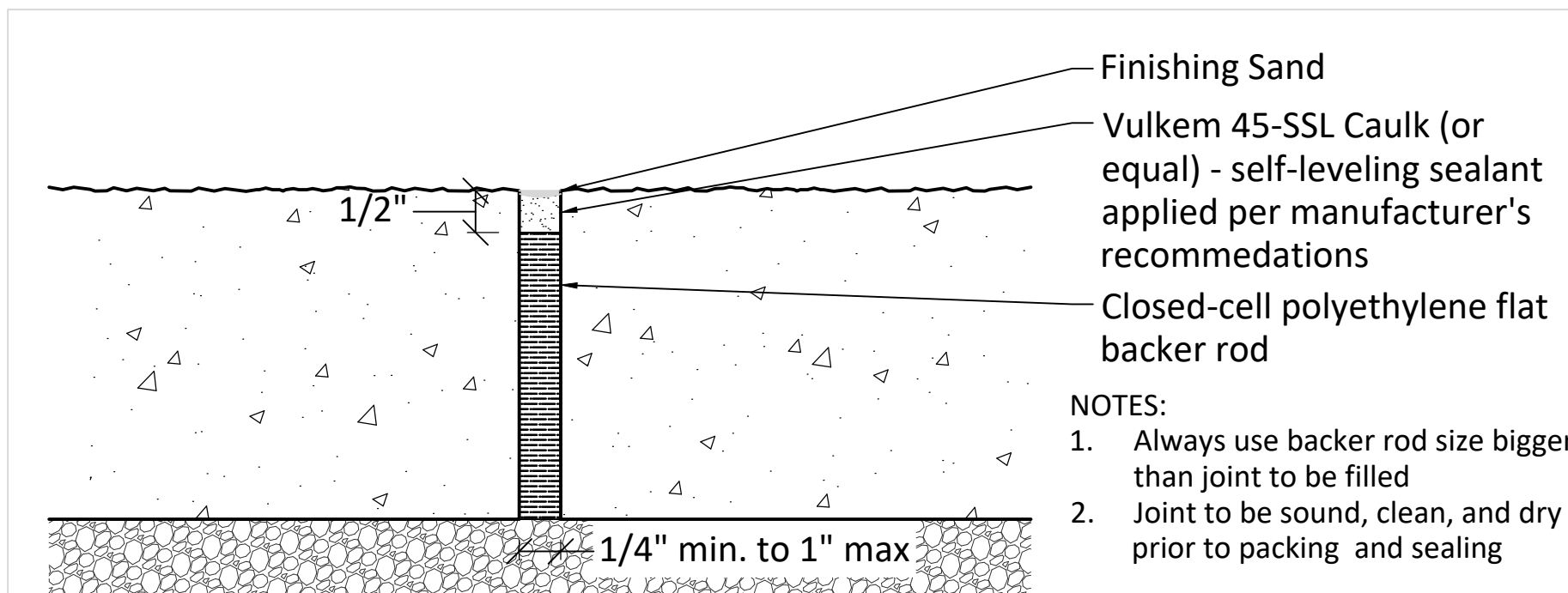
03 Maintenance Strip at Building



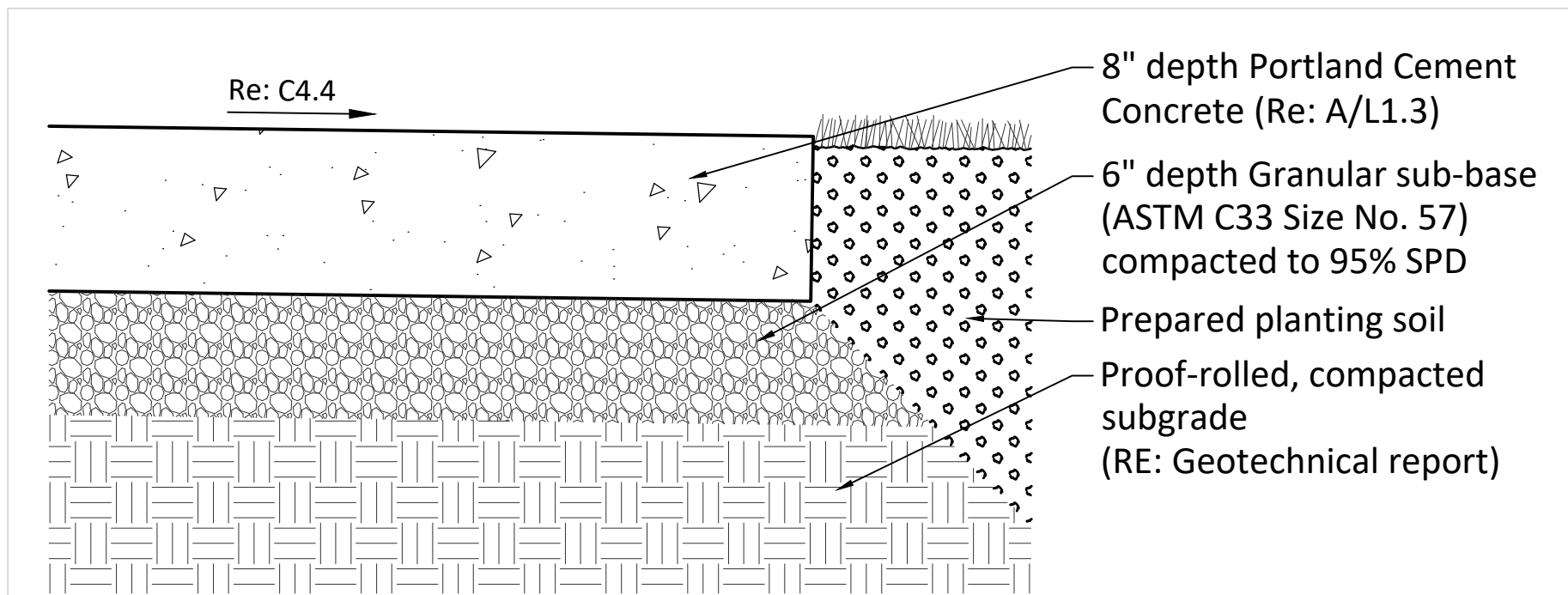
10 Landscape Fabric



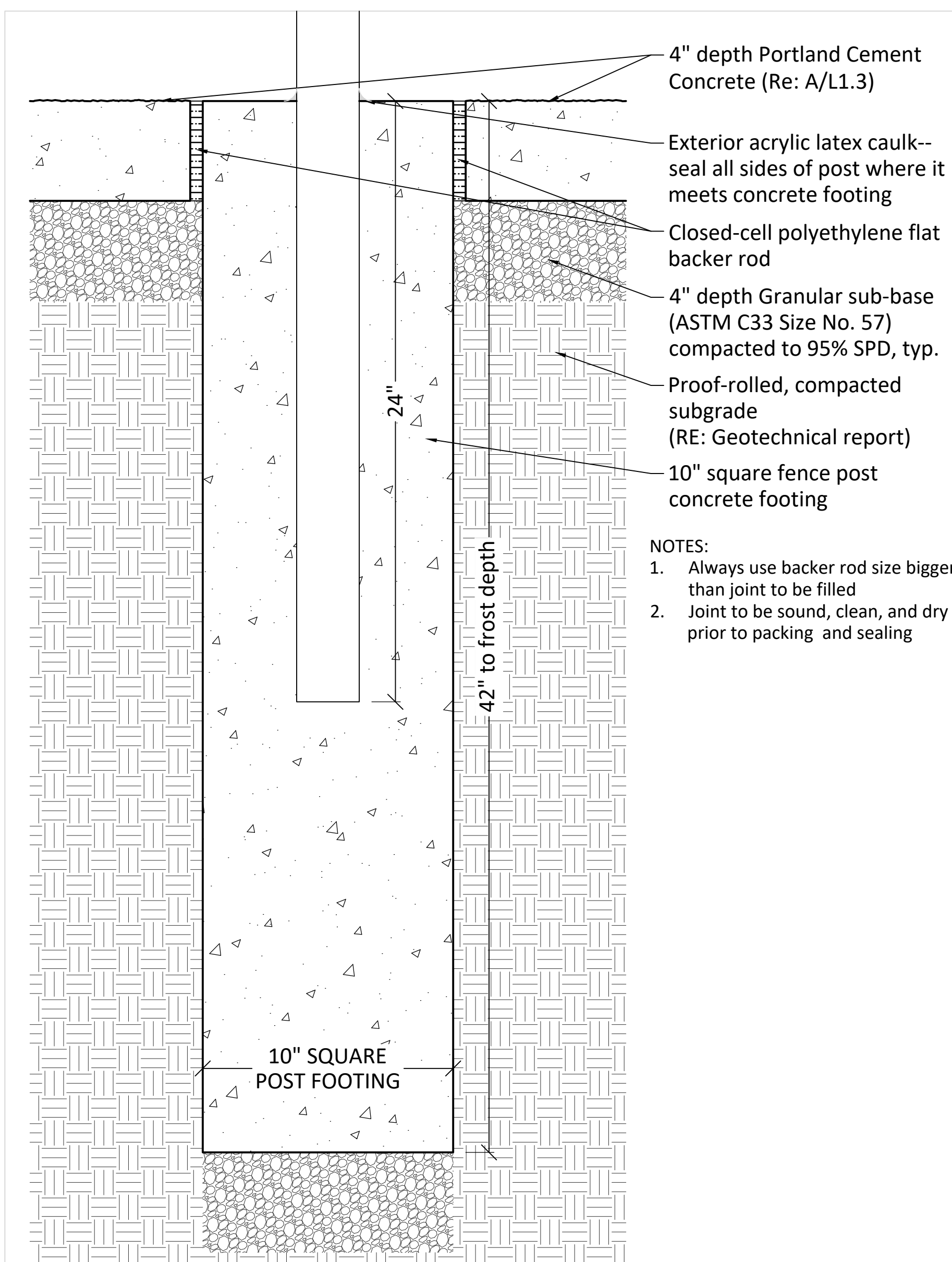
08 10" Concrete Mow Strip



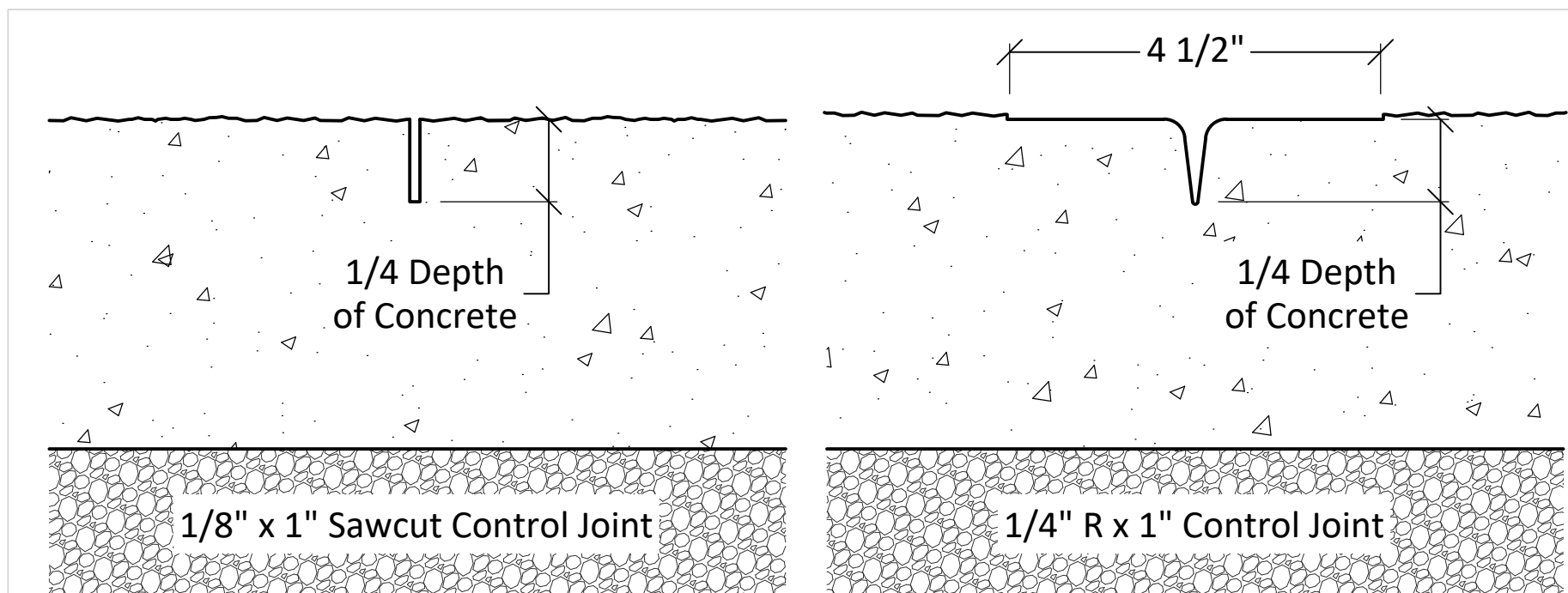
05 Concrete Expansion Joint at Horizontal Break



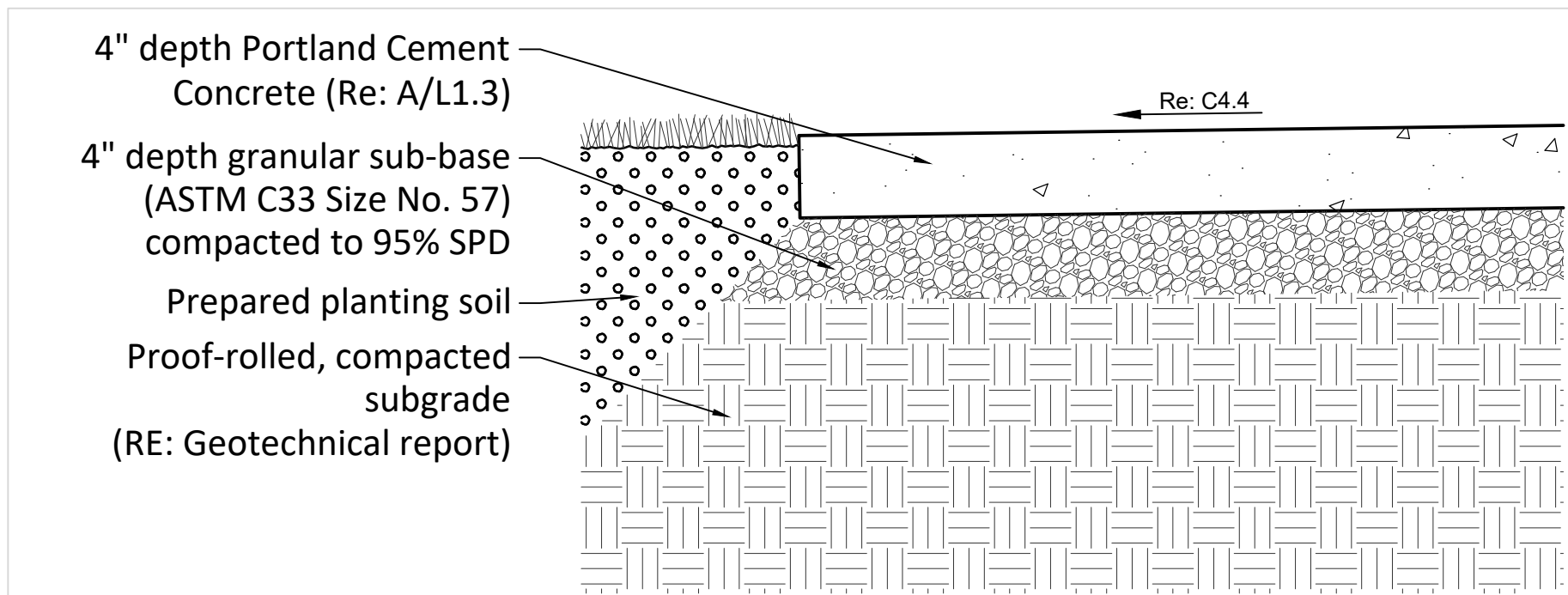
02 Heavy Duty Concrete Paving



07 10" Concrete Mow Strip at Fence Posts



04 Concrete Control Joints



01 Concrete Paving



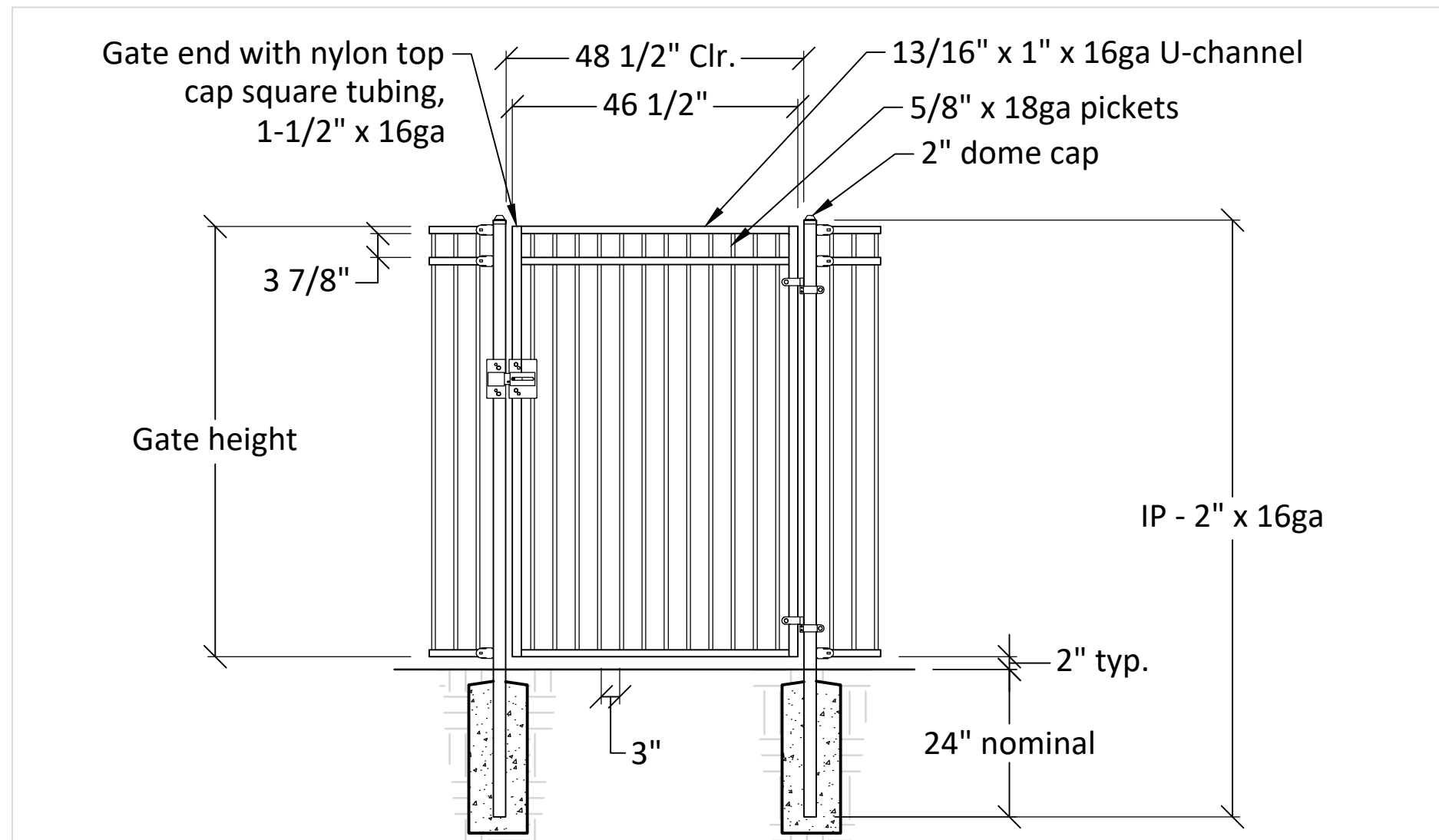
## FINAL DEVELOPMENT PLAN



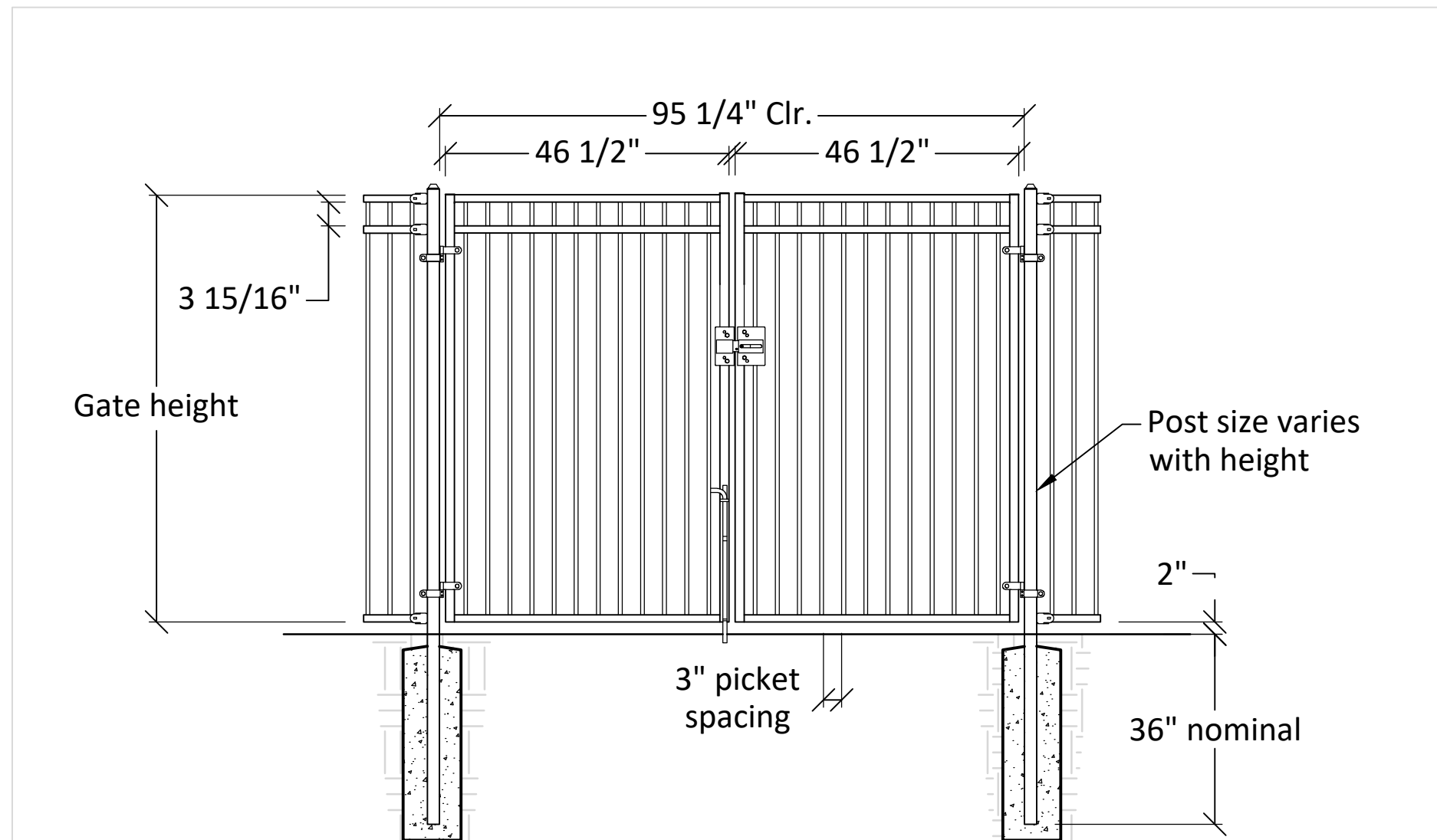
DESIGNER : ERDM	DRAWN : ERDM
ARCHITECT : DAS	CHECKED : ADM
ENGINEER : ERB	APPROVED : CDW
NO.	REVISION DESCRIPTION
DATE	

## CONSTRUCTION DETAILS

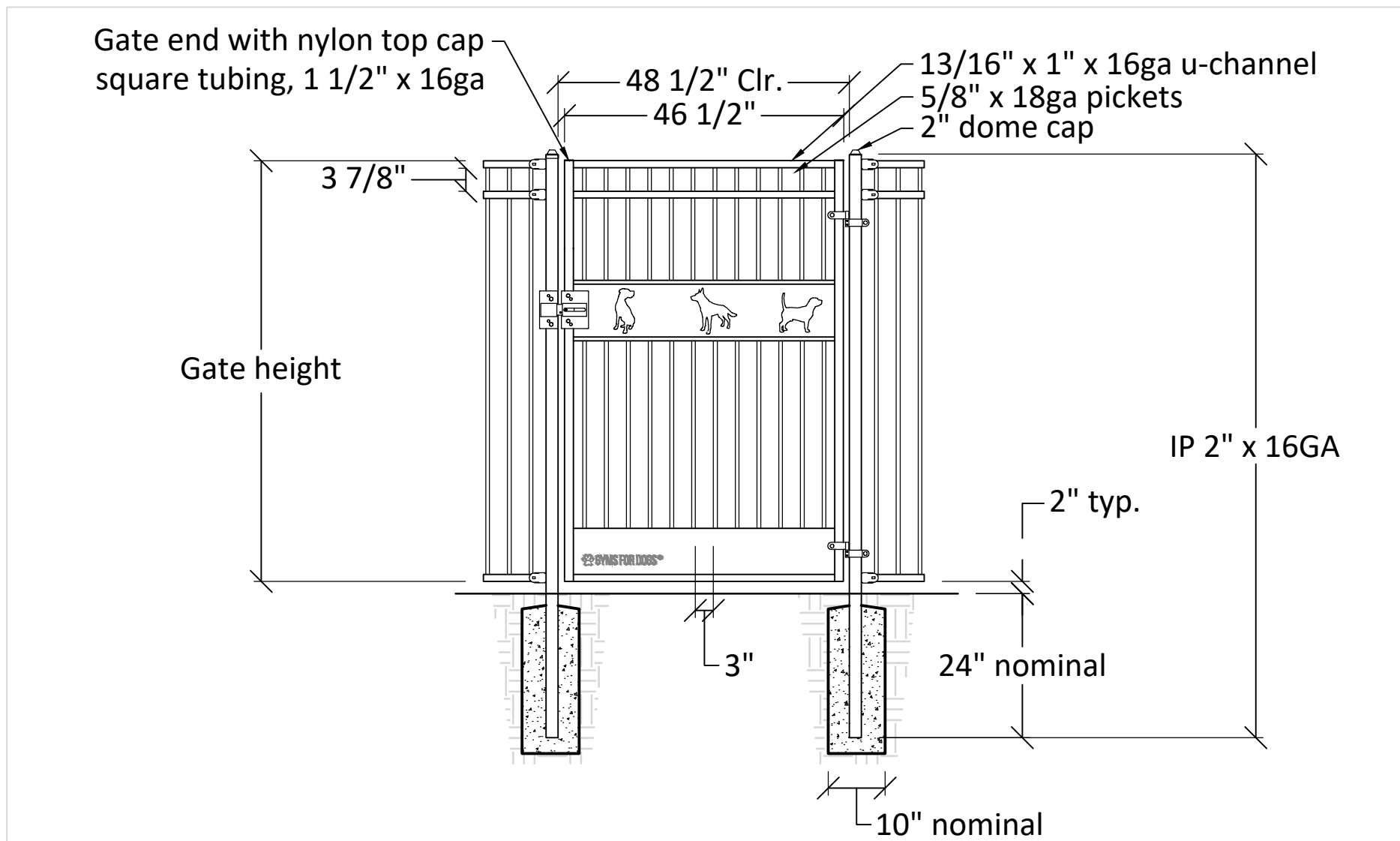
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COMM. NO. 23104.00	L3.1



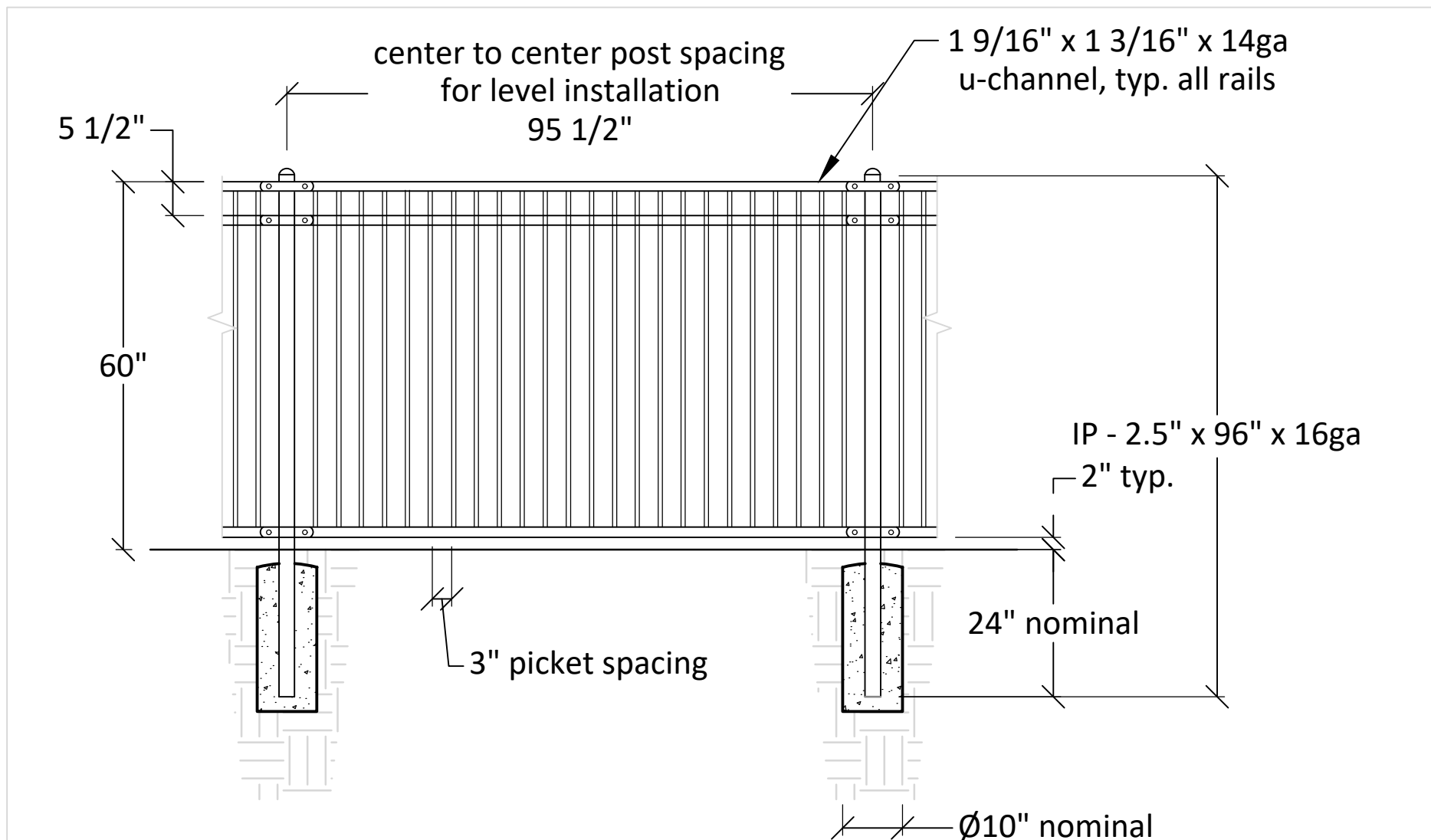
05 Dog Park Fence - Secondary Gate



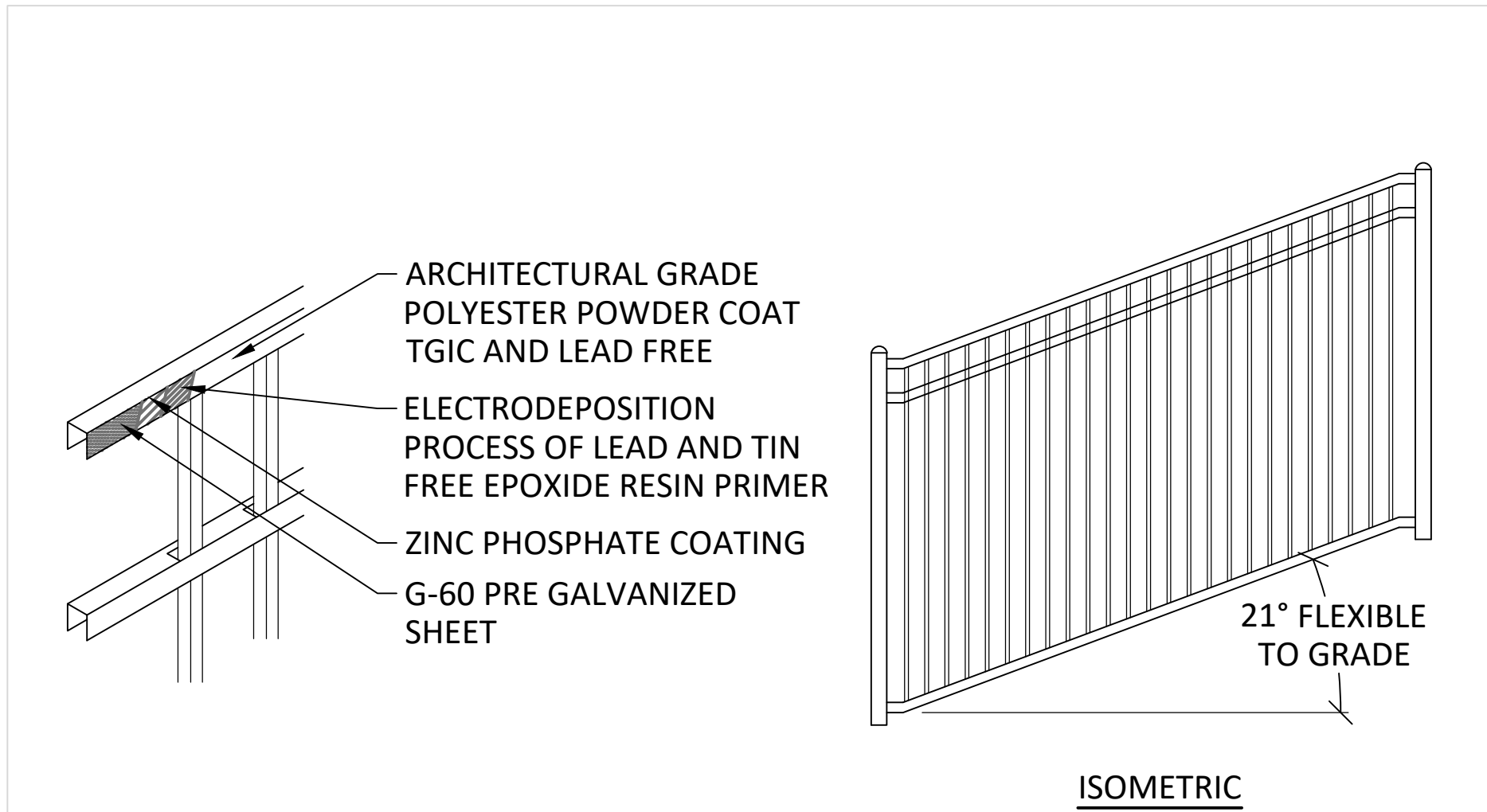
03 Dog Park Fence - Service Gate



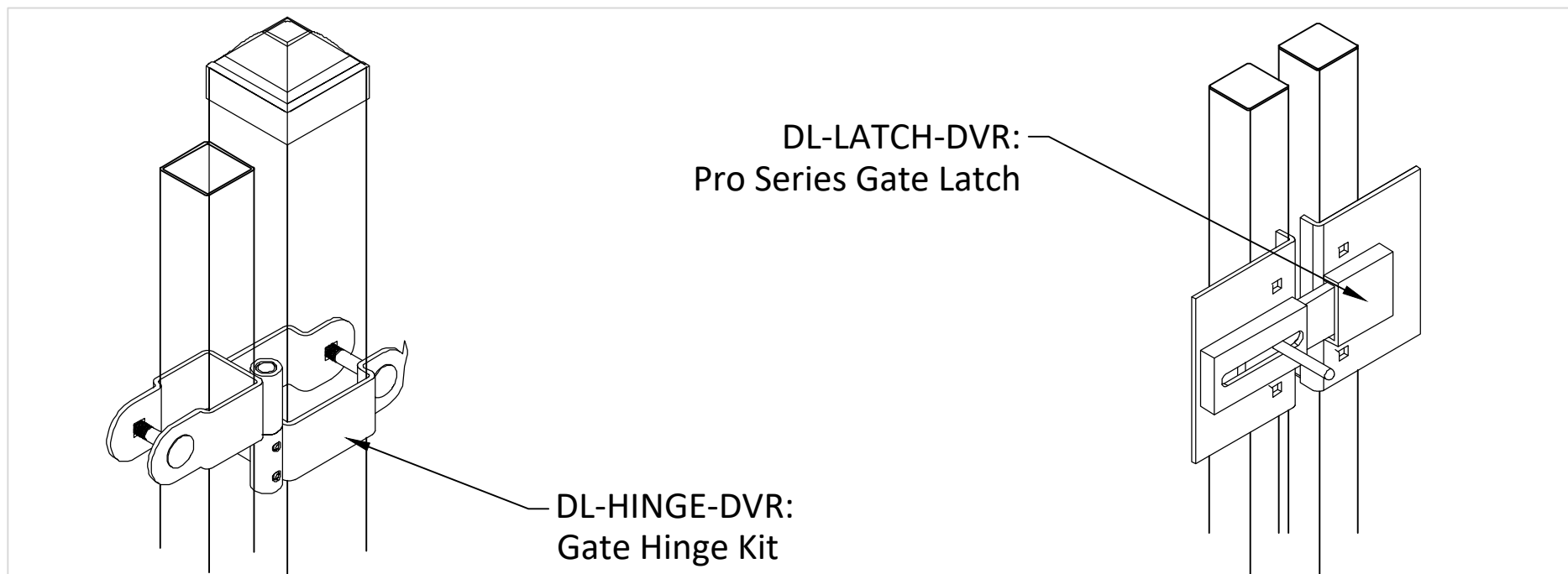
04 Dog Park Fence - Primary Gate




02 Dog Park Fence - Posts & Panels



07 Dog Park Fence - Railing Detail



06 Dog Park Fence - Entry Gate Self-Close Hinge & Latch



GYMS FOR DOGS®  
3815 RIVER CROSSING PKWY SUITE 100  
INDIANAPOLIS, IN 46240  
PHONE: (800) 931-1562  
EMAIL: sales@GymsForDogs.com  
www.GymsForDogs.com

DESIRED MOUNT:  
☒ IN-GROUND  
☐ SURFACE

DESIRED HEIGHT:  
☐ 48"  
☒ 60"  
☐ 72"

DESIRED PICKET SPACING:  
☒ 3" (SHOWN)  
☐ 3.9"

DESIRED FENCE:  
☐ ALUMINUM  
☒ STEEL

Doggie DVR Fence Series		
Item	Approx. Dimensions	Item Number
Panels – 90.5" wide	Fence Panel – 5' Tall	DL-FN5FP-DVR
Gates – 4' Wide	Entrance Gate – 5' Tall	DL-FN5EG-DVR
Gates – 4' Wide	(2) 4' Wide panels for a total opening of 8'	DL-FN5SG-DVR
Post – 2.5" x 2.5"	In-Ground Post (IG)	DL-FNIG5-DVR
Post – 2.5" x 2.5"	Post Top Cap – 1 per post	DL-FNPOST-DVR
Mounting Brackets	In-Line Brackets (2) Kit per post	DL-LBRACKT-DVR
Mounting Brackets	End, Corner, T Brackets (2) Kit per post	DL-TBRACKT-DVR
Gate Hinges and Latch	Hinge Kit – 2 Hinges per Kit	DL-HINGE-DVR
Gate Hinges and Latch	Latch for Entrance Gate	DL-LATCH-DVR
Gate Hinges and Latch	Drop Rod Kit for Service Gate	DL-DROPPN-DVR
Gate Hinges and Latch	Fork Latch for Service Gate	DL-FORKLTH-DVR

01 Dog Park Fence - Fence Selection



## FINAL DEVELOPMENT PLAN

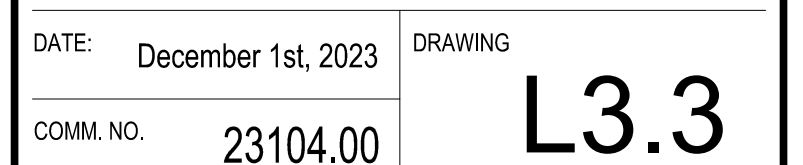


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ENGINEER : ERB	APPROVED : CDW
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## CONSTRUCTION DETAILS

DATE: December 1st, 2023	DRAWING
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PLANTING NOTES

- Location of all existing utilities needs to be done before commencing work.
- The planting plan graphically illustrates overall plant massings. Each plant species massing shall be placed in the field to utilize the greatest coverage of ground plane. The following applies for individual plantings:
  - Creeping groundcover shall be a minimum of 6" from paving edge.
  - All trees shall be a minimum of 3 ft. from paving edge.
  - All plants of the same species shall be equally spaced apart and placed for best aesthetic viewing.
  - All shrubs shall be a minimum of 2 ft. from paved edge and 4' from back of curb to allow for bumper overhang.
- Mulch all planting bed areas to a minimum depth of 3". Mulch individual trees to a minimum depth of 2".
- All landscaped areas in right of way shall be sodded and irrigated unless otherwise specified.

MATERIALS:

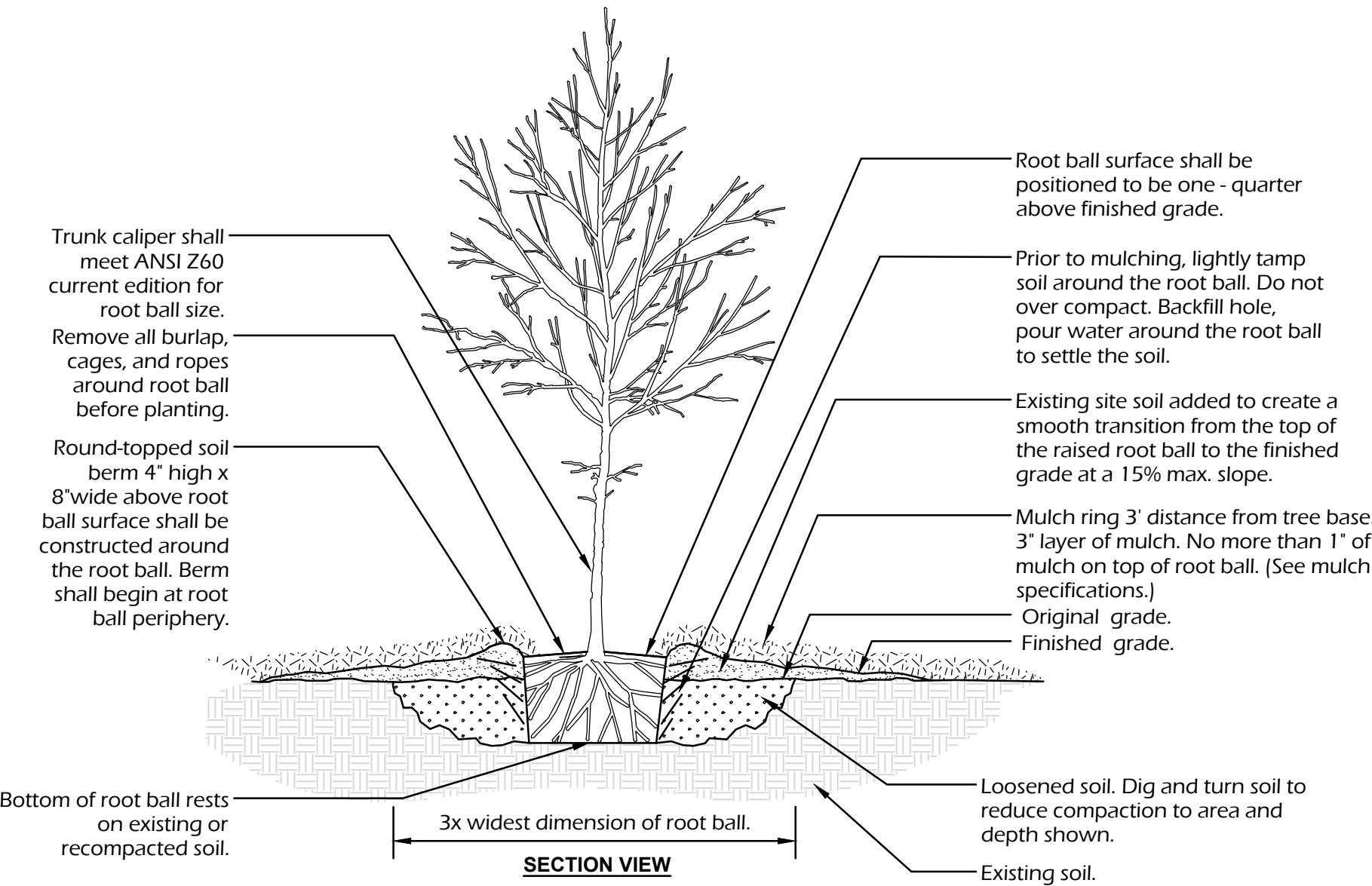
- Plant material shall be healthy, vigorous, and free of disease and insects as per AAN standards.
- Kind, size and quality of plant material shall conform to American Standard for nursery stock, ANSI-Z60-2004, or most recent edition.
- Shredded bark mulch installed at trees shall be finely chipped and shredded hardwood chips, consisting of pure wood products and free of all other foreign substances. Pine bark compost mulch installed at planting bed areas shall be free of all other foreign substances.

INSTALLATION:

- All compacted soil within the area to be landscaped shall be removed to a depth of not less than thirty inches (30") and shall be backfilled with topsoil.
- Prepare planting beds by incorporating an approved composed organic soil into existing soil for all shrub, perennial, and annual planting beds at a minimum depth of 6". Thoroughly mix organic material into the existing soil by roto-tilling or other approved method to a minimum depth of 12".
- Planting of trees, shrubs, and seeded groundcover shall be commenced during either the spring (March 15 - June 15) or fall (September 1 - October 15) planting season and with water available for hand irrigation purposes.
- Apply liquid, root stimulator, to all shrubs and groundcovers at rates recommended by manufacturer during first planting watering following installation.
- All planting beds will be prepared with polypropylene landscape fabric, that meets or exceeds the DeWitt Pro5 specification, before plant material is installed. Any product substitution to be submitted by contractor to project manager for approval prior to installation. Rock mulch to be placed over polypropylene landscape fabric at a depth of 2" - 4".
- Landscape fabric should be installed flat with all folds either pinned down with 4" landscape pins, overlap adjoining sheets a minimum of 2 - 4" steel landscape staples to be used to pin down the corners before mulch is installed.
- After plants have been installed, all planting beds shall be treated with dacthal pre-emergent herbicide prior to mulch application.
- Plant pit backfill for trees and shrubs shall be 20% peat or well composted manure and 80% topsoil.
- Trees planted in landscaped planting areas shall be situated a minimum of three (3) feet from any curb.
- Plant material shall be maintained and guaranteed for a period of one year after owner's acceptance of finished job. All dead or damaged plant material shall be replaced at landscape contractor's expense.
- Landscape contractor shall maintain all plant material until final acceptance, at which point the one year guarantee begins.
- All landscape beds shall be level with surrounding hardscape.

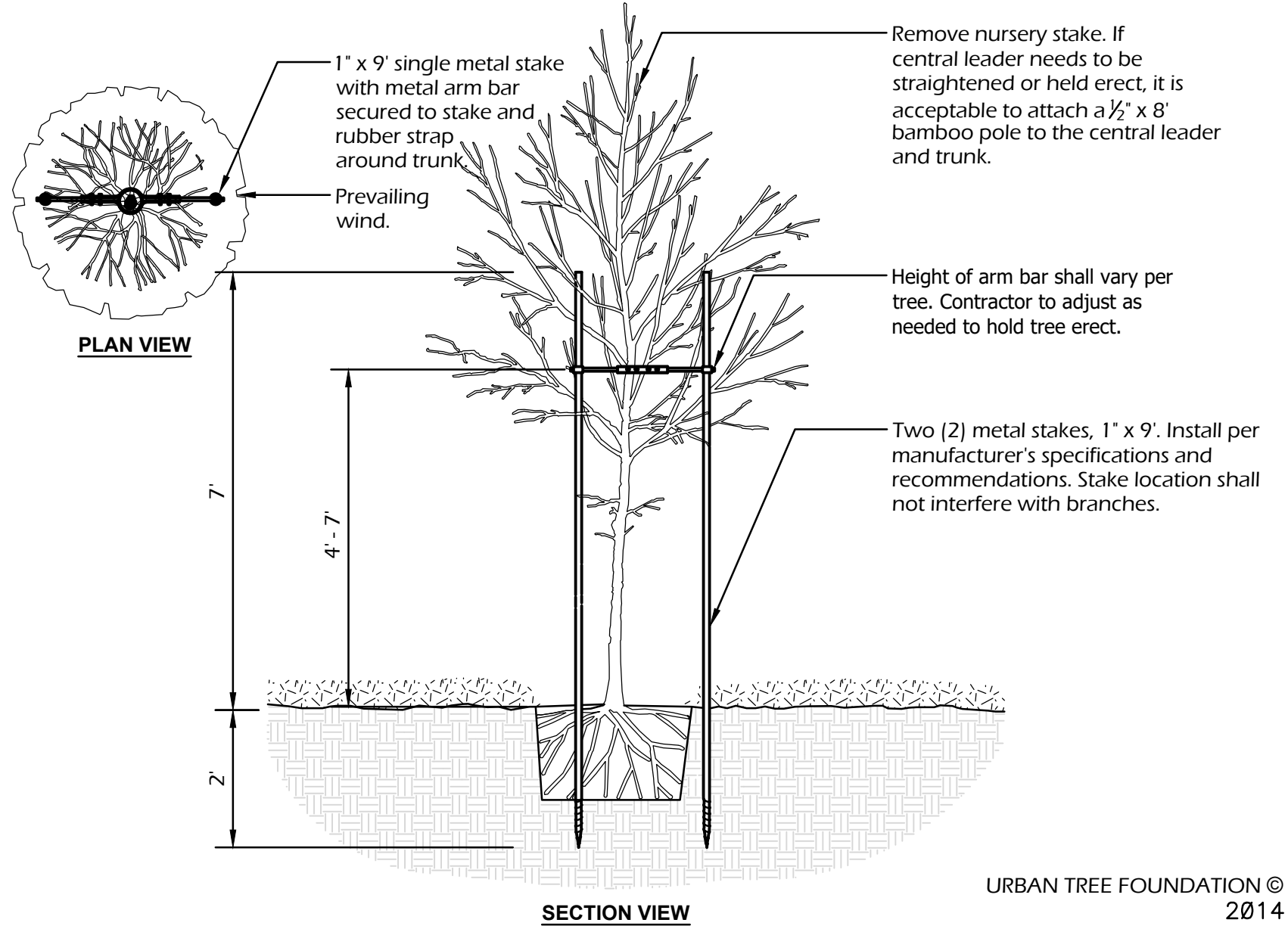
SOD NOTES

- All landscaped areas shall receive a minimum 6-inch depth of topsoil compacted to 85% density at optimum moisture content.
- The entire surface to be landscaped should be reasonable smooth and free from stones, roots or other debris.
- Sod shall be machine stripped at a uniform soil thickness of approximately one inch (plus or minus 1/4-inch). The measurement for thickness shall exclude top growth and thatch, and shall be determined at the time of cutting in the field. Precautions shall be taken to prevent drying and heating. sod damaged by heat and dry conditions, and sod cut more than 18 hours before being incorporated into the work shall not be used.
- Handling of sod shall be done in a manner that will prevent tearing, breaking, drying and other damage. Protect exposed roots from dehydration. Do not deliver more sod than can be laid within 24 hours.
- Moisten prepared surface immediately prior to laying sod. water thoroughly and allow surface to dry before installing sod, fertilize, harrow or rake fertilizer in the top 1-1/2-inches of topsoil, at a uniform rate.
- Fertilizer shall be 20-10-5 commercial fertilizer of the grade, type, and form specified and shall comply with the rules of the state dept. of agriculture. fertilizer shall be identified according to the percent N,P,K in that order.
- Saturate sod with fine water spray within two hours of planting. During the first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of four inches.



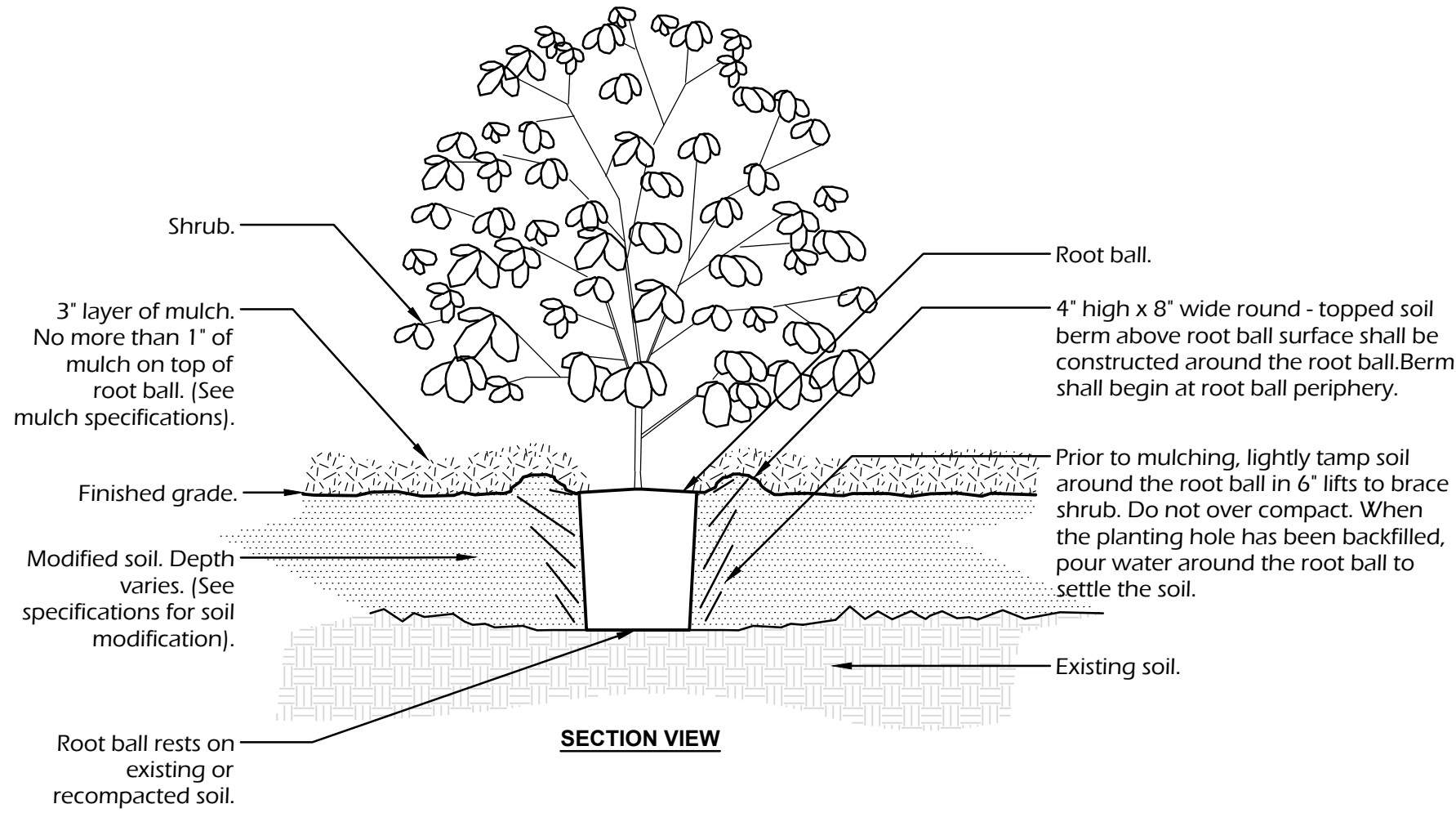
Tree Planting Detail

Not to Scale



Tree Staking Detail

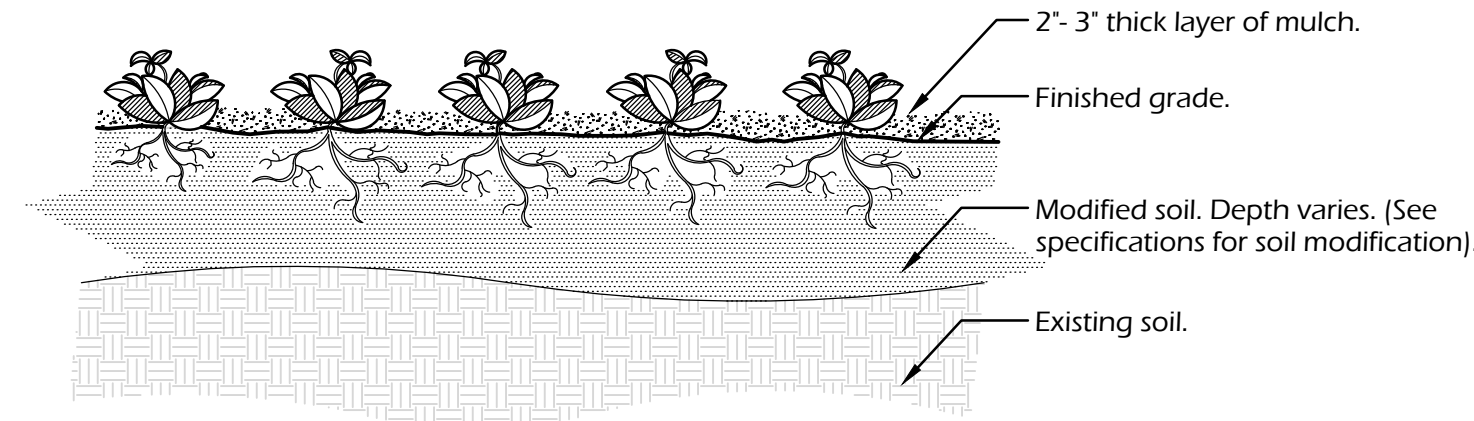
Not to Scale



- Notes:
- Shrubs shall be of quality prescribed in the root observations detail and specifications.
  - See specifications for further requirements related to this detail.

Shrub Planting Detail

Not to Scale

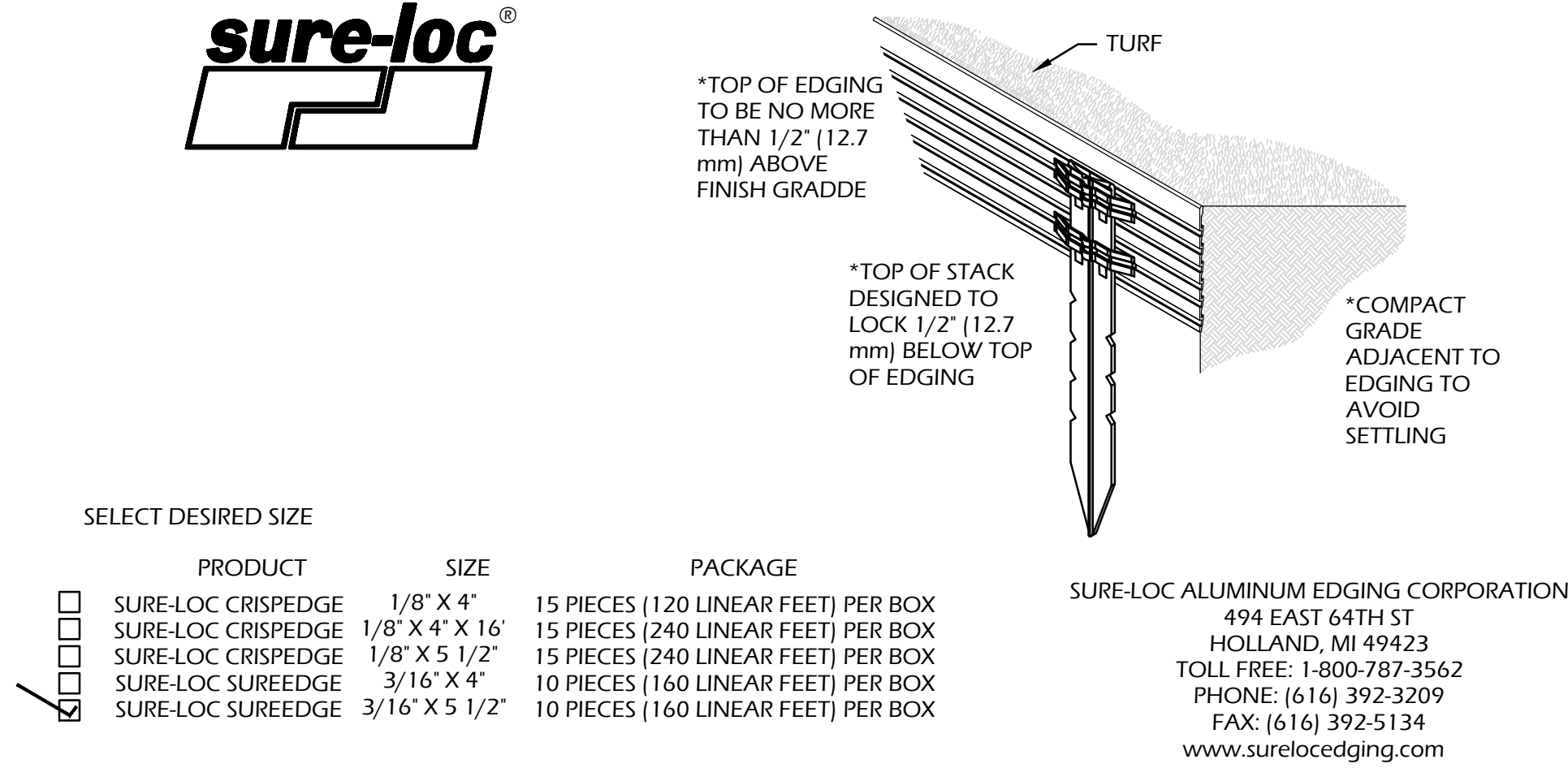


- Notes:
- See planting legend for groundcover species, size, and spacing dimension.
  - Small roots (1/2" or less) that grow around, up, or down the root ball periphery are considered a normal condition in container production and are acceptable however they should be removed or loosened at the time of planting.
  - Settle soil around root ball of each groundcover prior to mulching.

URBAN TREE FOUNDATION © 2014

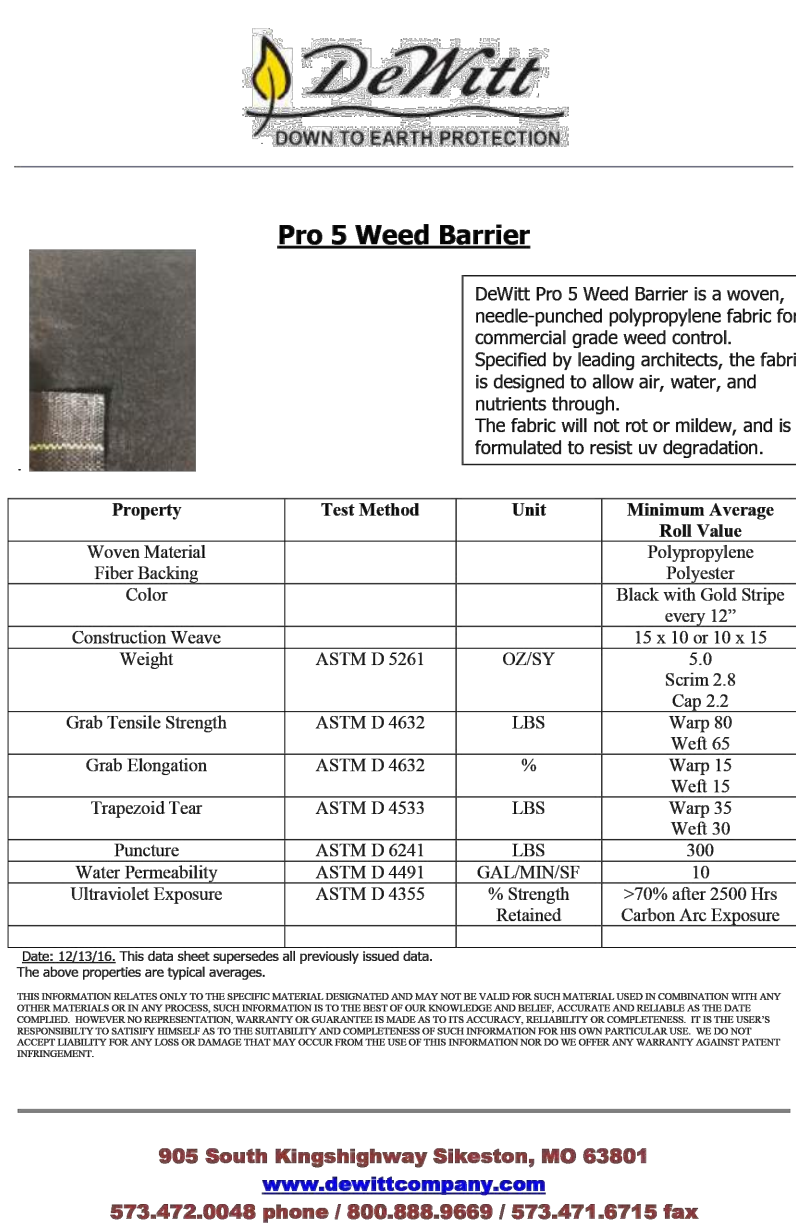
Ground Cover Spacing Detail

Not to Scale



Aluminum Landscape Edging Detail

Not to Scale



Weed Barrier Detail

Not to Scale



FINAL DEVELOPMENT PLAN



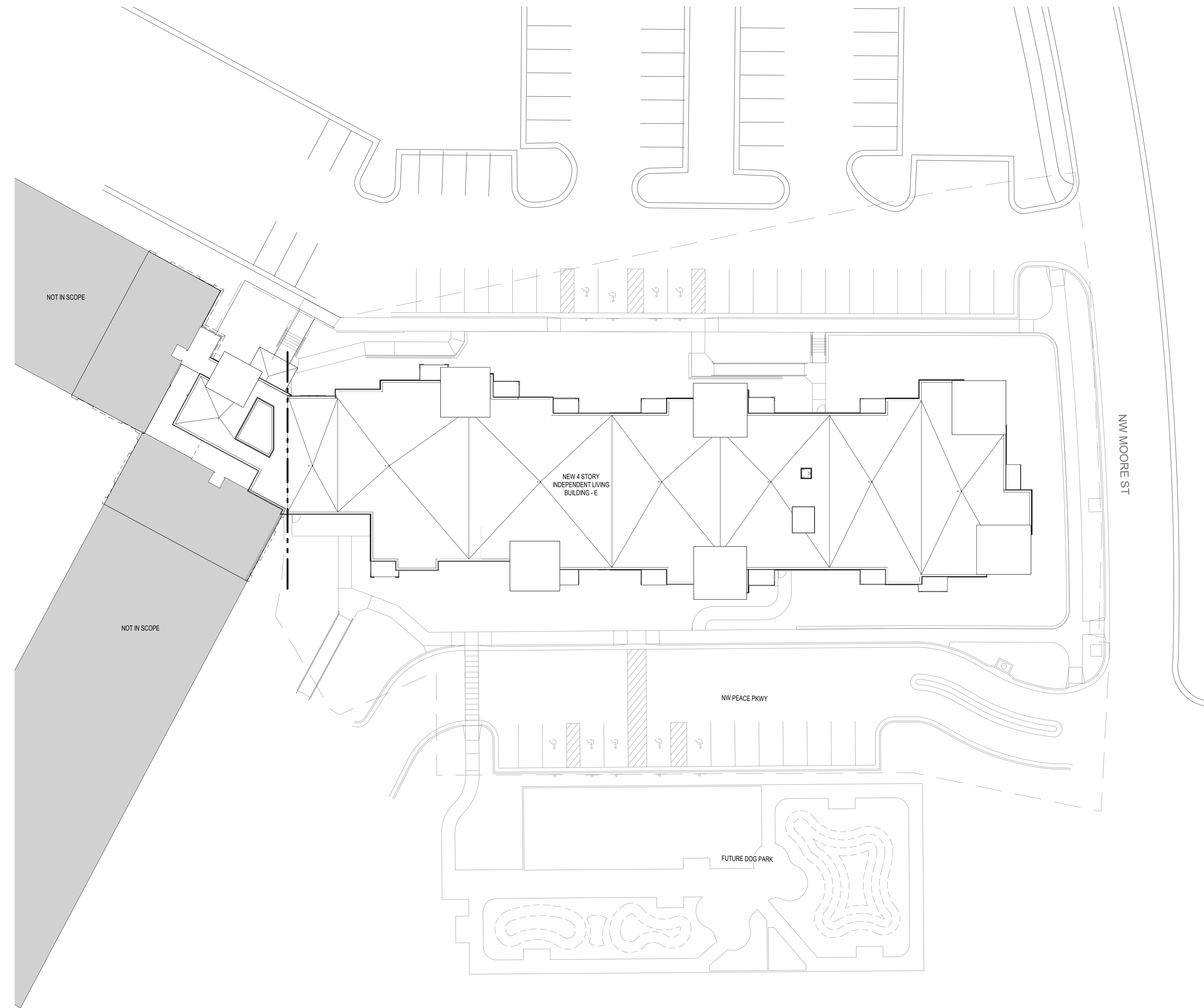
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ARCHITECT : DAS	CHECKED : ADM	
ENGINEER : ERB	APPROVED : CDW	
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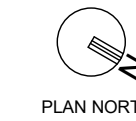
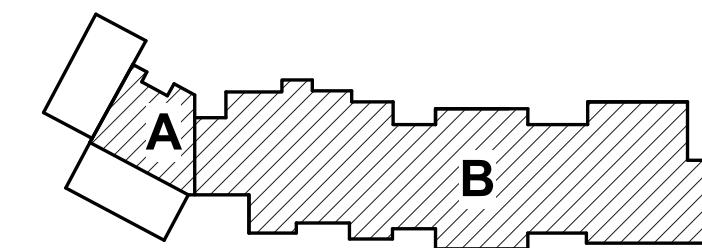
PLANTING DETAILS

DATE: December 1st, 2023	DRAWING
COMM. NO. 23104.00	L3.4



1 SITE PLAN  
1" = 20'-0"

KEYPLAN



GENERAL NOTES

FDP SUBMITTAL



PROJECT TITLE



John Knox Village

COURTYARDS - BUILDING E

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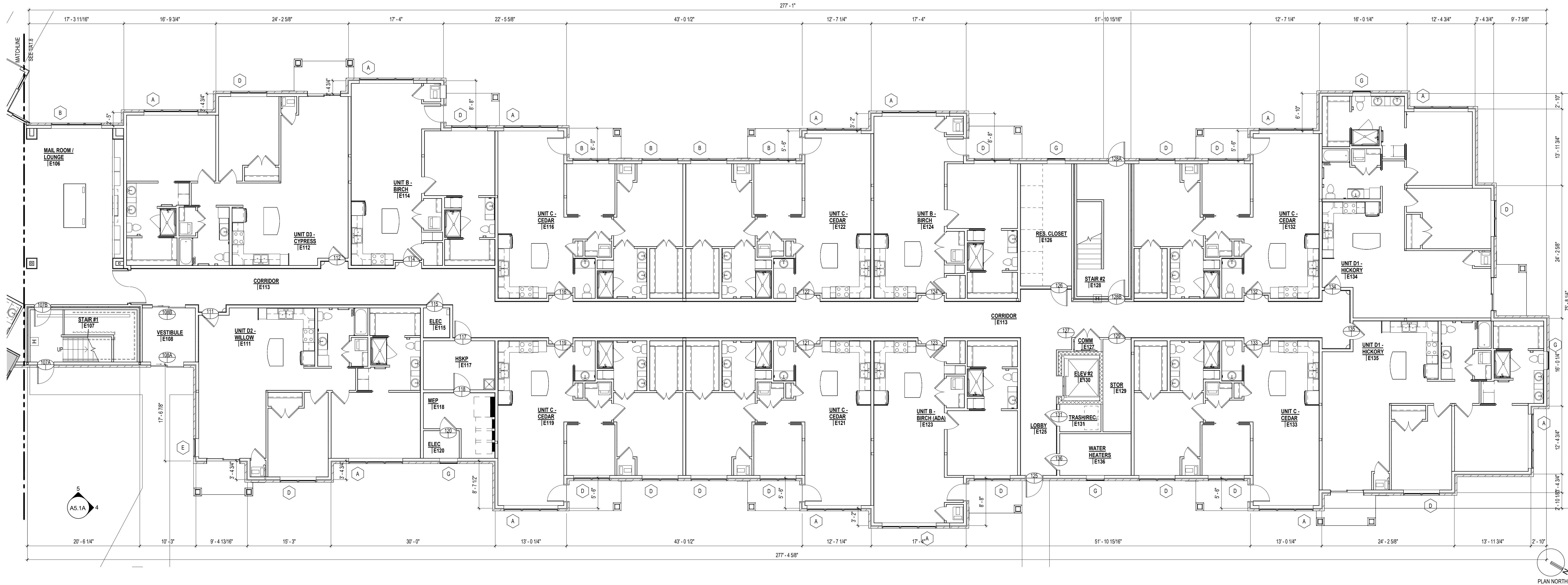
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ARCHITECT : DAS	CHECKED : Checker	
ENGINEER : Designer	APPROVED : Approver	
NO.	REVISION DESCRIPTION	D

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ARCHITECTURAL SITE  
PLAN

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	<b>A1.1</b>

PLAN NORTH



1 FIRST FLOOR PLAN - IL UNITS  
1/8" = 1'-0"

KEYPLAN

PLAN NORTH

GENERAL NOTES

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PROJECT TITLE

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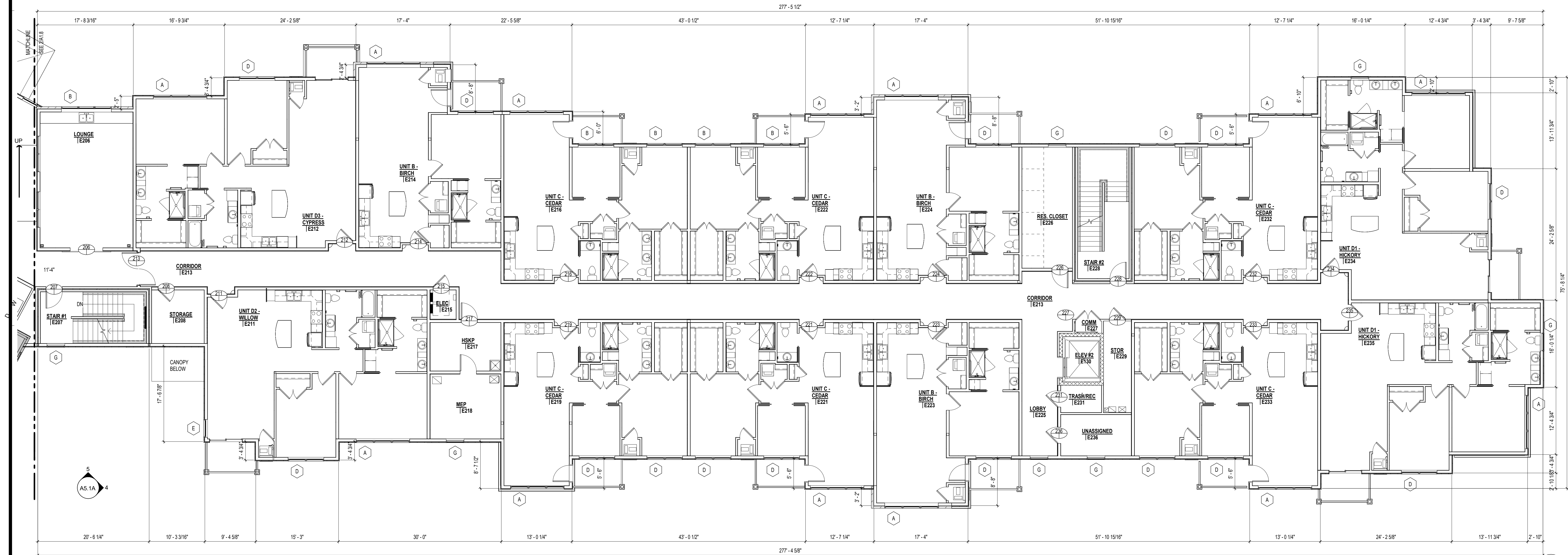
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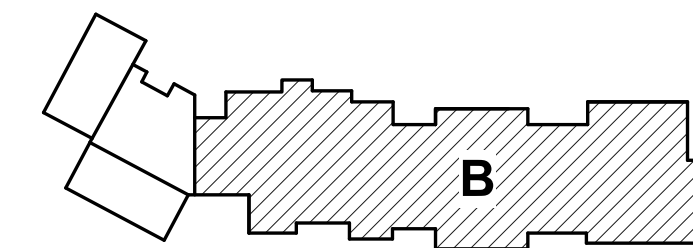
**FIRST FLOOR PLAN - IL UNITS**

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	<b>A1.3</b>



1 SECOND FLOOR PLAN - IL UNITS  
1/8" = 1'-0"

KEYPLAN



GENERAL NOTES

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PROJECT TITLE



John Knox Village

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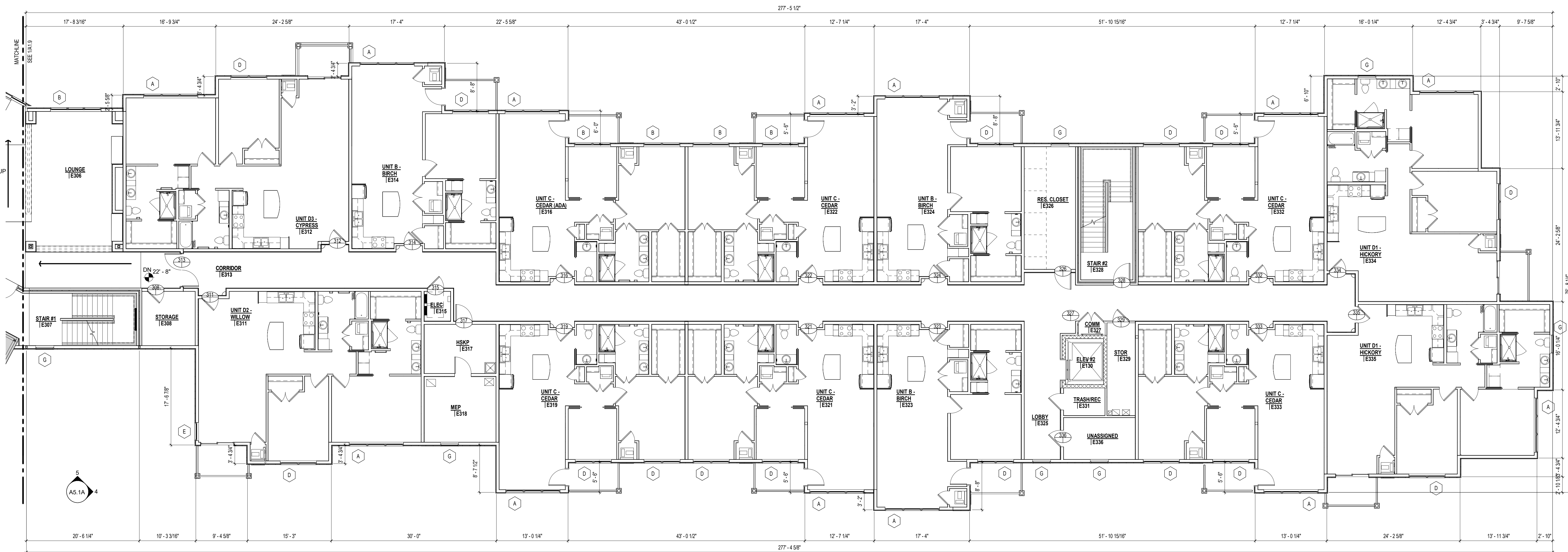
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	DATE

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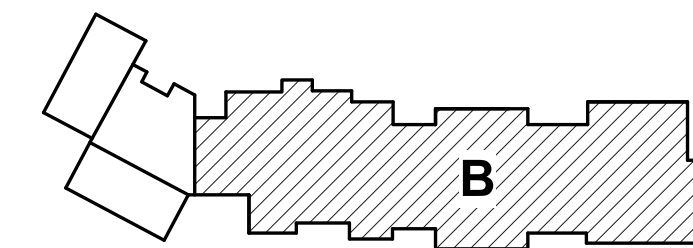
SECOND FLOOR PLAN - IL UNITS

DATE: December 1, 2023	DRAWING
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1 THIRD FLOOR PLAN - IL UNITS  
1/8" = 1'-0"

KEYPLAN



GENERAL NOTES

FDP SUBMITTAL



PROJECT TITLE



John Knox Village

COURTYARDS - BUILDING E

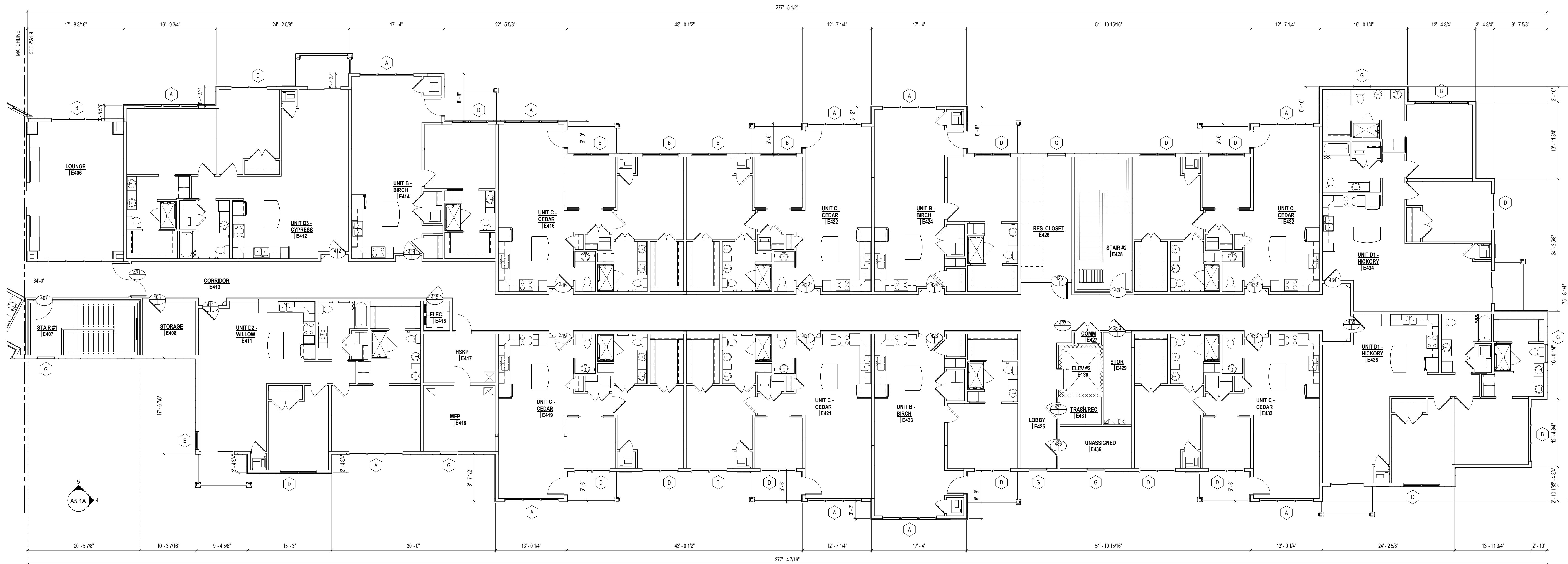
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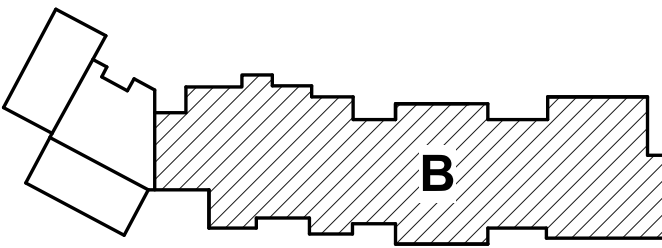
THIRD FLOOR PLAN - IL UNITS

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	A1.5



1 FOURTH FLOOR PLAN - IL UNITS  
1/8" = 1'-0"

KEYPLAN



GENERAL NOTES

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PROJECT TITLE



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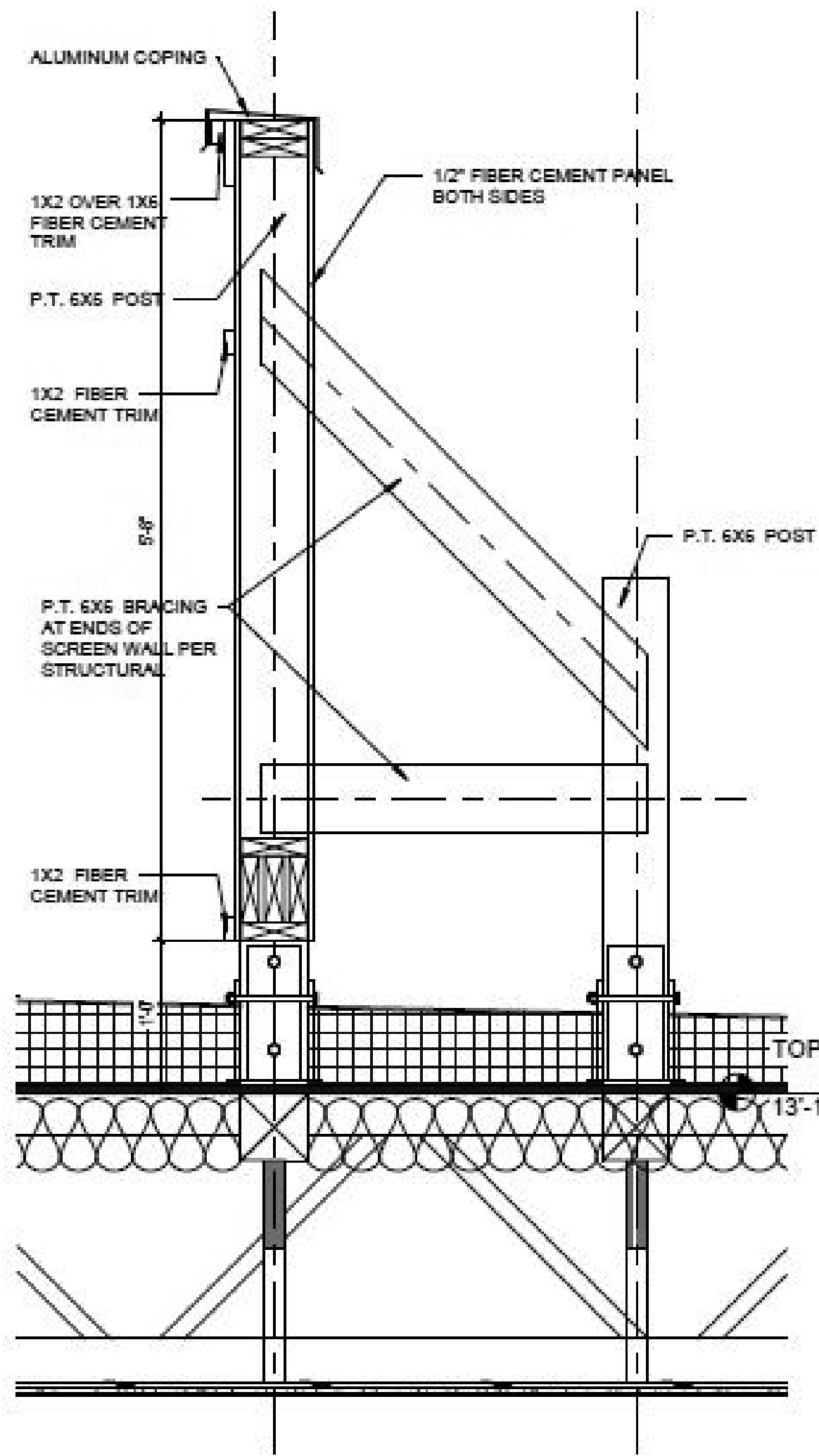
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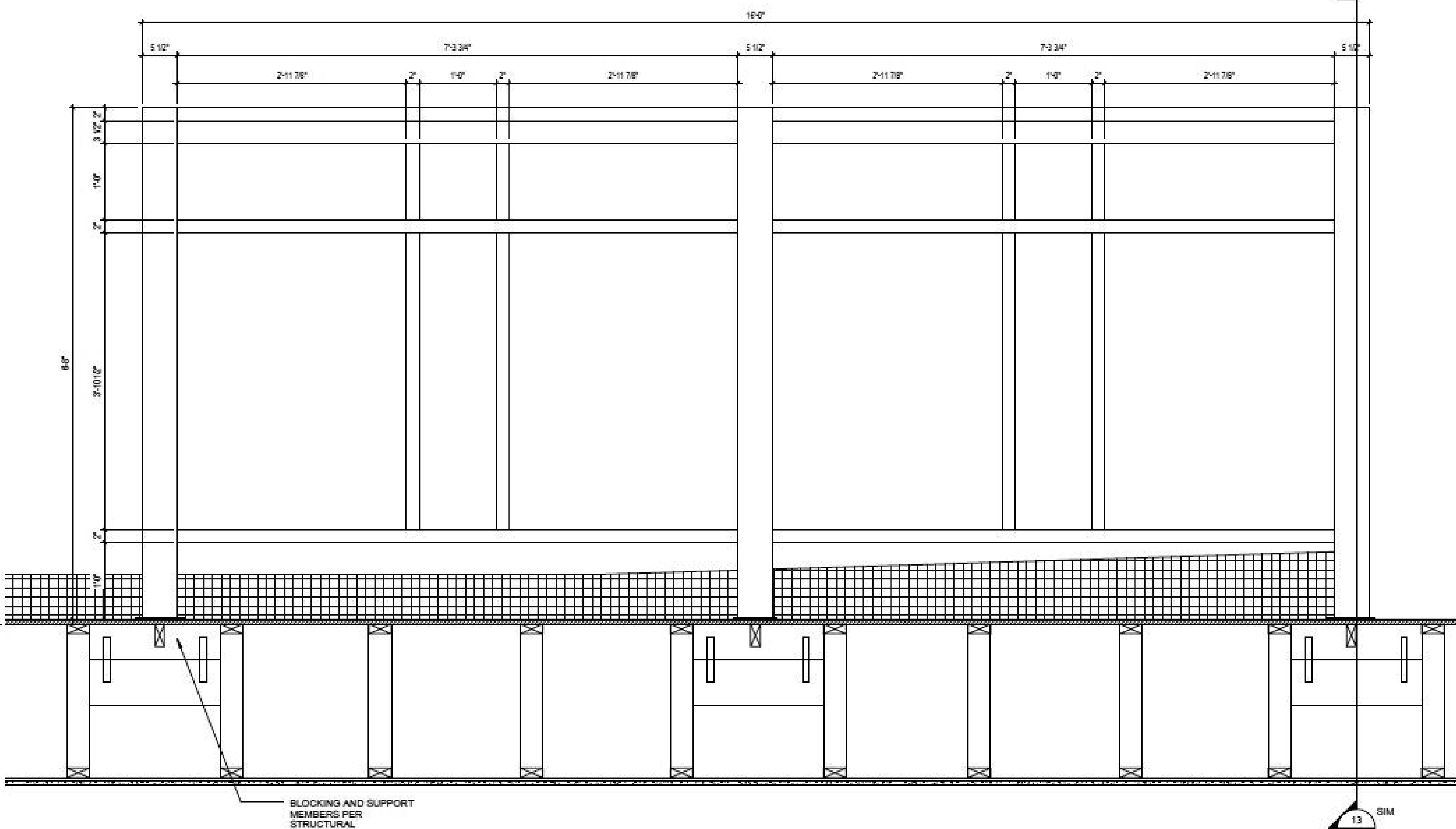
FOURTH FLOOR PLAN - IL  
UNITS

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	<b>A1.6</b>

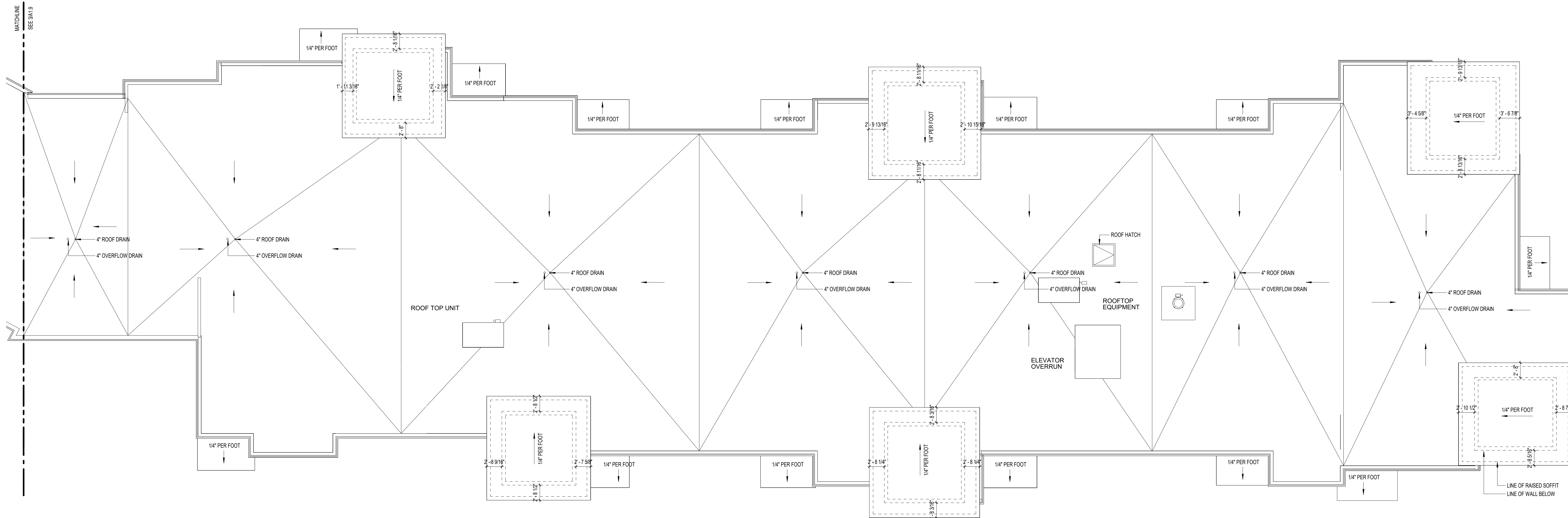
ROOF TOP SCREENING:  
STANDARD ROOFTOP UNITS FOR THE ATRIUM AND SMALL ROOFTOP UNITS WILL BE USED FOR THE MAIN CORRIDOR.  
IF IT IS DEEMED THAT THE EQUIPMENT IS VISIBLE FROM BELOW, WE WILL USE A SCREEN SIMILAR TO DETAILS 2 AND 3 THAT WERE USED ON THE COURTYARDS COMMONS PROJECT



3 SECTION AT COMMONS SCREEN WALL  
1" = 1'-0"

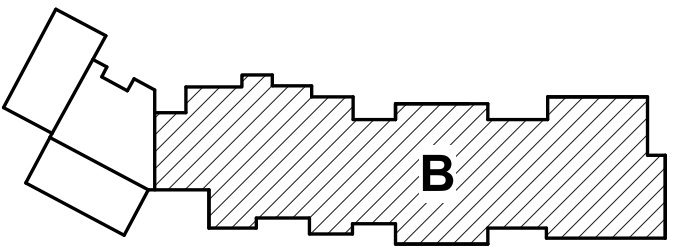


2 FIBER CEMENT SCREEN AT COMMONS  
1" = 1'-0"



1 ROOF PLAN - IL UNITS  
1/8" = 1'-0"

KEYPLAN



GENERAL NOTES

1. SLOPE TO BE 1/4" PER FOOT UNLESS OTHERWISE NOTED
2. ROOFING MATERIAL IS TO BE SINGLE PLY MEMBRANE ROOF OVER INSULATION UNLESS OTHERWISE NOTED

FDP SUBMITTAL



PROJECT TITLE



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ROOF PLAN - IL UNITS

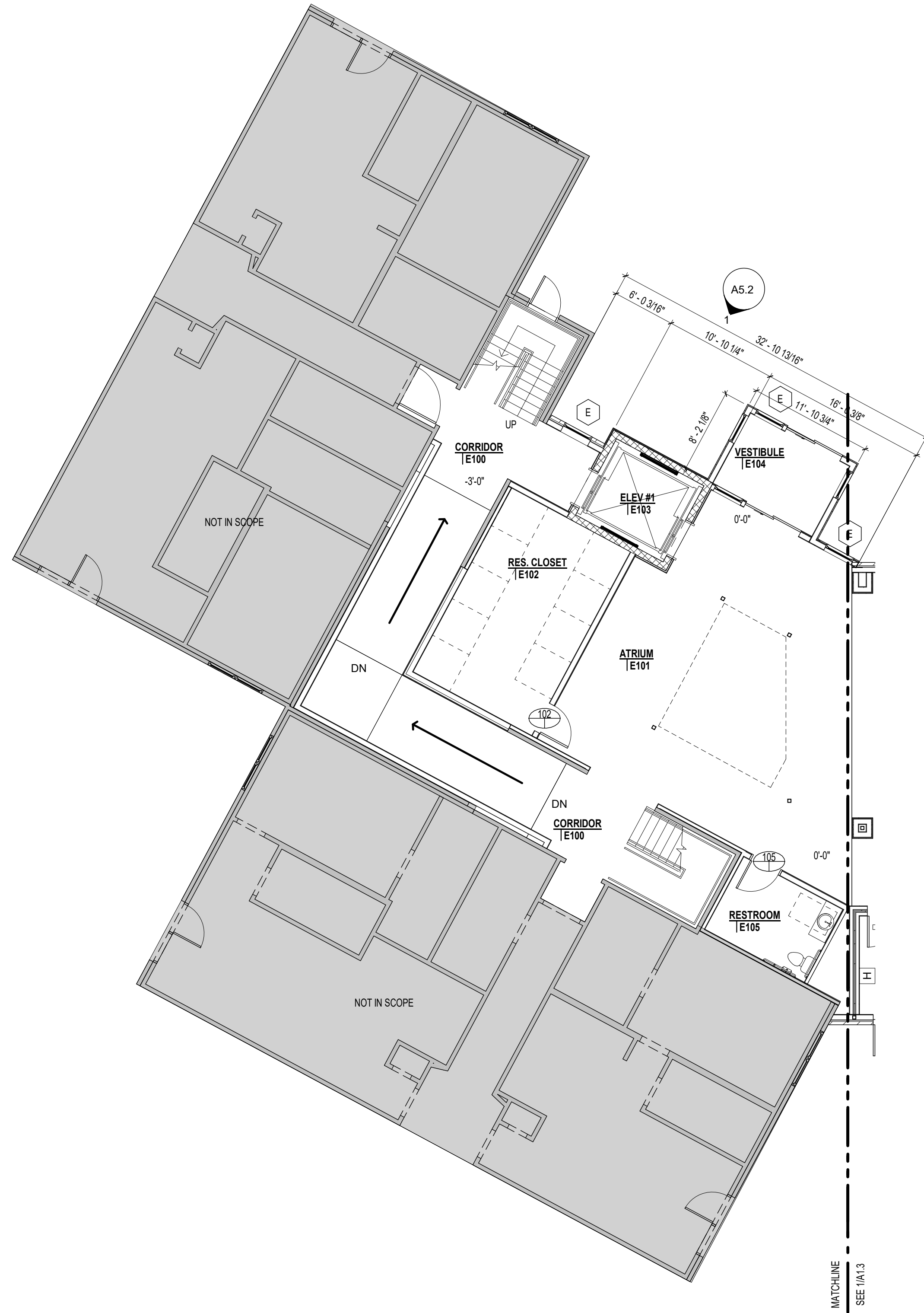
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COM. NO. 23104.00

A1.7

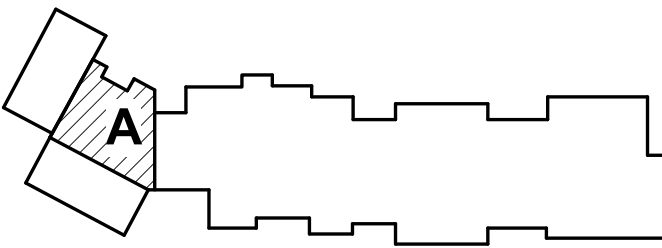


2 ATRIUM - SECOND FLOOR PLAN  
1/8" = 1'-0"



1 ATRIUM - FIRST FLOOR PLAN  
1/8" = 1'-0"

KEYPLAN



GENERAL NOTES

FDP SUBMITTAL



PROJECT TITLE



John Knox Village

COURTYARDS - BUILDING E

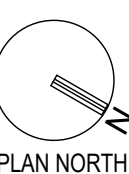
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SIGNER : DAS	DRAWN : DAS
CHITECT : DAS	CHECKED : Checker
GINEER : Designer	APPROVED : Approver
REVISION DESCRIPTION	

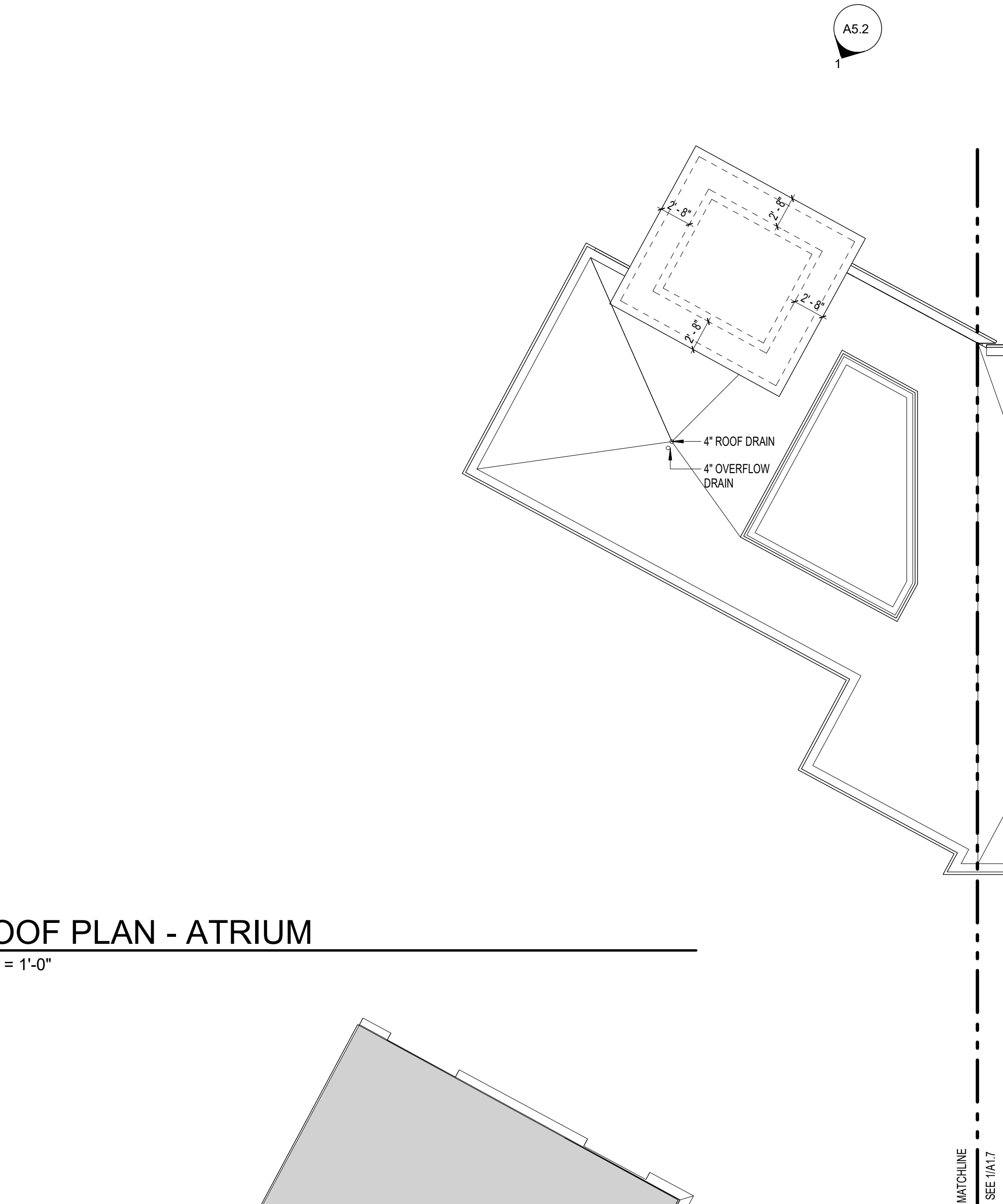
DRAWING TITLE

FIRST AND SECOND  
FLOOR PLANS - ATRIUM

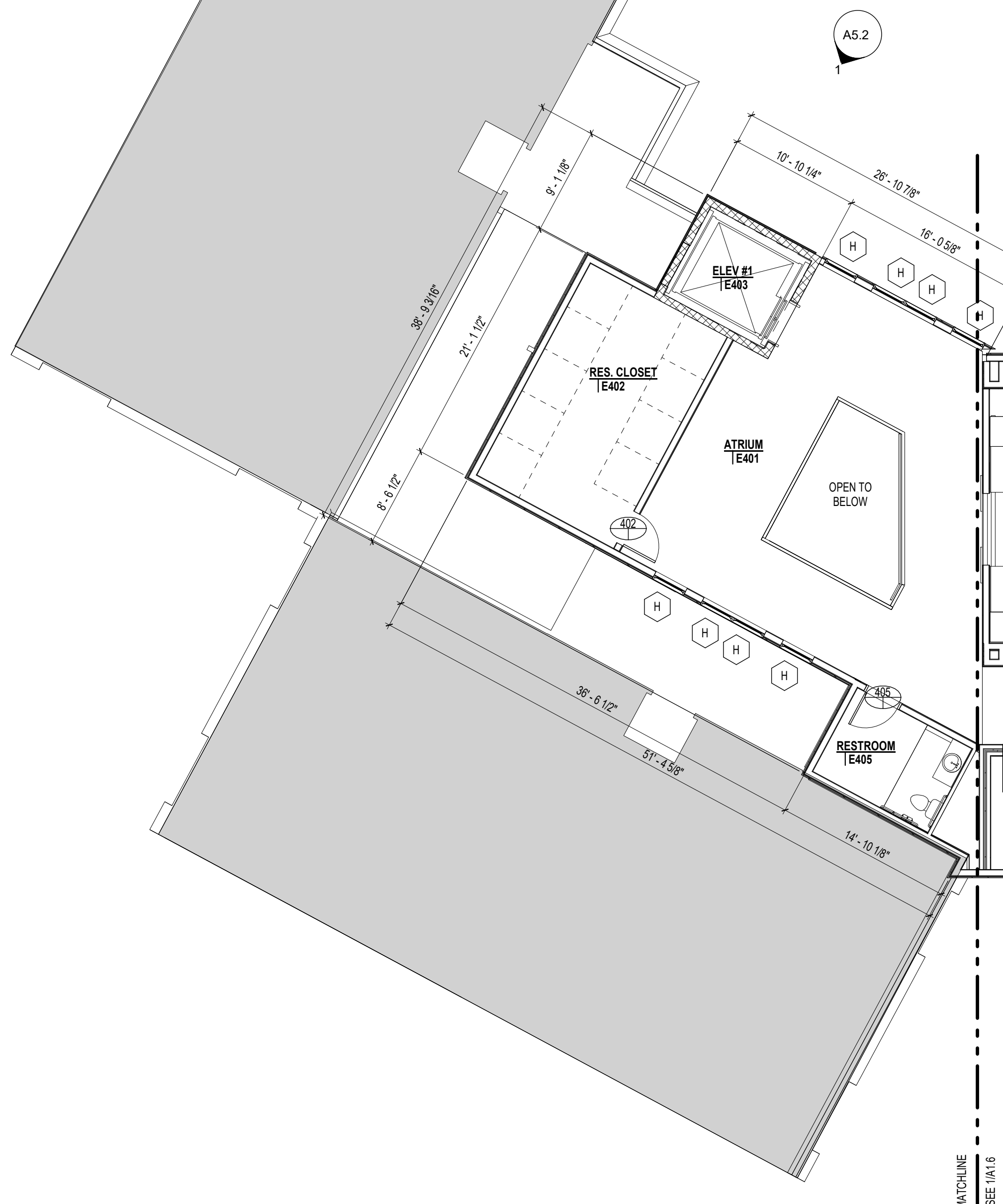


DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	<b>A1.8</b>

3 ROOF PLAN - ATRIUM  
1/8" = 1'-0"



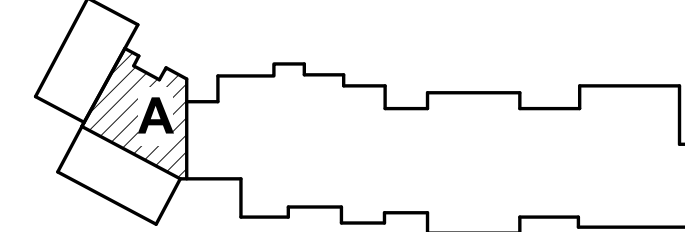
2 ATRIUM - FOURTH FLOOR PLAN  
1/8" = 1'-0"



1 ATRIUM - THIRD FLOOR PLAN  
1/8" = 1'-0"



KEYPLAN



PLAN NORTH

GENERAL NOTES

1. SLOPE TO BE 1/4" PER FOOT UNLESS OTHERWISE NOTED
2. ROOFING MATERIAL IS TO BE SINGLE PLY MEMBRANE ROOF OVER INSULATION UNLESS OTHERWISE NOTED

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PROJECT TITLE



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DESIGNER : DAS	DRAWN : DAS
ARCHITECT : DAS	CHECKED : CHK
ENGINEER : DES	APPROVED : APP

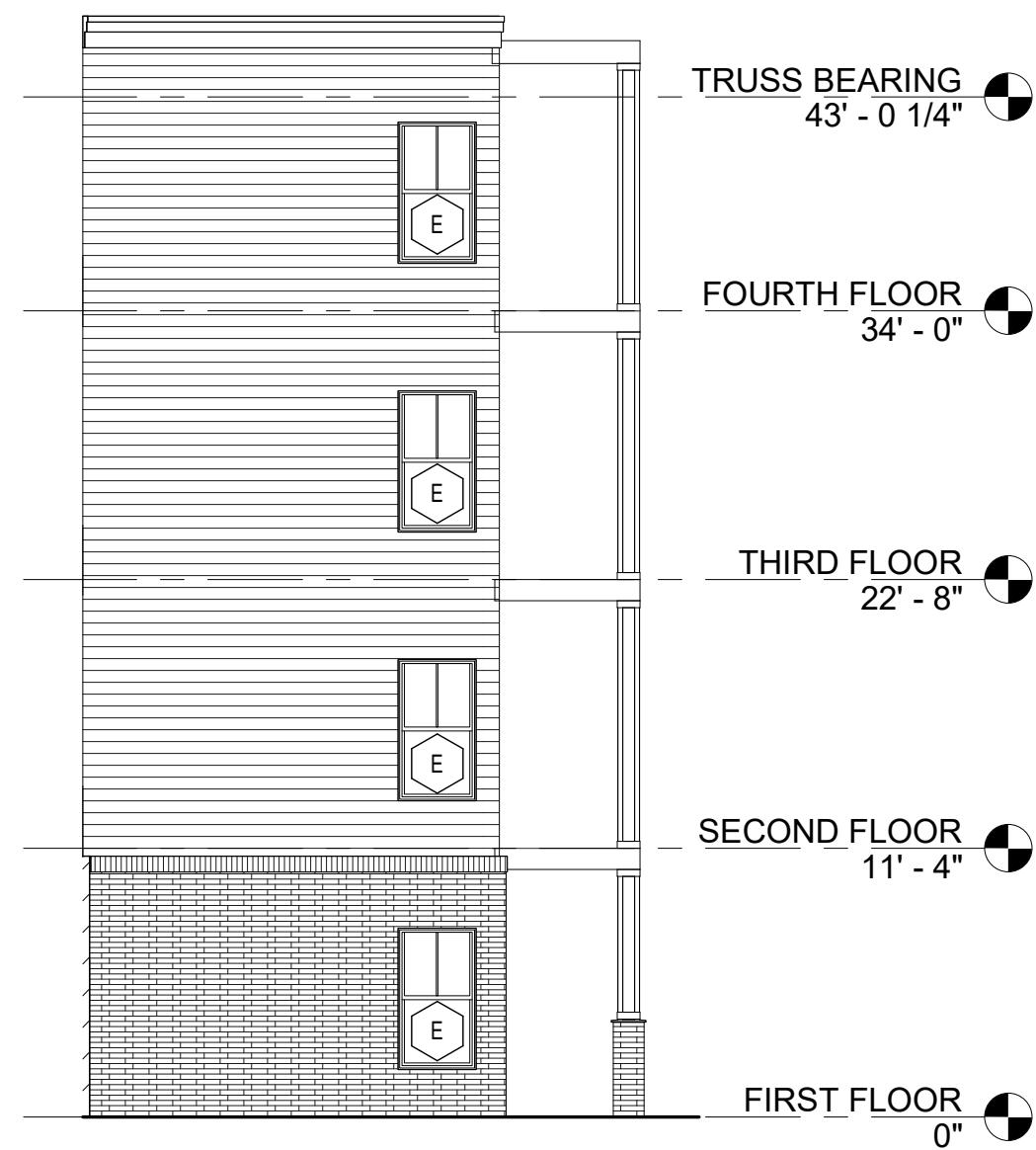
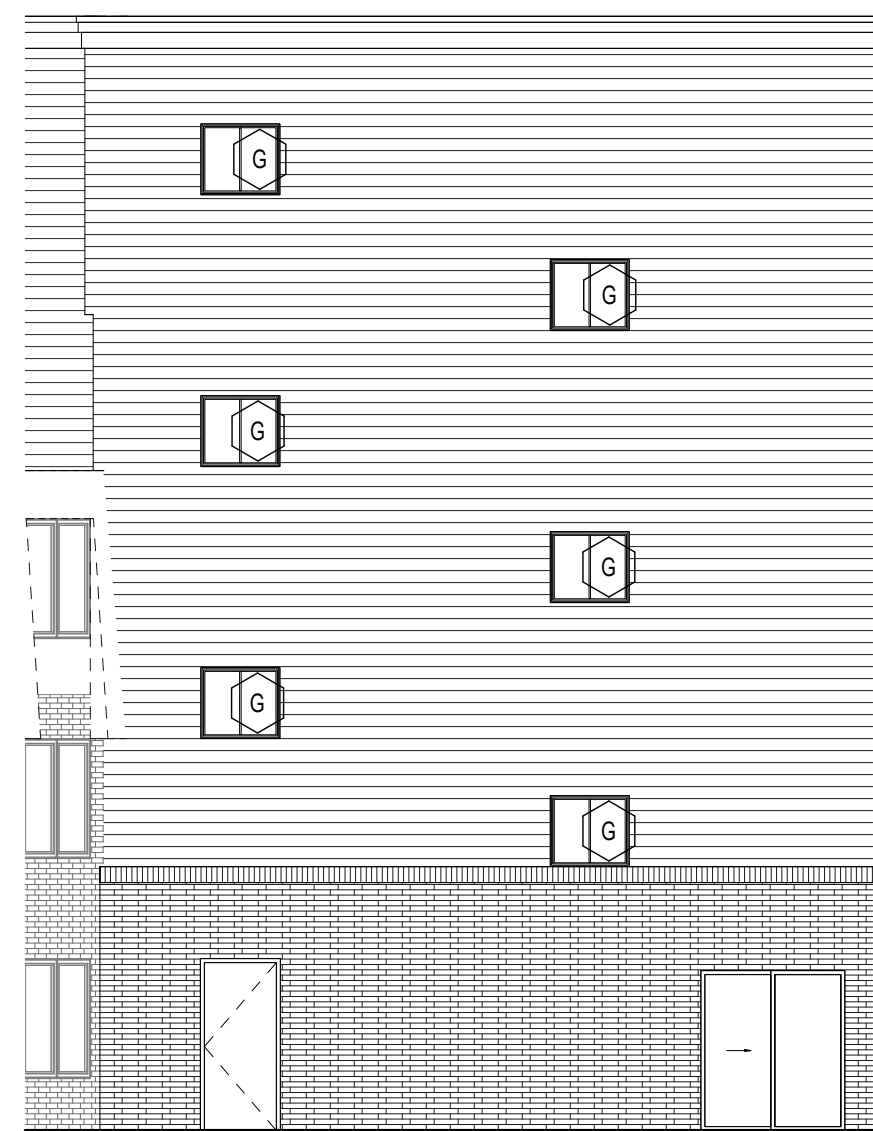
NO.	REVISION DESCRIPTION	DATE
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DRAWING TITLE  
THIRD AND FOURTH  
FLOOR PLANS - ATRIUM

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	<b>A1.9</b>



3 EAST ELEVATION A  
1/8" = 1'-0"



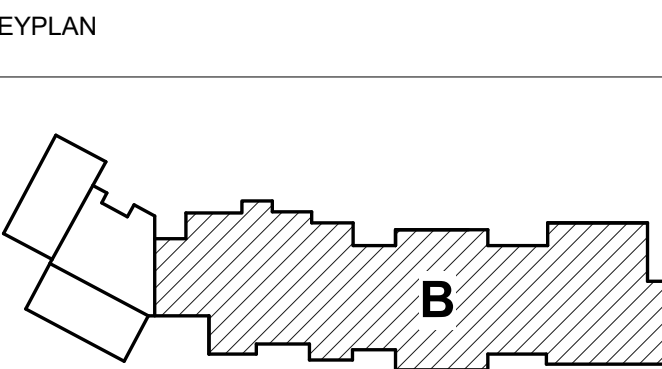
2 NORTH ELEVATION  
1/8" = 1'-0"

5 EAST ELEVATION B  
1/8" = 1'-0"

4 SOUTH ELEVATION  
1/8" = 1'-0"



1 WEST ELEVATION  
1/8" = 1'-0"



GENERAL NOTES

FDP SUBMITTAL



PROJECT TITLE



John Knox Village

COURTYARDS - BUILDING E

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SIGNER : DAS	DRAWN : LW/DAS
CHITECT : DAS	CHECKED : CHK
GINEER : DES	APPROVED : APP
REVISION DESCRIPTION	

DRAWING TITLE

EXTERIOR ELEVATIONS

DATE: December 1, 2023	DRAWING
COMM. NO. 23104.00	A5.1





3  
E0.4  
ELECTRICAL SITE PLAN  
1" = 20'-0"

GENERAL NOTES

PLAN NOTES

1. EXISTING UTILITY PAD MOUNTED SWITCH
2. TWO (2) 4" SCH 40 PVC FOR PRIMARY PROVIDED AND INSTALLED BY UTILITY.
3. PAD MOUNTED UTILITY SERVICE TRANSFORMER PROVIDED AND INSTALLED BY UTILITY.
4. UNDERGROUND SERVICE LATERAL -- 4 SETS OF (4 - #500 KCMIL ALUMINUM IN 3/2")
5. EXISTING SOLAR ARRAY AND DISTRIBUTION ON EXISTING BUILDING ROOF TO BE RELOCATED OR REMOVE.
6. TO BE RELOCATED. PROVIDE NEW UNDERGROUND WIRING AND RECONNECT TO EXISTING CIRCUIT.
7. PROVIDE AND INSTALL TWO (2) 2" SCH 40 PVC WITH PULL STRING FROM PANEL NLDP1 TO PULLBOX
8. PROVIDE AND INSTALL 12"X12" PULLBOX FOR FUTURE EXPANSION.
9. EXISTING LIGHTING POLES TO REMAIN.

DESIGN  
DEVELOPMENT SET

NOT FOR CONSTRUCTION

PROJECT TITLE



John Knox Village

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DESIGNER : DAS	DRAWN : MAW, DKW	
ARCHITECT : DAS	CHECKED : MAW	
ENGINEER : MAW	APPROVED : JSK	
NO.	REVISION DESCRIPTION	DATE

DRAWING TITLE

ELECTRICAL SITE PLAN

DATE: September 29, 2023	DRAWING
COMM. NO. 23104.00	E0.4