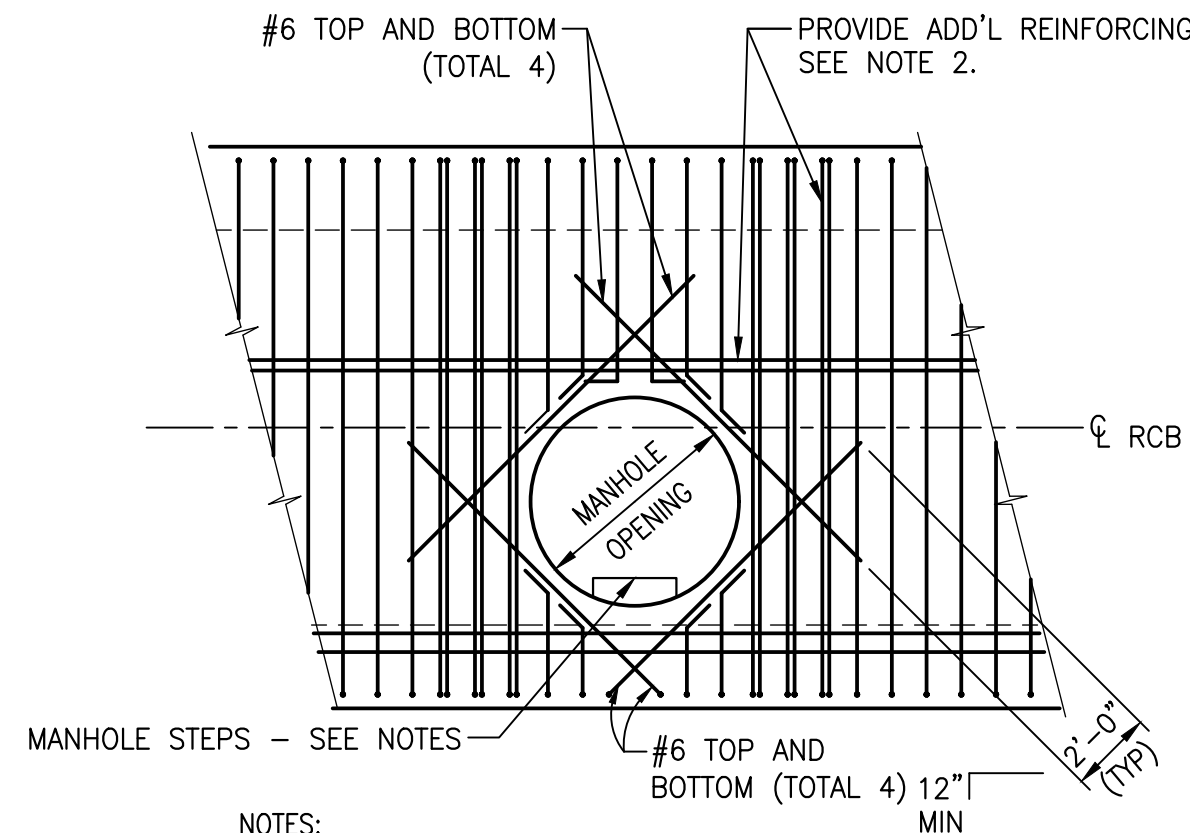
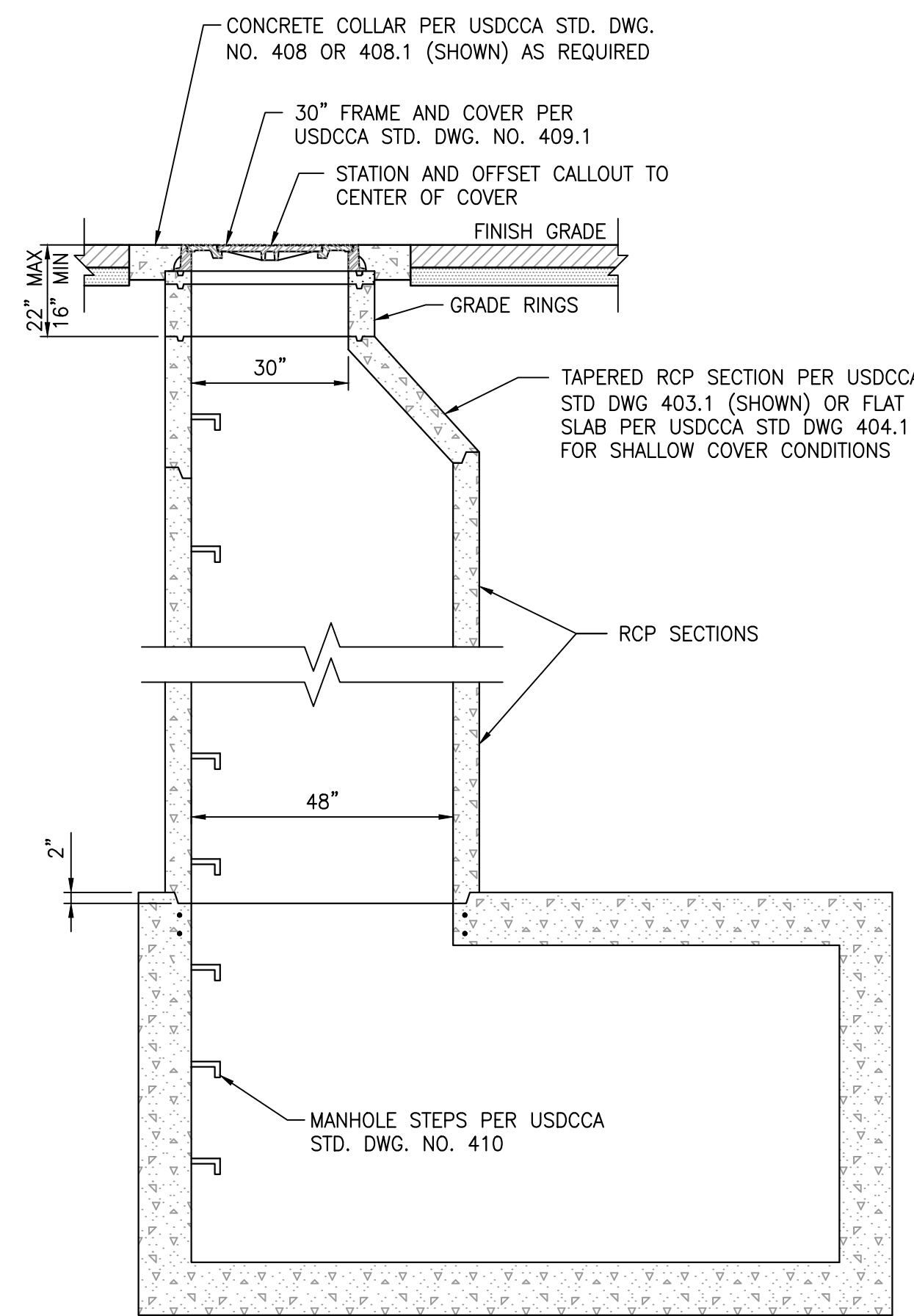


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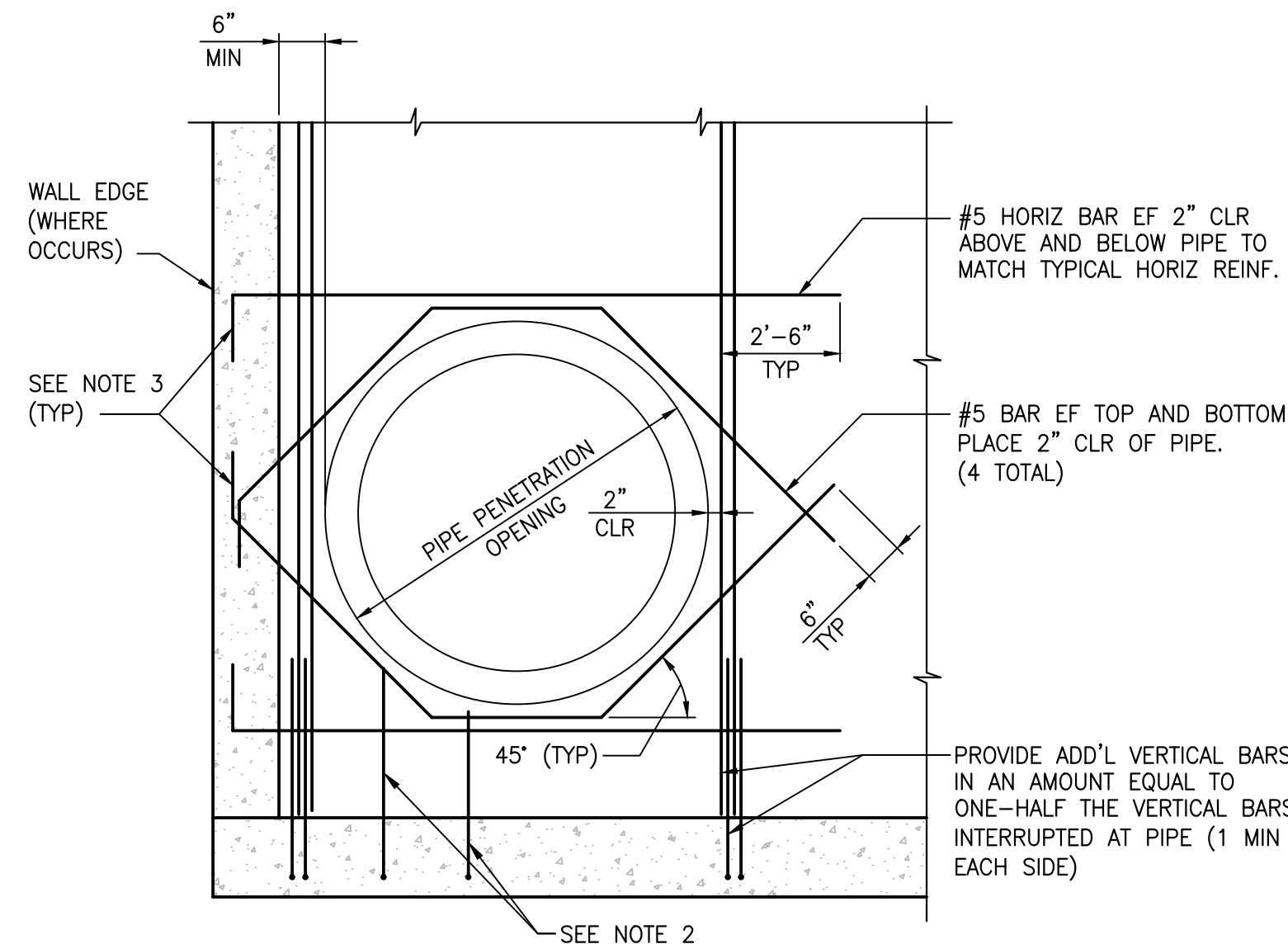
- NOTES:**
- FIELD BEND OR CUT ALL REINFORCING 2" CLR OF OPENINGS.
  - EVERY REBAR DISCONTINUED AT OPENING SHALL BE REPLACED BY AN EXTRA REBAR PLACED AT THE SIDE OF THE OPENING AS SHOWN. THE LENGTH OF THE EXTRA REBARS SHALL EQUAL THE LENGTH OF THE SCHEDULE REBARS THAT ARE NOT DISCONTINUED AT THE OPENING.
  - PROVIDE MINIMUM 2" CLR BETWEEN ALL REINFORCING BARS.
  - MANHOLE STEPS SHALL BE PER CLARK COUNTY STANDARD DRAWING NO. 410 WITH A MAXIMUM SPACING BETWEEN STEPS OF 12" AND A MAXIMUM OF 16" BETWEEN THE LAST STEP AND BOTTOM OF STRUCTURE.

**4 RCB ACCESS MANHOLE OPENING**  
SCALE: NTS



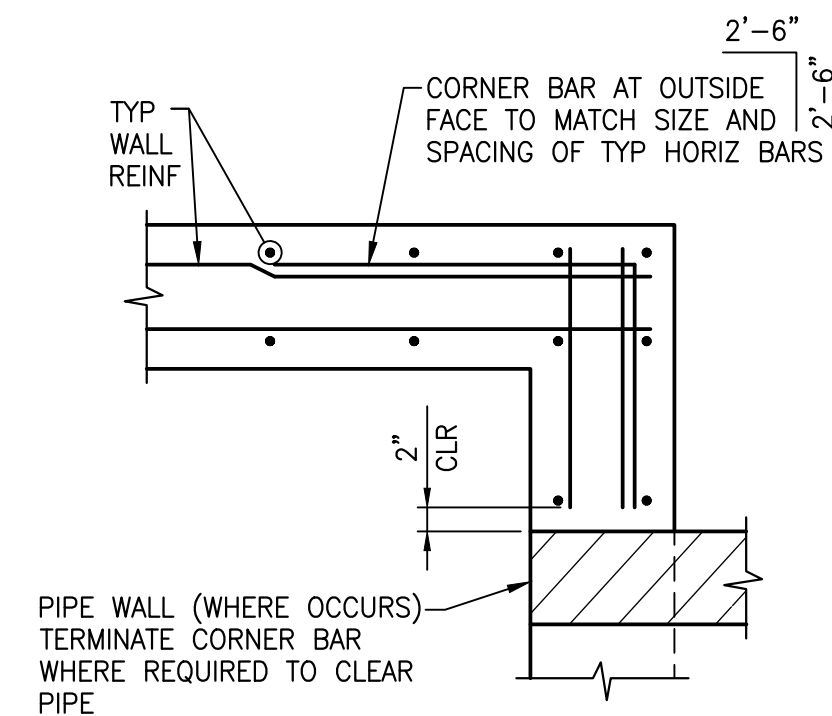
- NOTES:**
- SEE USDOCA STD. DWG. NO. 403.1 AND 404.1 FOR ADDITIONAL MANHOLE CONSTRUCTION NOTES AND DETAILS.

**3 MANHOLE RISER DETAIL**  
SCALE: NTS



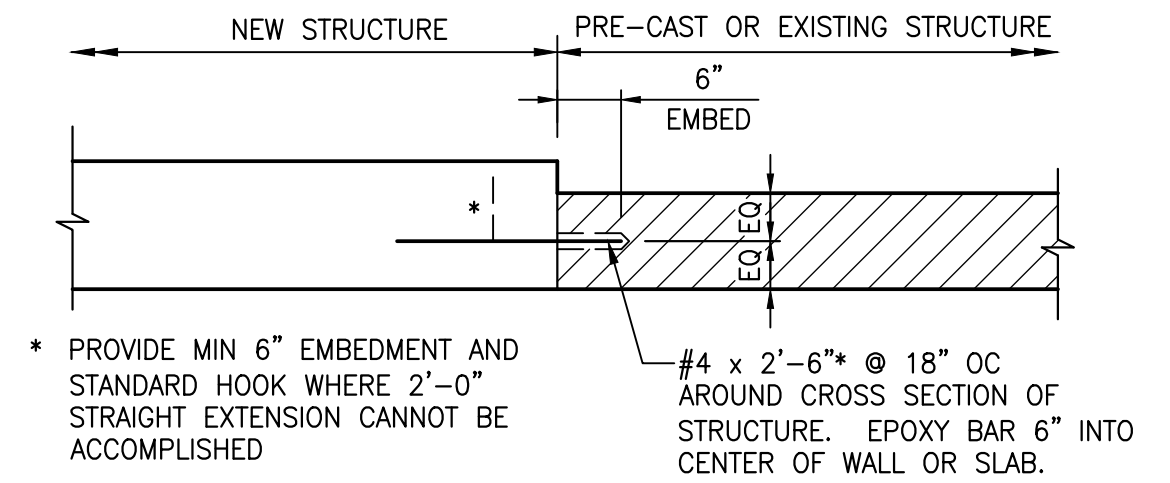
- NOTES:**
- TYPICAL WALL REINFORCING NOT SHOWN FOR CLARITY.
  - FIELD CUT TYPICAL WALL REINFORCING 2" CLEAR OF PIPE.
  - IF ADDITIONAL BARS AROUND PENETRATION CANNOT EXTEND BEYOND PIPE AS SHOWN, EXTEND AS FAR AS POSSIBLE AND PROVIDE STANDARD HOOK AT END.

**2 PIPE PENETRATION DETAIL**  
SCALE: NTS



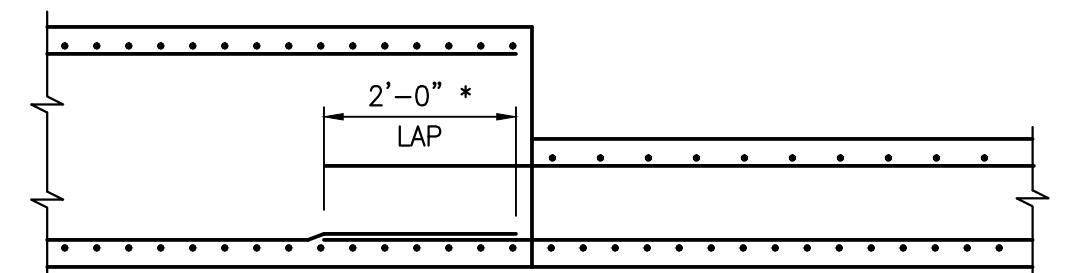
PIPE WALL (WHERE OCCURS) TERMINATE CORNER BAR WHERE REQUIRED TO CLEAR PIPE

**1 TYP WALL CORNER DETAIL**  
SCALE: NTS



\* PROVIDE MIN 6" EMBEDMENT AND STANDARD HOOK WHERE 2'-0" STRAIGHT EXTENSION CANNOT BE ACCOMPLISHED

**CAST-IN-PLACE CONNECTION TO PRE-CAST OR EXISTING STRUCTURE**



**CAST-IN-PLACE CONNECTION TO CAST-IN-PLACE STRUCTURE**

**5 CONSTRUCTION JOINT DETAIL**  
SCALE: NTS

**GENERAL STRUCTURAL NOTES**

- DESIGN SPECIFICATIONS:** AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, EIGHTH EDITION, 2017.
- CONSTRUCTION SPECIFICATIONS:** CLARK COUNTY UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- EXISTING UTILITIES:** THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES WITHIN THE WORK AREA, AND PROVIDING PROTECTION FOR THE VARIOUS UTILITIES AFFECTED PRIOR TO PROCEEDING WITH THE WORK.
- CONCRETE:** CONCRETE SHALL BE CLASS D MODIFIED AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF  $f'_c=4,500$  PSI AND A MAXIMUM WATER TO CEMENT RATIO, BY WEIGHT, OF 0.45. USE TYPE V CEMENT PER ASTM C-150. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4", UNLESS NOTED OTHERWISE.
- REINFORCING STEEL:** ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. DIMENSIONS ARE FROM OUT TO OUT OF BARS. MINIMUM CLEARANCE TO REINFORCING STEEL SHALL BE 3" WHERE CONCRETE IS CAST AGAINST SOIL AND 2" ELSEWHERE, UNLESS NOTED OTHERWISE. HOOKS MAY BE ROTATED OR TILTED AS NECESSARY TO PROVIDE THE PROPER CLEARANCES.
- BEDDING MATERIAL:** BEDDING MATERIAL SHALL BE 6-INCHES OF TYPE II AGGREGATE BASE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY. EXPOSED NATIVE SOILS IN BOTTOMS OF EXCAVATIONS SHALL BE SCARIFIED TO A DEPTH OF 6-INCHES, MOISTURE-CONDITIONED TO WITHIN 2% OF OPTIMUM MOISTURE CONTENT AND COMPACTED TO 90%.
- INVERTS, SLOPES, BEARINGS, ALIGNMENTS, AND ELEVATIONS** SHOWN ARE FOR "REFERENCE ONLY". INFORMATION ON CIVIL DRAWINGS SHALL GOVERN.
- EPOXY:** ADHESIVE ANCHORS SHALL BE INSTALLED WITH SIMPSON STRONG-TIE "SET -3G" (ICC-ES ESR-4057) OR APPROVED EQUAL. INSTALL IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS. INSTALLERS SHALL HAVE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION. PROVIDE CONTINUOUS SPECIAL INSPECTION.
- STRUCTURAL STEEL:** STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE LATEST EDITIONS AND SUPPLEMENTS OF THE AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AND CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES.

- ALL MISCELLANEOUS STEEL SHALL CONFORM TO ASTM A36 UNLESS NOTED OTHERWISE. ALL HOLLOW STRUCTURAL SECTION (HSS) TUBE SHAPES SHALL BE ASTM A500, GRADE B. ALL W-SECTIONS SHALL BE ASTM A992. ALL PIPE SECTIONS SHALL BE ASTM A53 GR. B. WIRE ROPE SHALL BE PER FEDERAL SPECIFICATION RR-W-410E. THREADED RODS SHALL BE PER ASTM F1554 GR 36. ALUMINUM IS NOT PERMITTED.
- GALVANIZING:** ALL EXPOSED METAL AND METAL PARTS SHALL BE GALVANIZED OR PAINTED. GALVANIZING DAMAGED BY FABRICATION SHALL RECEIVE TWO COATS OF ZINC RICH PAINT (GALVANOX OR EQUAL).
  - WELDING** SHALL BE PERFORMED BY AWS CERTIFIED WELDERS WITH EXPERIENCE WITH THE WELDING PROCESSES AND TYPES BEING PERFORMED.
  - ALL WELDING** SHALL BE IN ACCORDANCE WITH AWS D1.1 USING E70XX ELECTRODES. ALL FILTER MATERIAL SHALL HAVE A MINIMUM ULTIMATE STRENGTH OF 70 ksi. PROVIDE AISC MINIMUM WELD WHERE CONTROLLING OVER WELD SIZES SHOWN.
  - CONTRACTOR SHALL PROVIDE SLOPE STABILIZATION, SHEETING, BRACING, AND/OR SHORING AS REQUIRED TO PROTECT EXISTING EMBANKMENTS, STRUCTURES, AND UNDERGROUND ITEMS.
  - THE DESIGN IS BASED ON SOILS REPORT PREPARED BY SOUTHWEST GEOTECHNICAL, PROJECT NO. 230504, DATED JUNE 19, 2023 AND THE FOLLOWING SOILS PROPERTIES:  
ALLOWABLE SOILS BEARING PRESSURE = 2,000 psf  
SOIL ACTIVE PRESSURE,  $E_{FP} = 45$  psf/ft  
SOIL AT-REST PRESSURE,  $E_{PR} = 65$  psf/ft  
SOIL PASSIVE PRESSURE,  $E_{PP} = 350$  psf/ft  
COEFFICIENT OF FRICTION = 0.45  
SITE CLASS = D

**SPECIAL INSPECTION:**

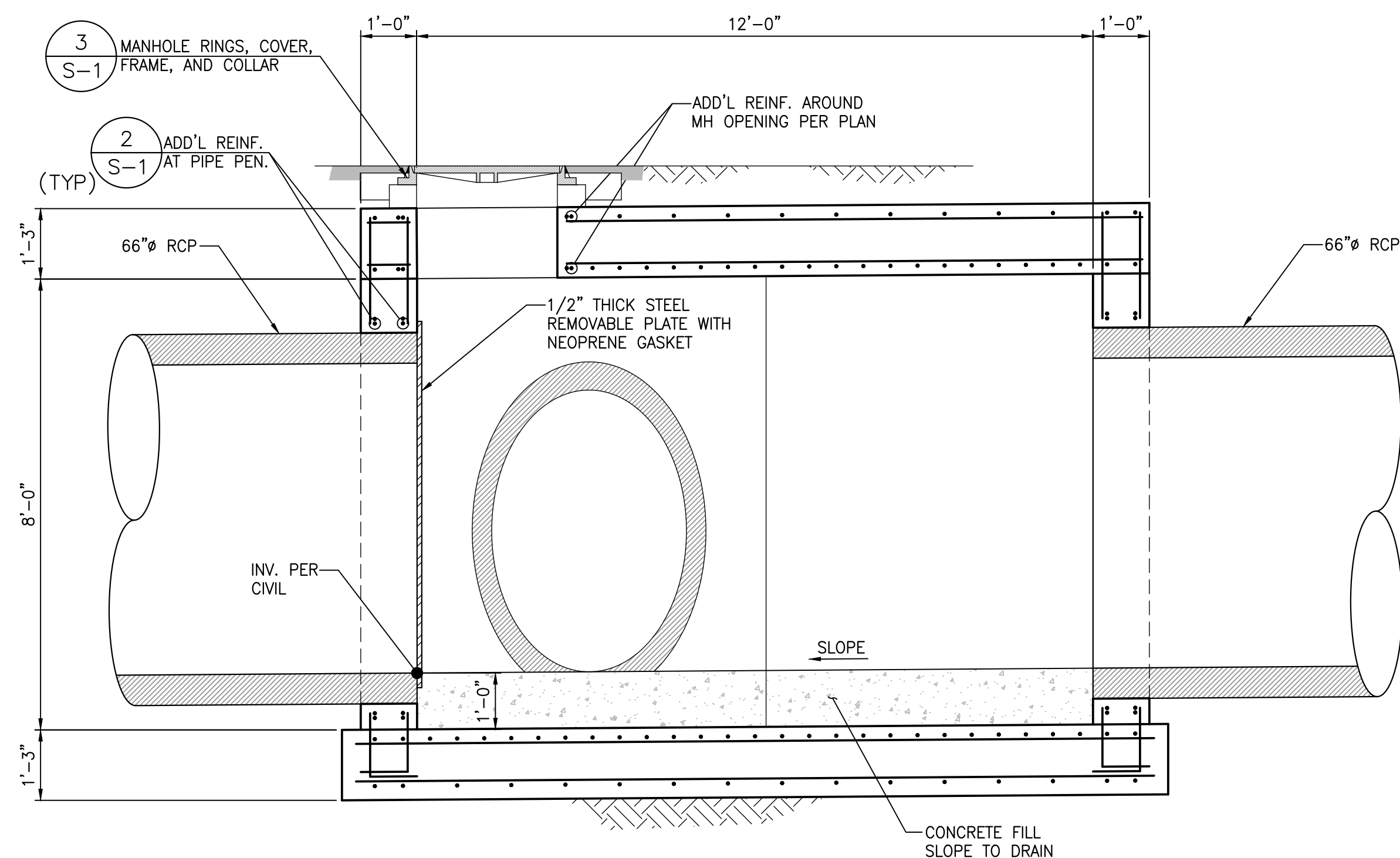
	CONTINUOUS MONITORING	PERIODIC MONITORING
FOUNDATION SOILS, EXCAVATIONS		X
FILL MATERIALS AND PLACEMENT	X	
FOUNDATION SUB-GRADES		X
REBAR PLACEMENT IN CONCRETE		X
VERIFICATION OF CONCRETE MIX DESIGN, CURING, FORMWORK		X
CONCRETE SAMPLING AND TESTING	X	
INSPECTION OF CONCRETE PLACEMENT	X	

- SPECIAL INSPECTIONS ARE TO BE PERFORMED BY QUALIFIED FIRMS OR PERSONNEL. THE SPECIAL INSPECTOR MUST BE ICC CERTIFIED AND APPROVED BY THE GOVERNING JURISDICTION IN THE CATEGORY OF WORK REQUIRED TO HAVE SPECIAL INSPECTION.
- THE CONSTRUCTION MATERIALS TESTING LABORATORY MUST BE APPROVED BY THE GOVERNING JURISDICTION, FOR TESTING OF MATERIALS, SYSTEMS, COMPONENTS, AND EQUIPMENTS.
- AS IDENTIFIED WITHIN THE CONTRACT DOCUMENTS, AND THE IBC 2021 BUILDING CODE CHAPTER 17. THE SPECIAL INSPECTORS SHALL MAINTAIN RECORDS OF ALL INSPECTIONS PERTAINING TO THE PORTIONS OF WORK THEY ARE TO INSPECT. PROVIDE COPIES OF REPORTS TO THE OWNER AND ARCHITECT/ ENGINEER PERIODICALLY AND AS REQUIRED FOR ADEQUATE COMMUNICATION AS WORK PROGRESSES.

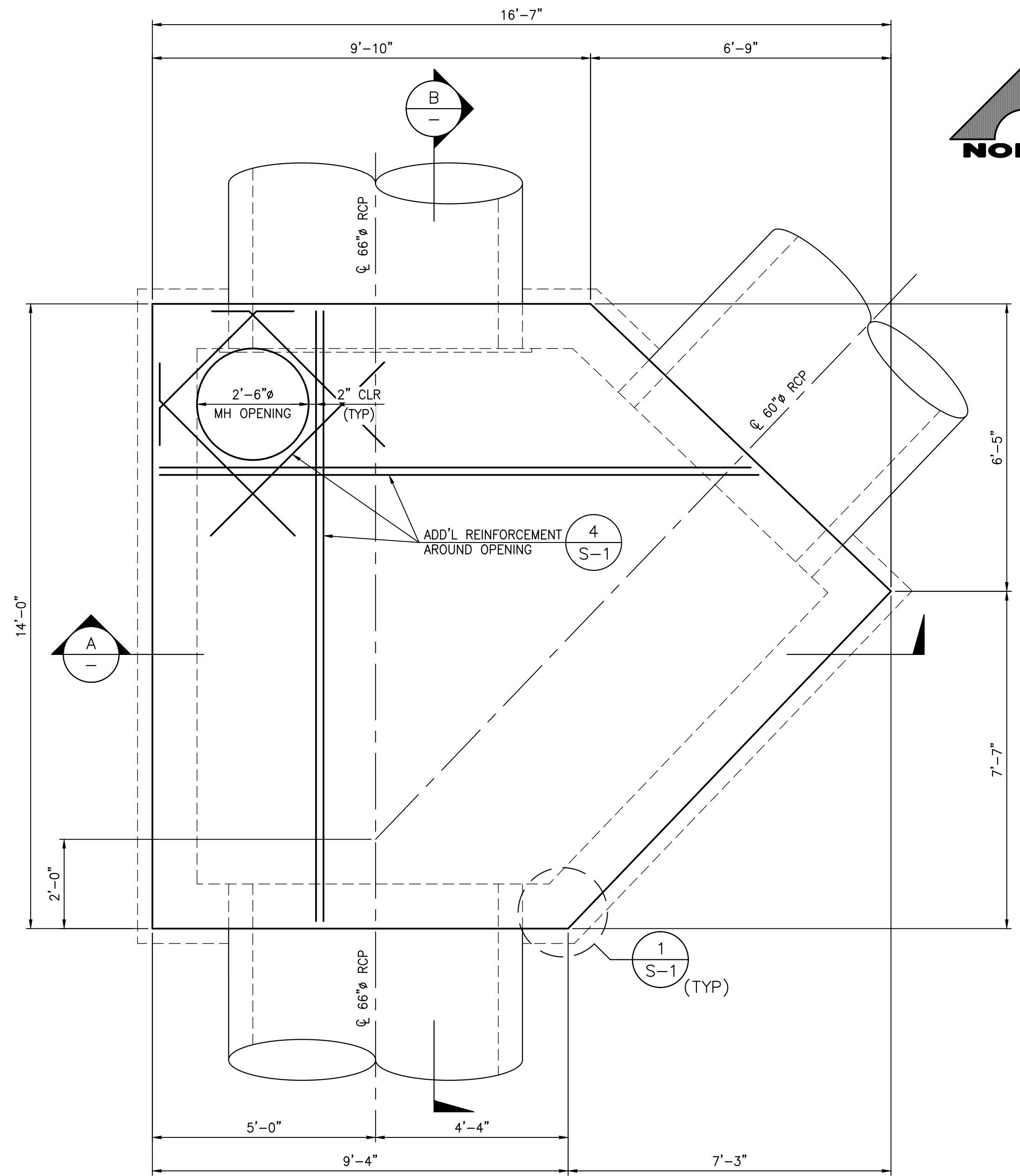
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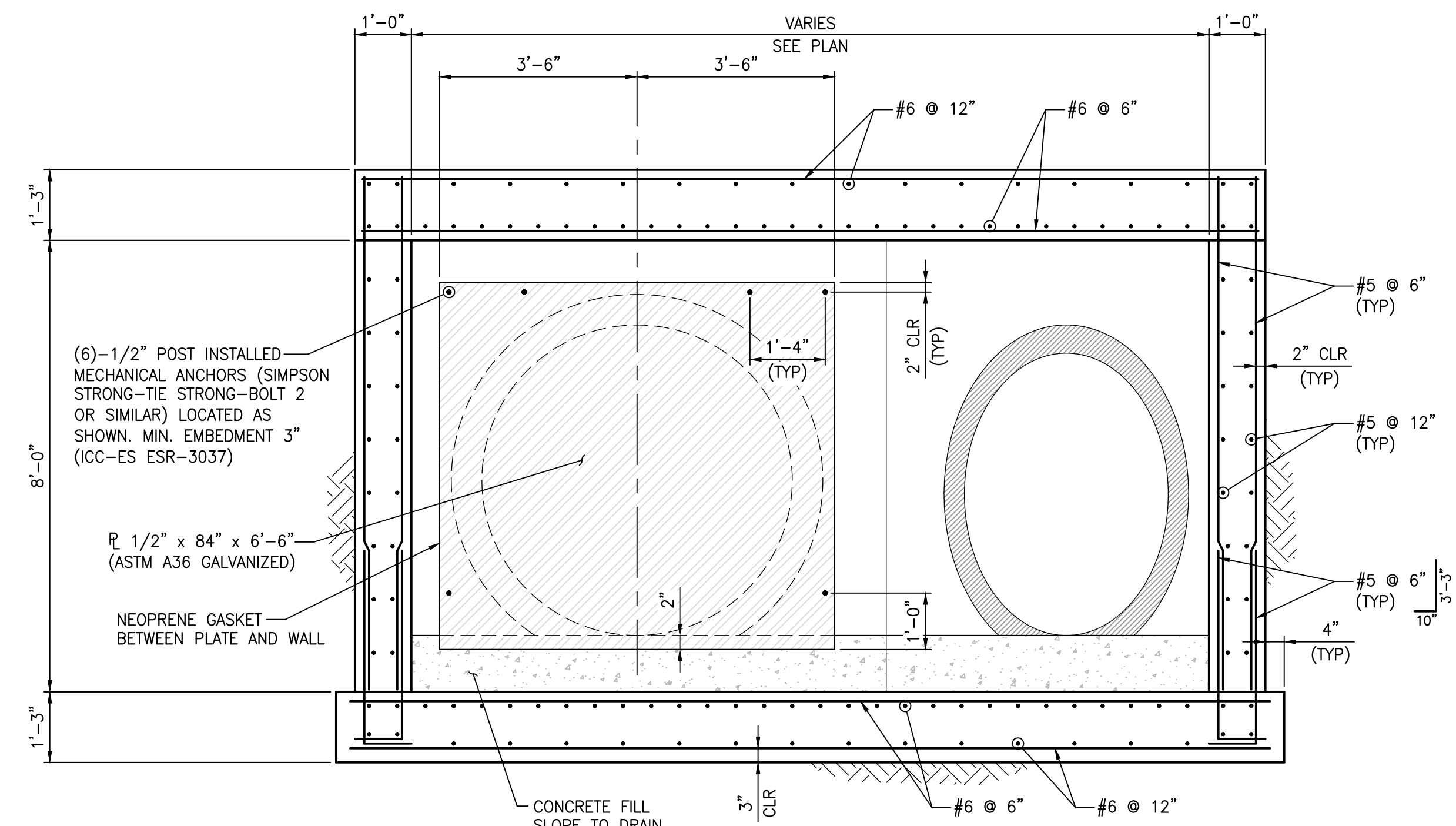
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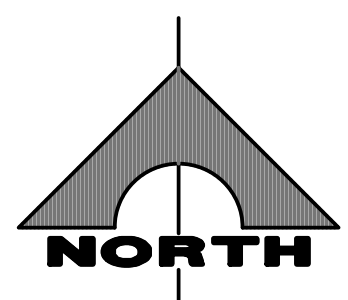
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SCALE: 1/2" = 1'-0"



**1 PLAN - SDJS #1**  
SCALE: 1/2" = 1'-0"



**A SECTION**  
SCALE: 1/2" = 1'-0"



1555 S. RAINBOW BLVD.  
LAS VEGAS, NV 89146  
T: 702.804.2000  
F: 702.804.2299  
gocivil.com

**GCVI**  
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**KYLE CANYON GATEWAY WEST - ARETE UNIT 1**

**STORM DRAIN JUNCTION STRUCTURE #1**

DATE: 2/14/2024

DRAFTER: DAT

DESIGNER: DAT

CHECKED: EGG

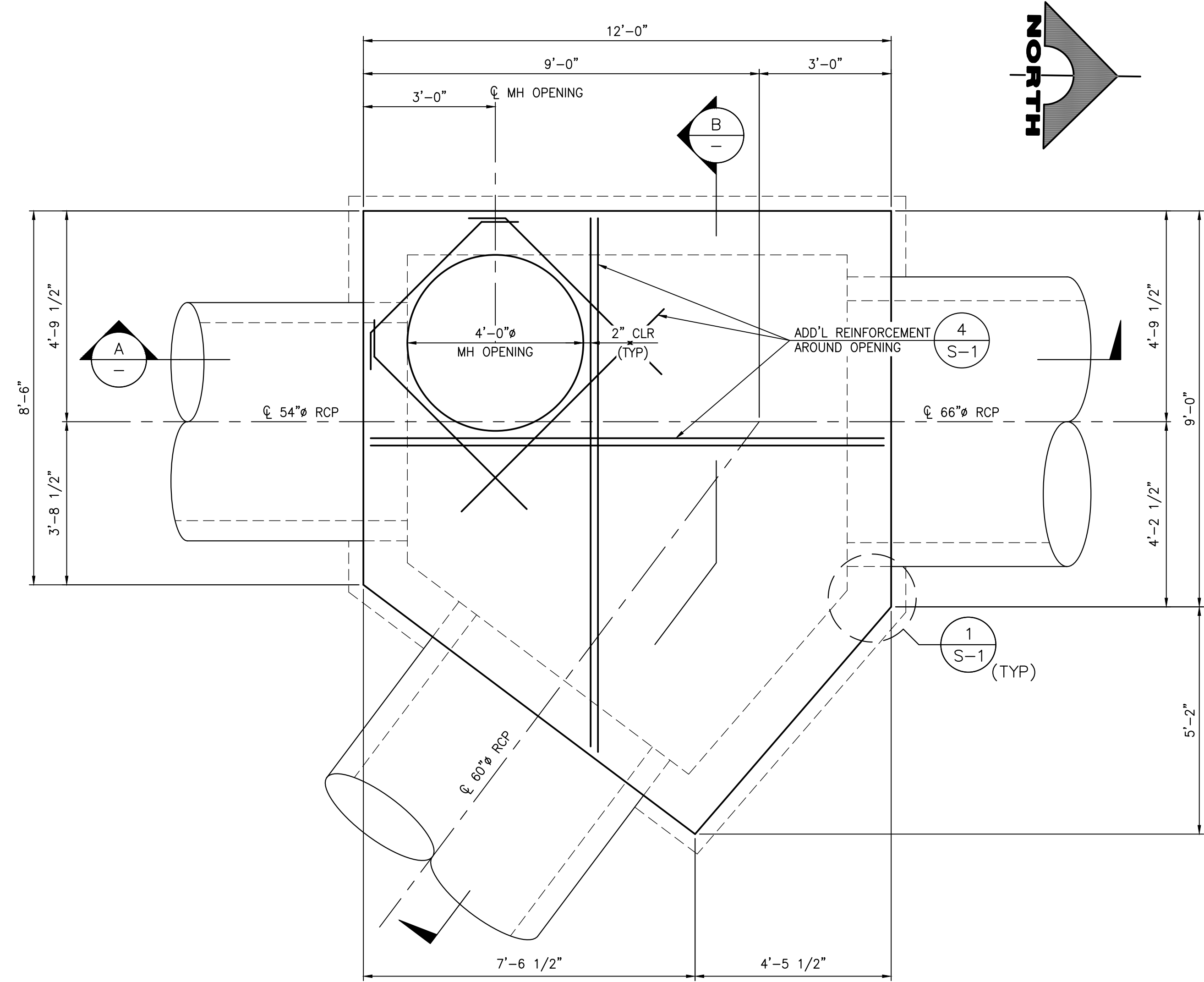
PROJECT NO.  
**KBH2302-001**

2/14/24

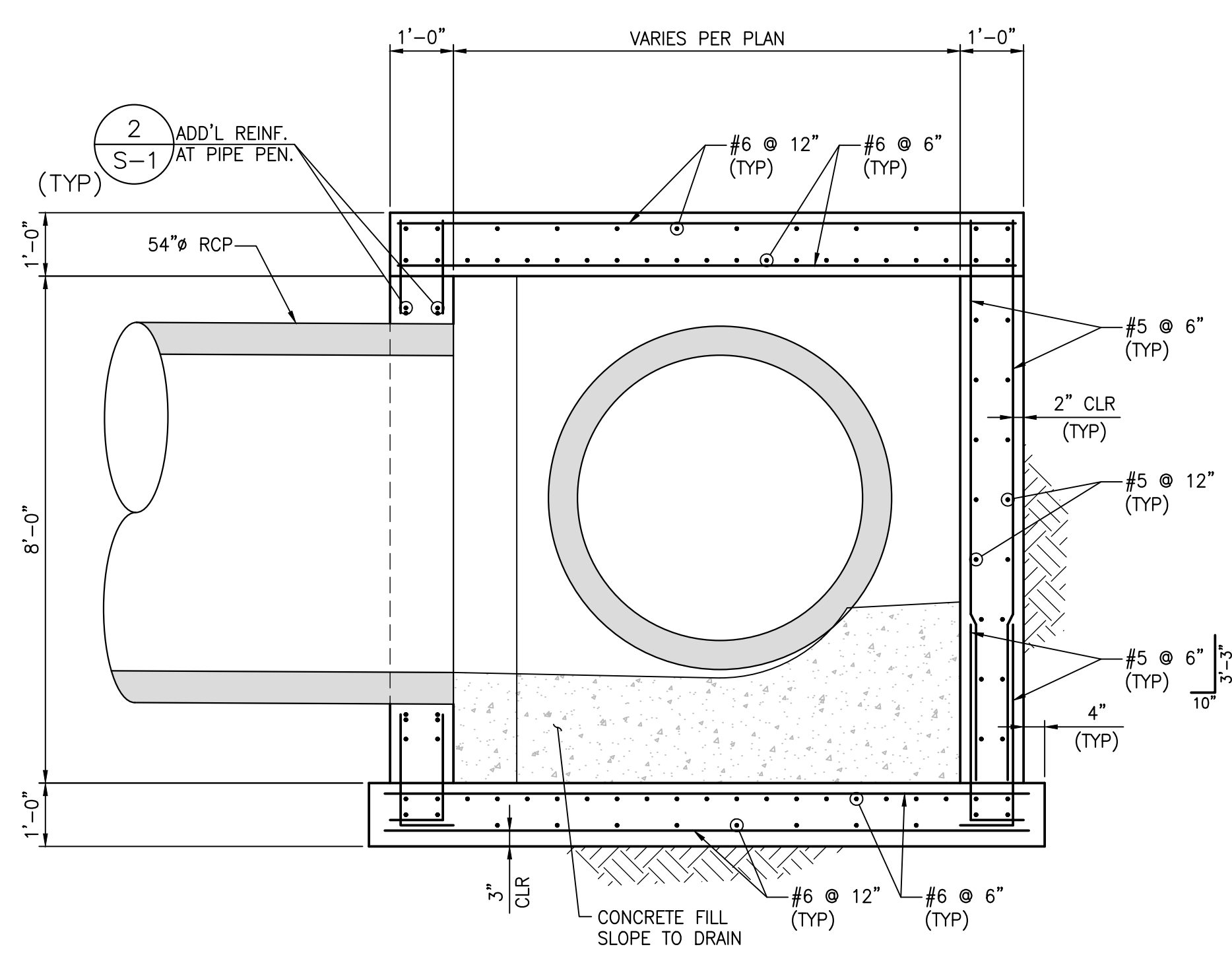
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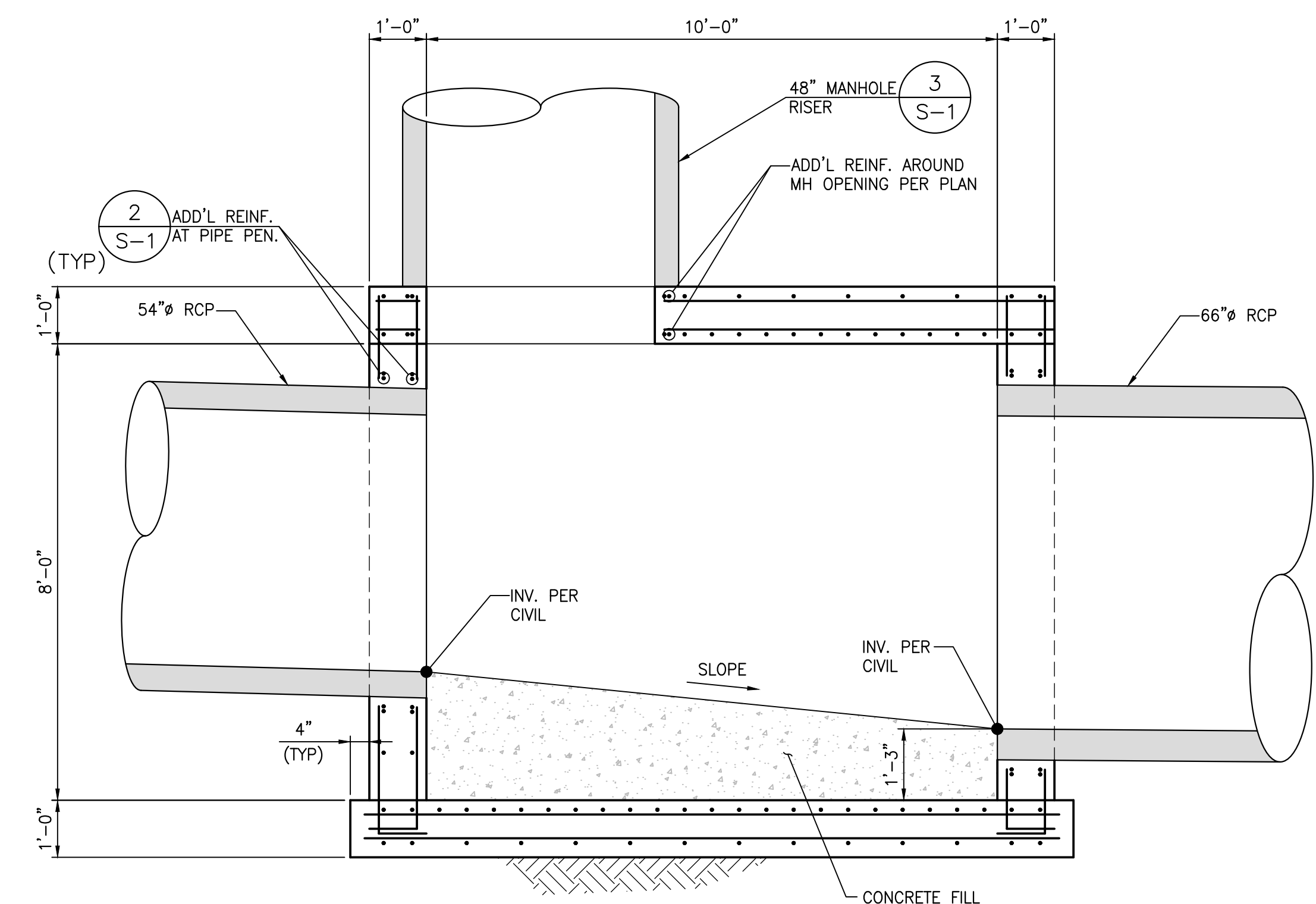
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**1 PLAN - SDJS #2**  
SCALE: 1/2" = 1'-0"



**B SECTION**  
SCALE: 1/2" = 1'-0"



**A SECTION**  
SCALE: 1/2" = 1'-0"

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**KYLE CANYON GATEWAY WEST - ARETE UNIT 1**

**STORM DRAIN JUNCTION STRUCTURE #2**

1555 S. RAINBOW BLVD.  
LAS VEGAS, NV 89146  
T: 702.804.2000  
F: 702.804.2599  
gowngineering.com

NO.	DESCRIPTION	DATE	BY	APP.

DATE: 2/14/2024

DRAFTER: DAT

DESIGNER: DAT

CHECKED: EGG

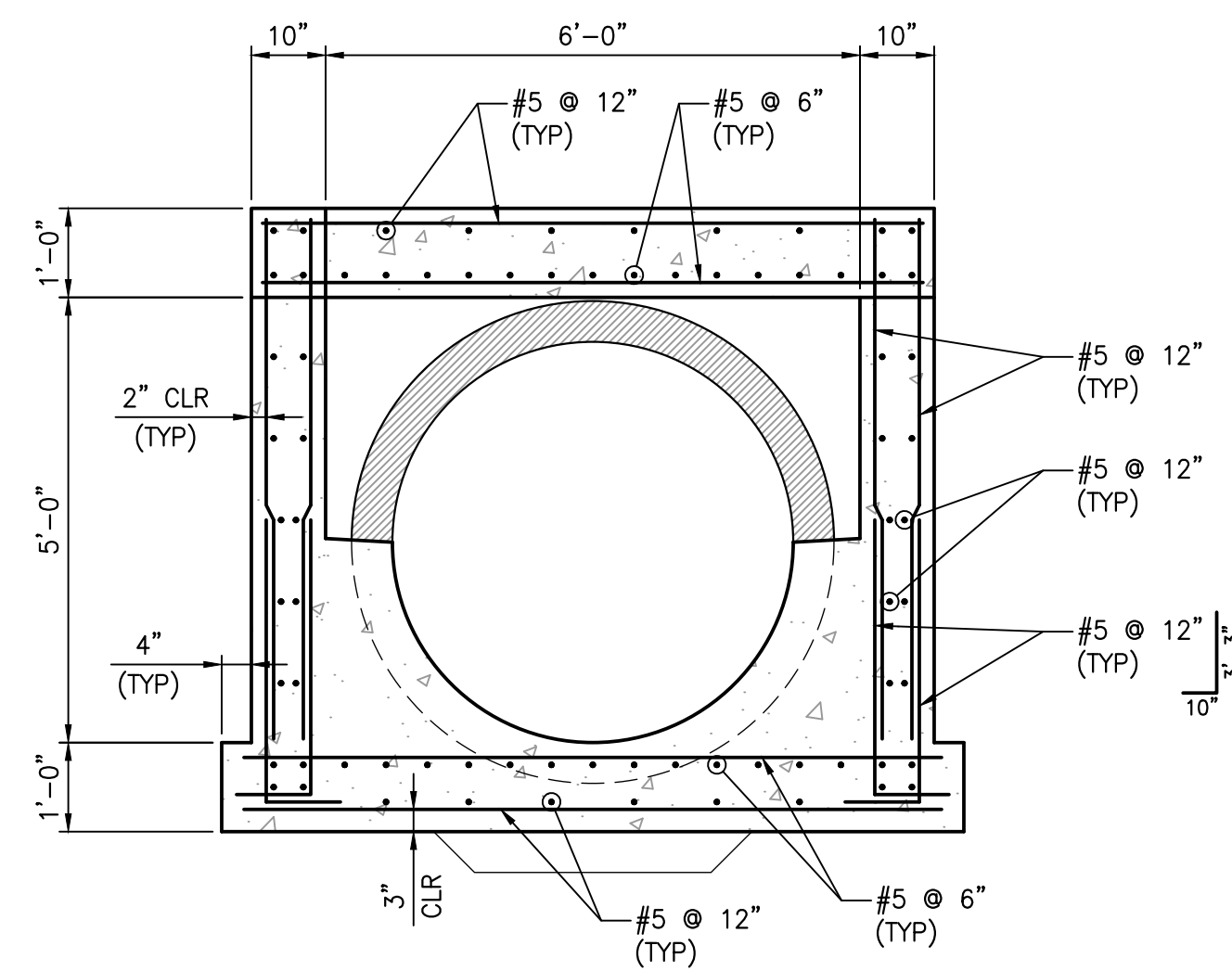
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2/14/24

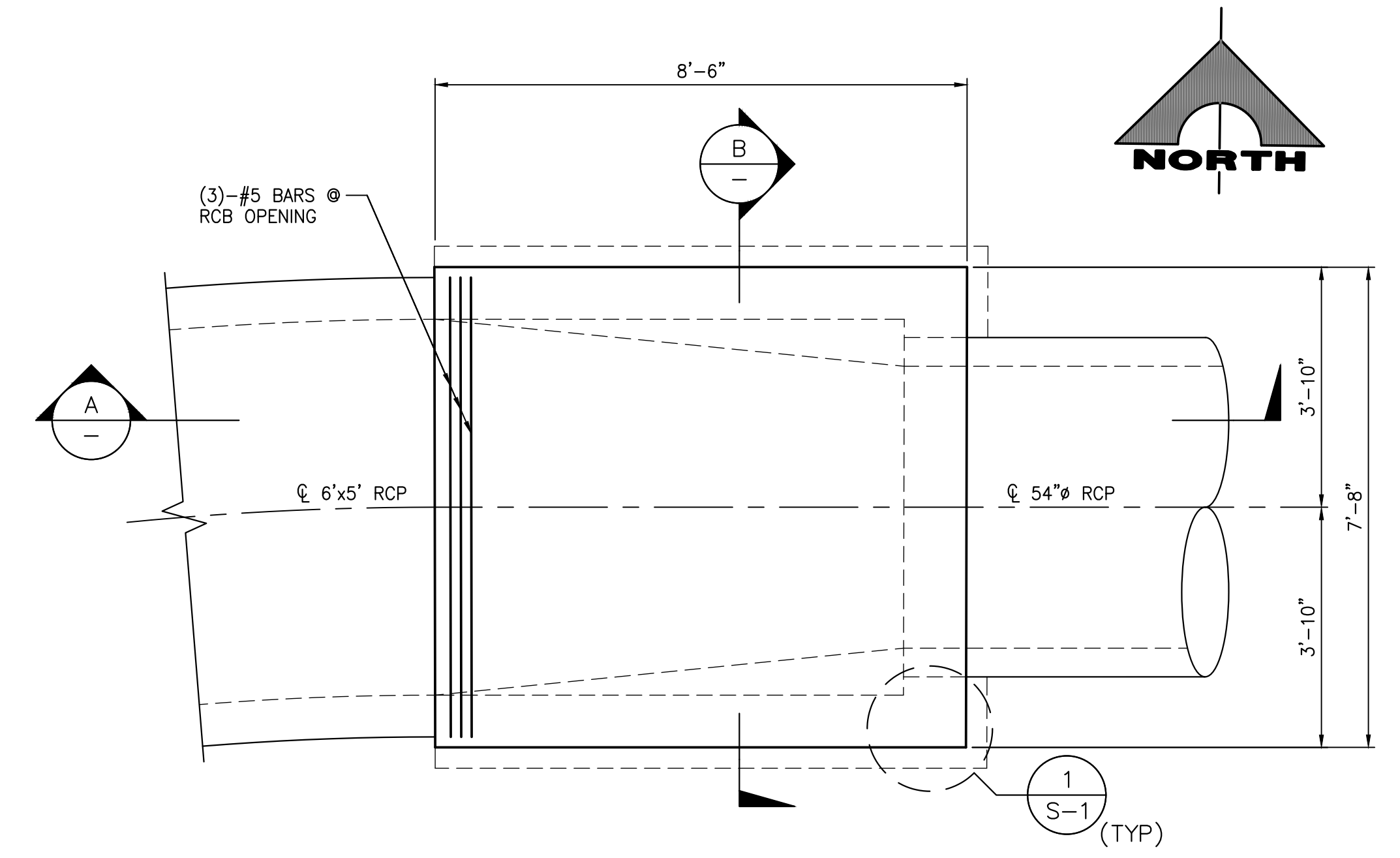
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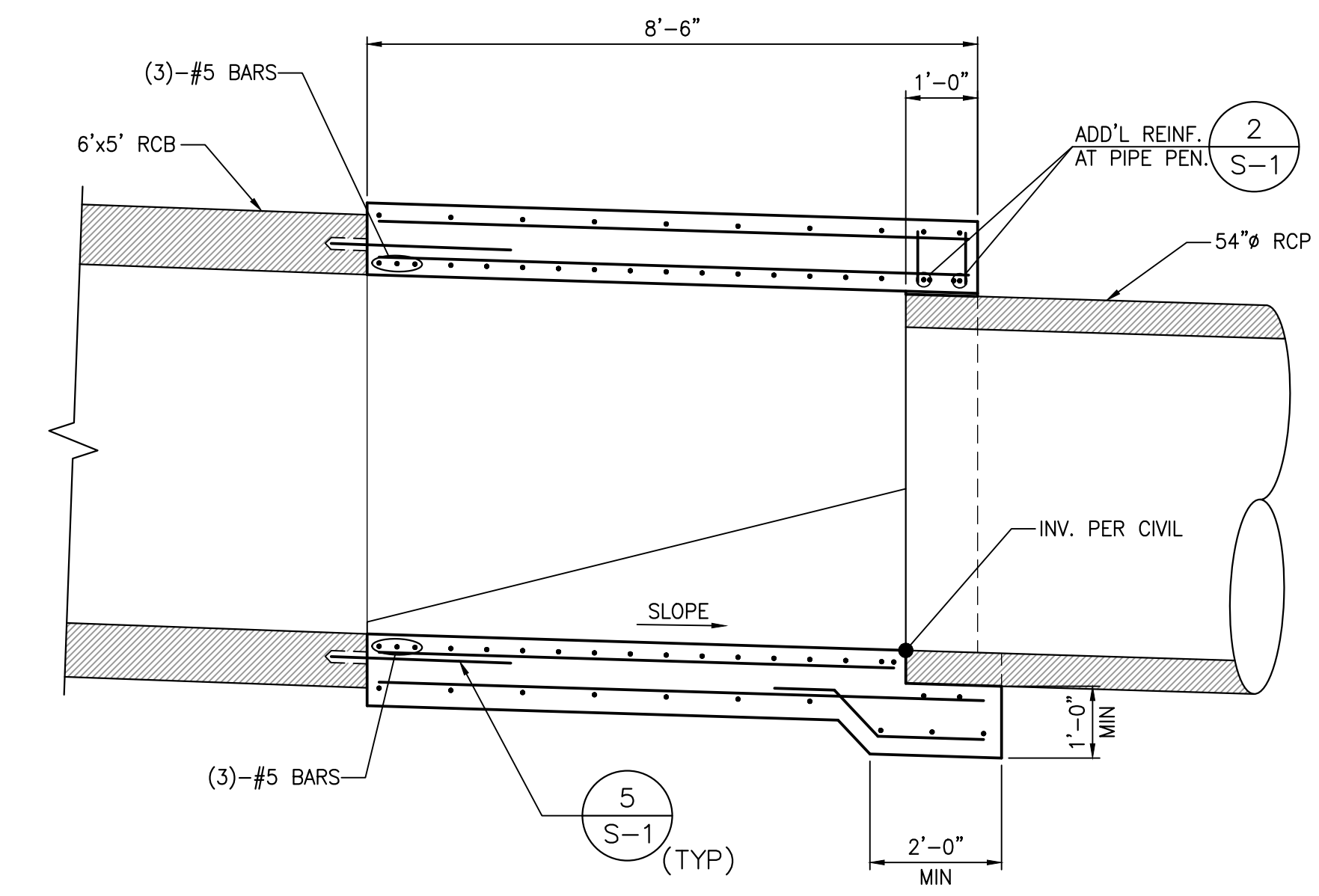
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**B SECTION**  
SCALE: 1/2" = 1'-0"



**1 PLAN - SDJS #3**  
SCALE: 1/2" = 1'-0"



**A SECTION**  
SCALE: 1/2" = 1'-0"

NO.	DESCRIPTION	DATE	BY	APP. DATE

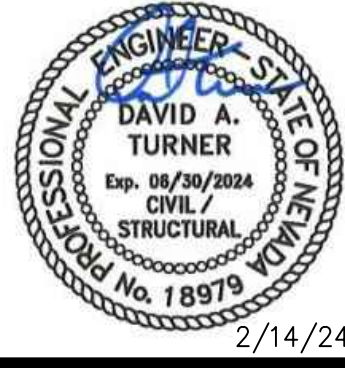
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**kb HOME**

**KYLE CANYON GATEWAY WEST - ARETE UNIT 1**

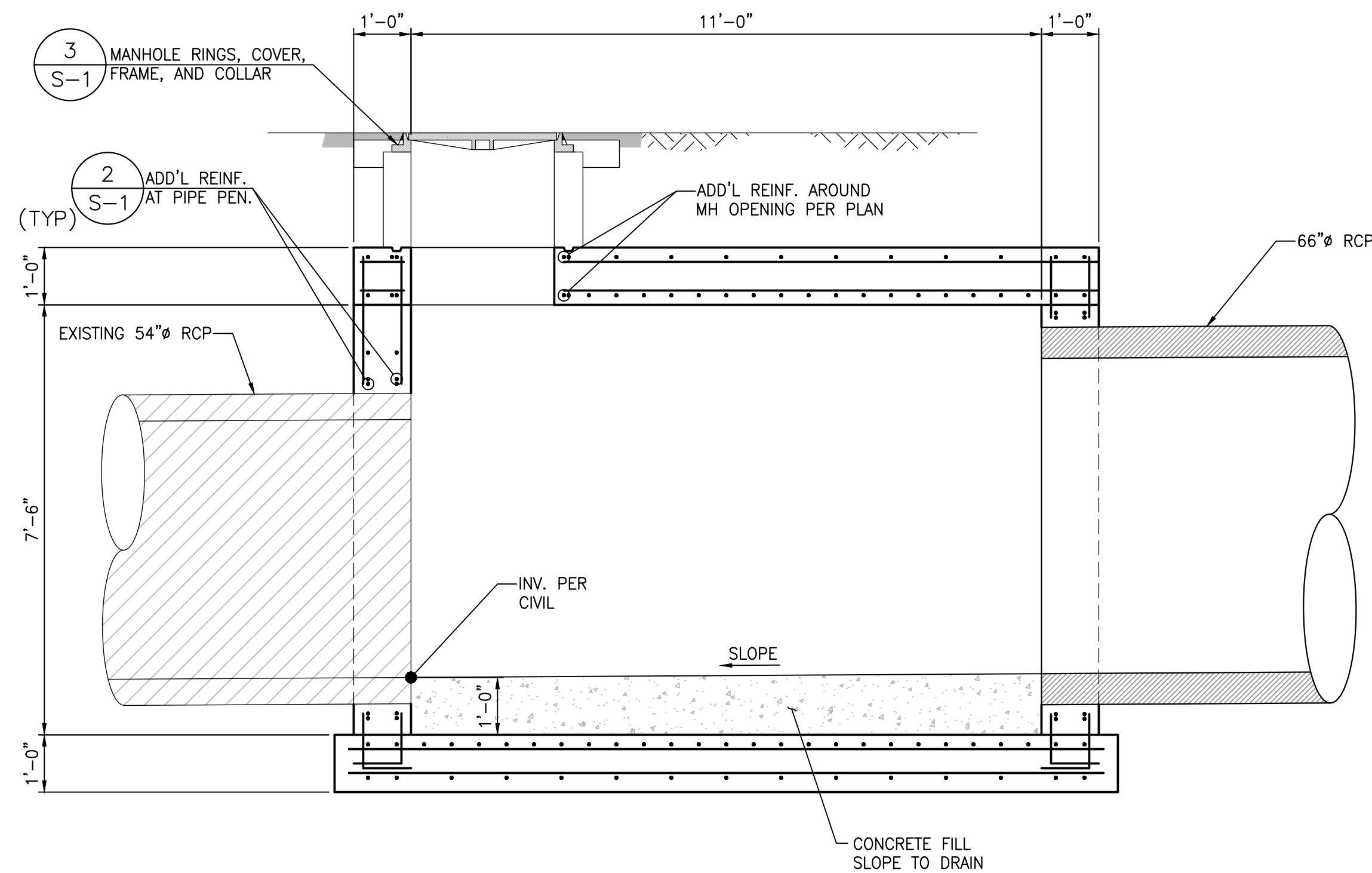
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DRAFTER: DAT  
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PROJECT NO.  
**KBH2302-001**

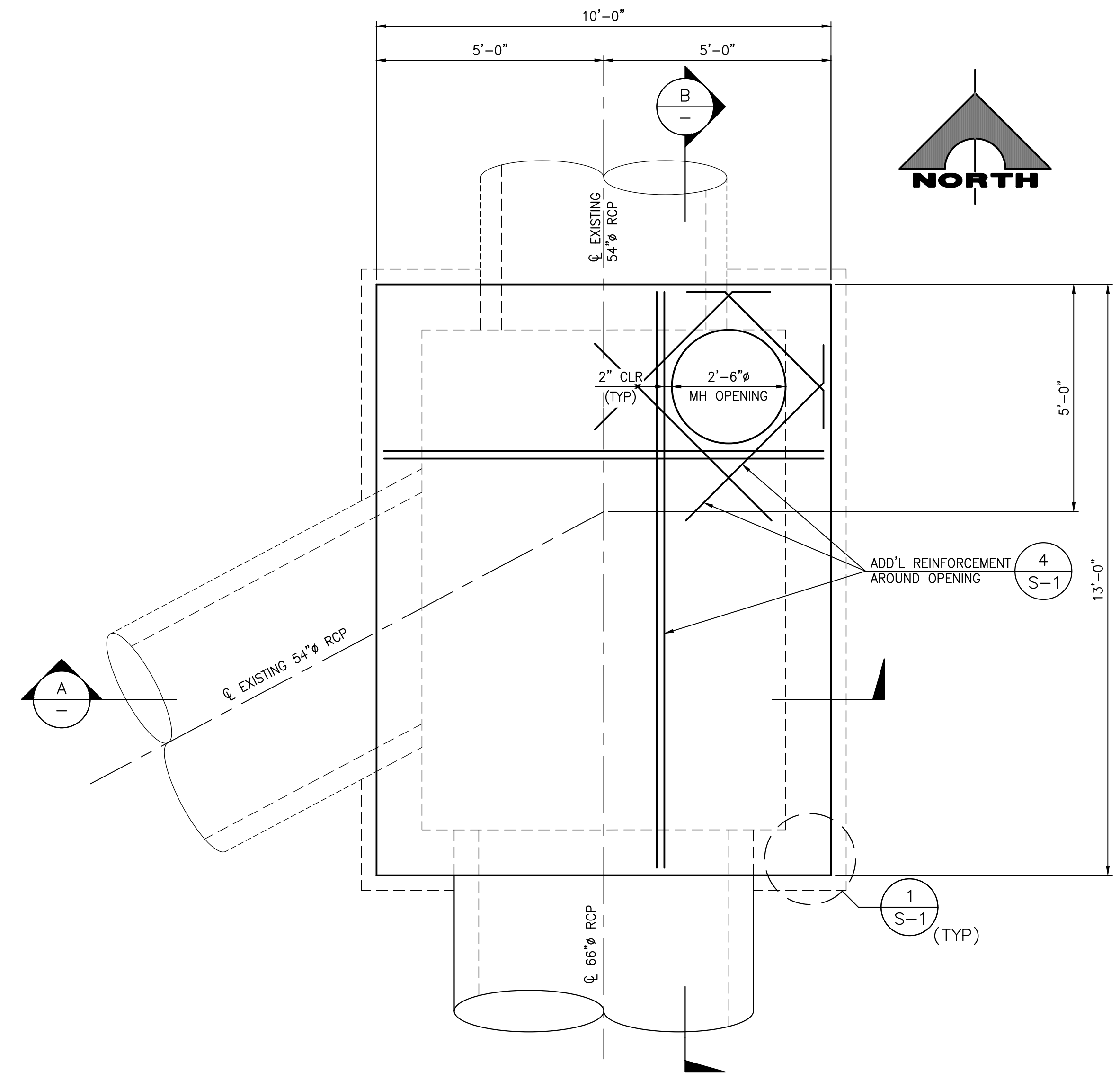




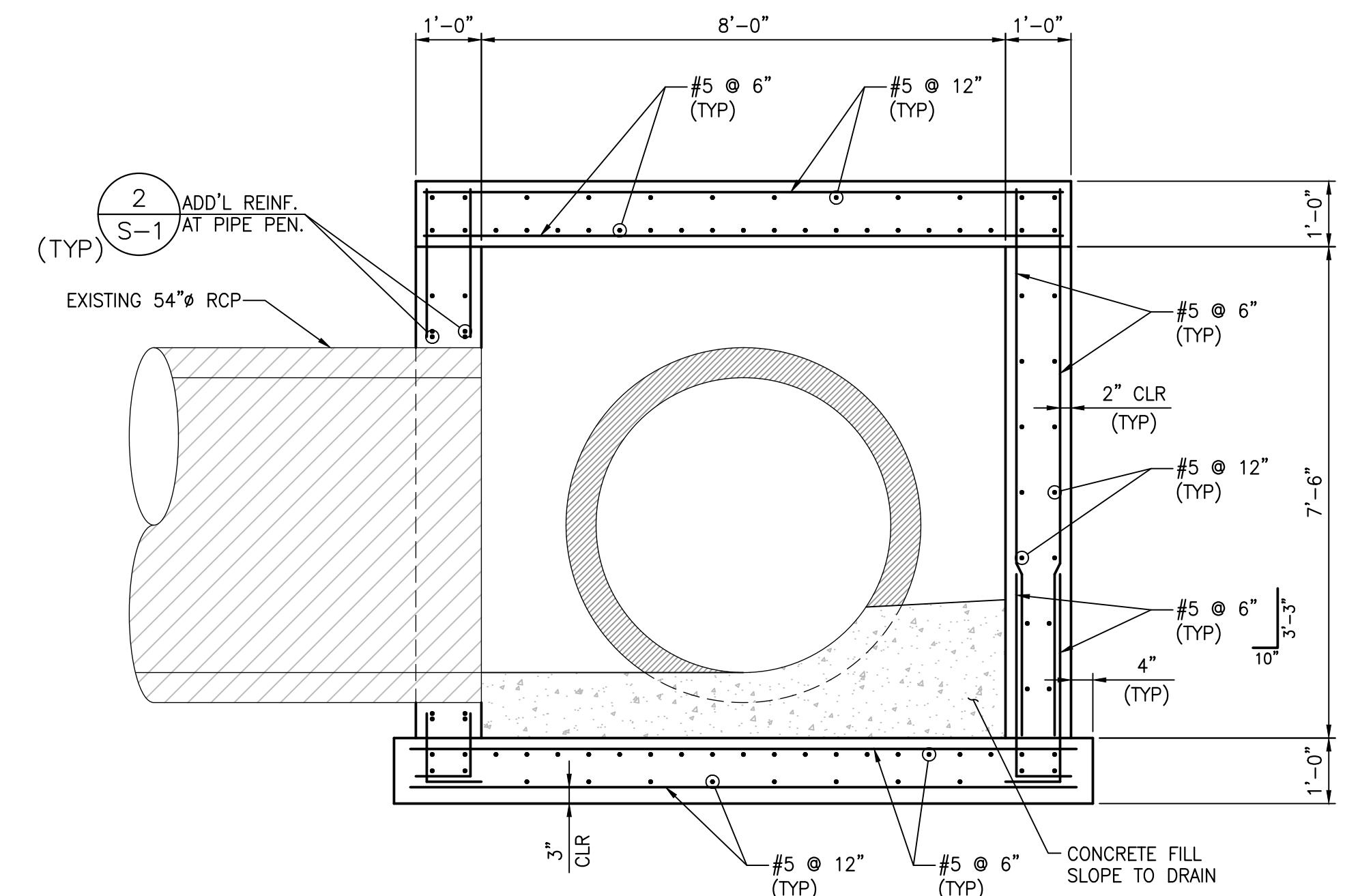
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**B SECTION**  
SCALE: 1/2" = 1'-0"



**1 PLAN - SDJS #5**  
SCALE: 1/2" = 1'-0"



**A SECTION**  
SCALE: 1/2" = 1'-0"

1555 S. RAINBOW BLVD.  
LAS VEGAS, NV 89146  
T: 702.804.2000  
F: 702.804.2999  
gowngineering.com

**ENGINEERS & SURVEYORS**

NO.	DESCRIPTION	DATE	BY	APP. DATE

CITY OF LAS VEGAS, NV

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**KYLE CANYON GATEWAY WEST - ARETE UNIT 1**

**STORM DRAIN JUNCTION STRUCTURE #5**

DATE:	2/14/2024
DRAFTER:	DAT
DESIGNER:	DAT
CHECKED:	EGG
PROJECT NO.	KBH2302-001

**S-6**

SHEET OF

2/14/24

NO.	DESCRIPTION	DATE	BY	APP. DATE

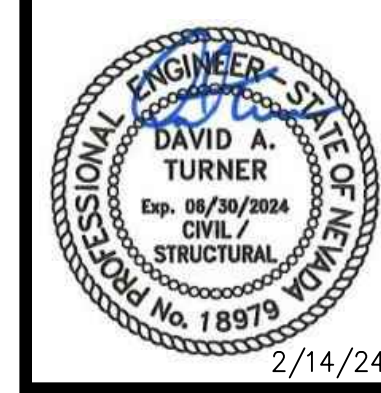
CITY OF LAS VEGAS, NV

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KYLE CANYON GATEWAY WEST - ARETE UNIT 1  
STRUCTURAL DETAILS

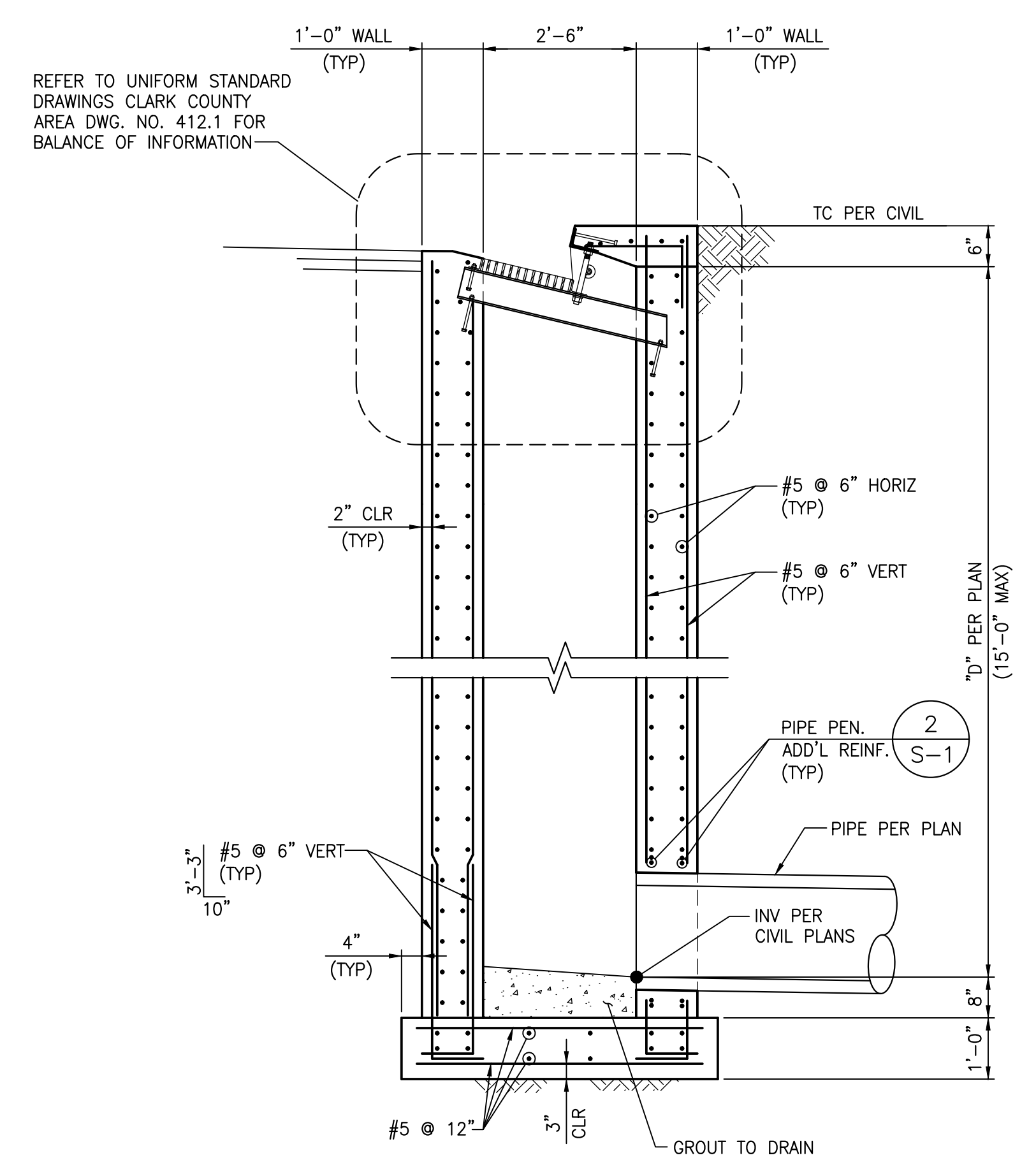
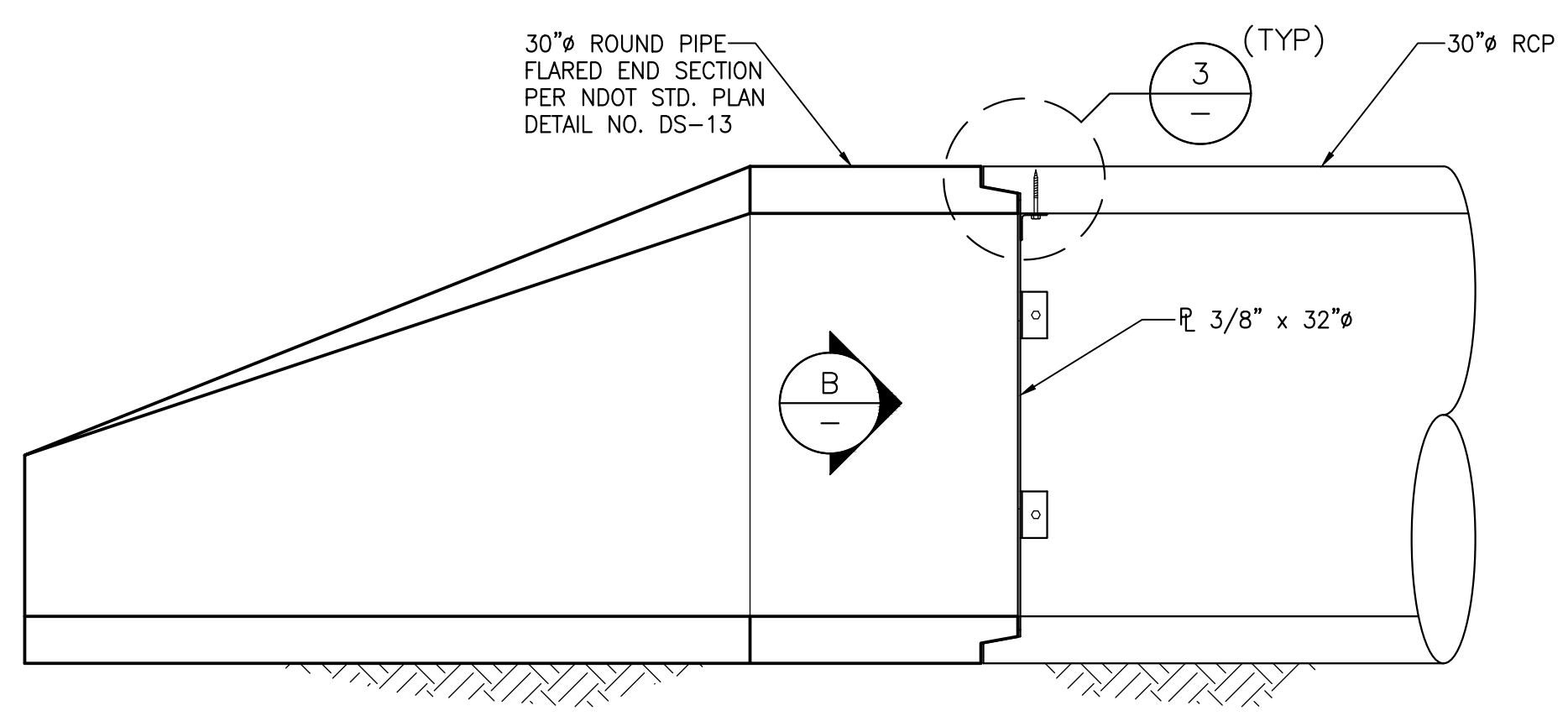
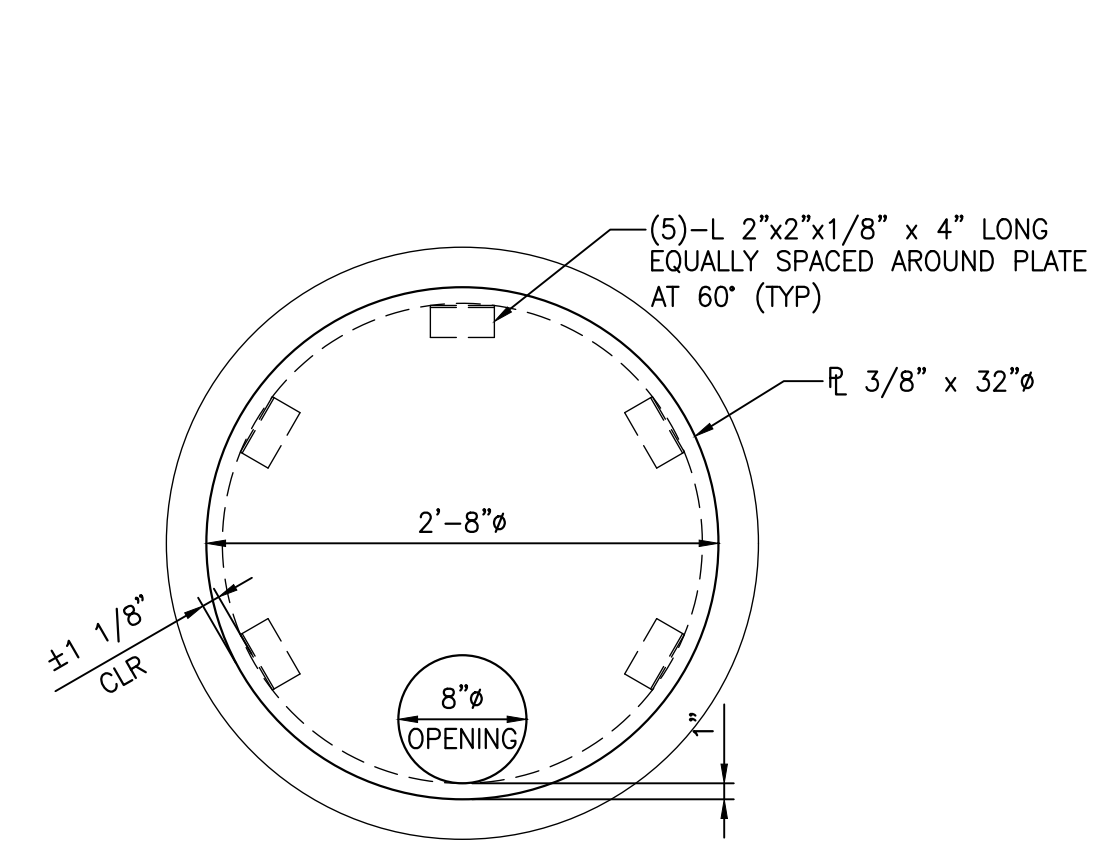
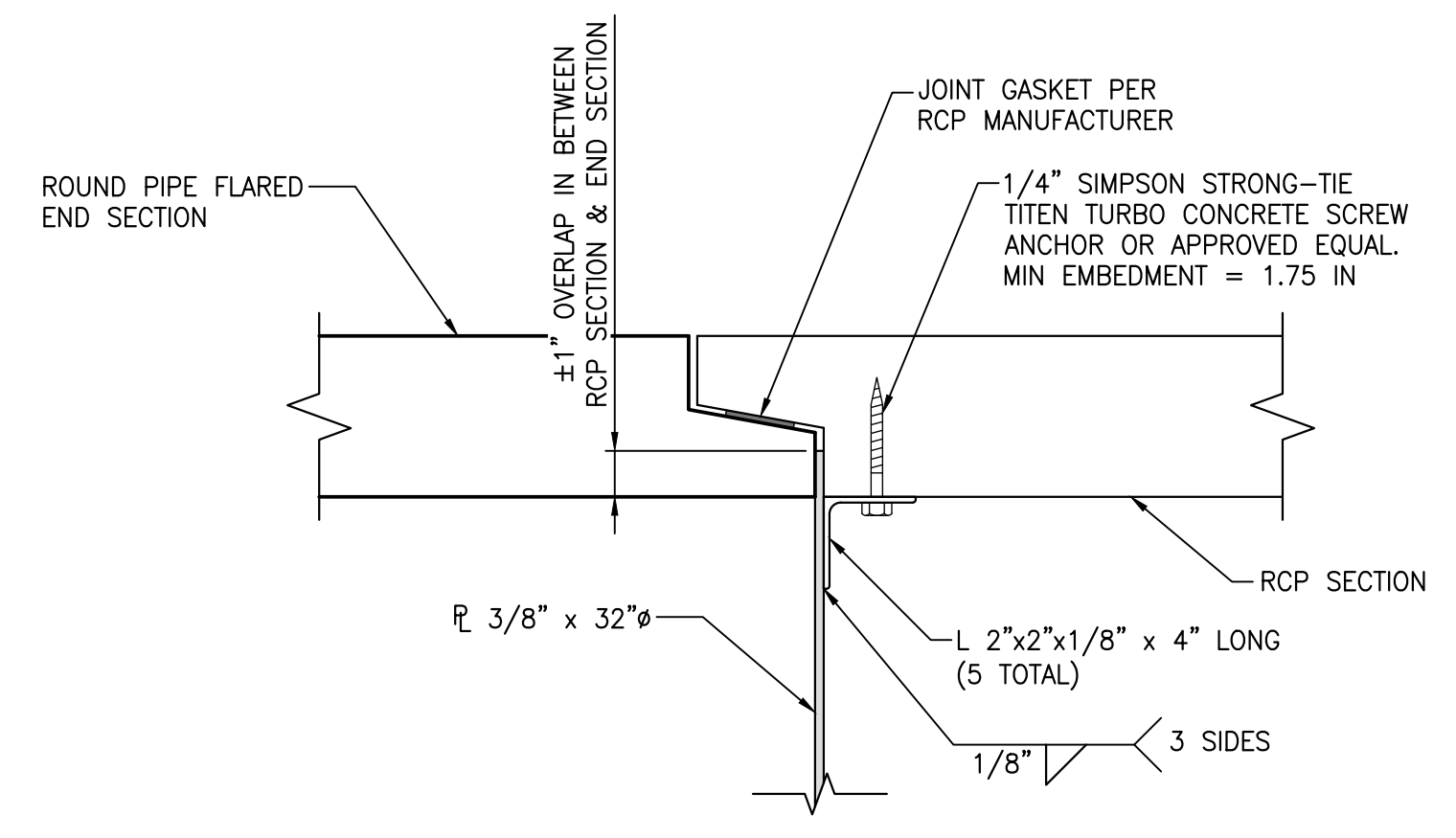
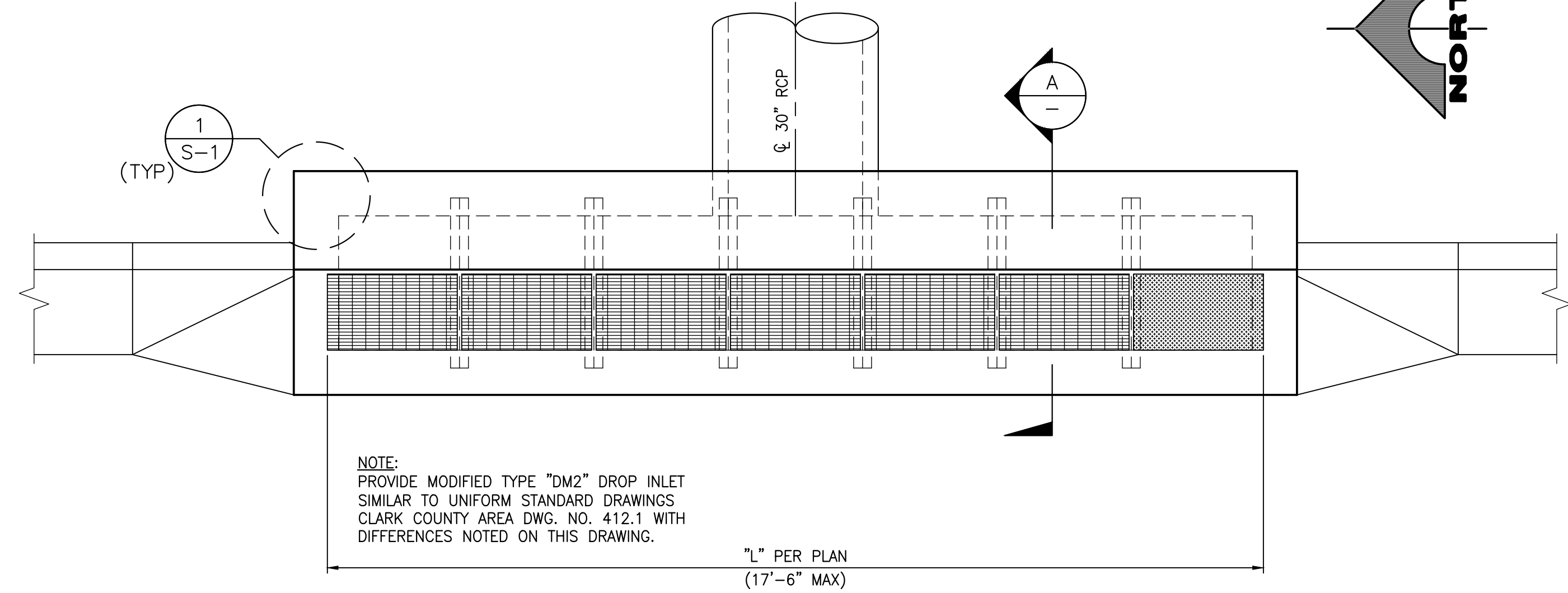
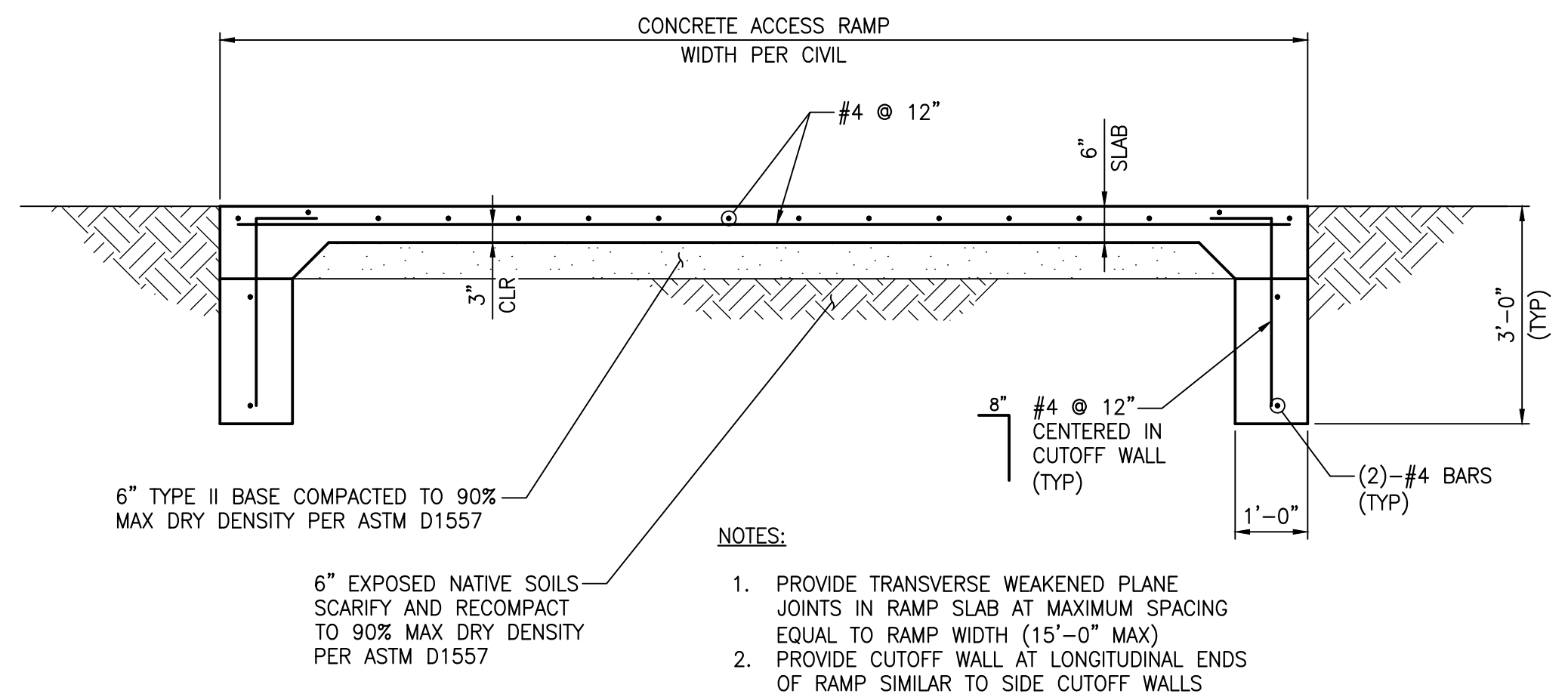
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DATE: 2/14/2024  
DRAFTER: DAT  
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CHECKED: EGG

PROJECT NO.  
**KBH2302-001**



2/14/24  
**S-7**  
SHEET OF



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