

Krebs Engineering, Inc.
2100 Riverhaven Drive, Suite 100
Birmingham, AL 35244
205-987-7411
June 27, 2022

ADDENDUM NO. 4

CONTRACT NO.: 21036
OWNER: City of Fairhope
PROJECT: Water Treatment Plant No. 3 Expansion

BID DATE: June 30, 2022
TO: ALL PROSPECTIVE CONTRACTORS AND SUPPLIERS

The changes, modifications, and/or additions covered by and set forth in this Addendum No. 4 shall become part of and be incorporated in the Contract Documents for the above referenced project:

CLARIFICATIONS FROM ADDENDUM NO. 3

AD4.1 SECTION 44 42 19.05 – FORCED DRAFT AERATORS

1. Page 44 42 19.05; 2.1 MANUFACTURERS
 - a. Add 2.1.c to read “c. DeLoach”

SPECIFICATIONS TO BE REVISED BY ADDENDUM:

AD4.2 SECTION 09 96 00 – HIGH-PERFORMANCE COATINGS

1. Page 09 96 00; 2.4 HIGH-PERFORMANCE COATING SYSTEMS
 - a. Remove paragraph L.

AD4.3 SECTION 33 11 16.10 – METAL PIPE AND FITTINGS FOR WATER UTILITIES

2. Page 33 11 16.10; 2.1 MANUFACTURERS
 - a. Remove paragraph G.

AD4.4 SECTION 44 42 56.13 – WATER SUPPLY AND TREATMENT PUMPS

1. Page 44 42 56.13; PART 1 - GENERAL

a. Add 1.6 to read:

1.6 Qualifications:

A. Well pump shall be installed by a qualified Contractor or representative with a minimum of ten (10) years' experience installing well pumps. The Contractor shall provide qualification information prior to well pumps being installed.

SPECIFICATIONS TO BE ADDED BY ADDENDUM:

AD4.5 Add specification section 44 42 56.16 – SUMP AND SAMPLE PUMPS

DRAWINGS TO BE REVISED BY ADDENDUM:

AD4.6 Revise Sheet C3-03, YARD PIPING PLAN

AD4.7 Revise Sheet DT-02 – MISCELLANEOUS DETAILS

Krebs Engineering, Inc.

By 
Austin Maynard, P.E.
Engineer

THIS IS THE LAST PAGE

Attachments to Addendum No. 4 preceding this page:

SPECIFICATION SECTION 44 42 56.16 - SUMP AND SAMPLE PUMPS – 5 pages

C3-03, YARD PIPING PLAN – 1 page

DT-02 – MISCELLANEOUS DETAILS – 1 page

A total of 10 pages or sheets of drawings (including this page) have been included in Addendum No. 4.

General Contractors are requested to return this page as an acknowledgement that you have received this Addendum by e-mail. This will NOT be mailed. A copy of this Addendum may be picked up at the office of the Engineer.

Return to Return to Alabama Graphics Digital Plan Room.

Received By _____

Contractor _____

Date _____

SECTION 44 42 56.16 - SUMP PUMPS AND SAMPLE PUMPS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUBMITTALS

- A. **Certification from Contractor and Manufacturer/Suppliers:** During the bid period and again prior to submitting/ordering and installing materials, products and equipment, the Contractor and all manufacturers and suppliers shall thoroughly review the materials, products and equipment being supplied and shall familiarize themselves with the existing and proposed/new facilities, as well as connections to existing facilities/utilities. This shall include field verification of the location, nature, size/dimensions, current and intended future use, etc. Prior to ordering and installation, the Contractor shall coordinate with all manufacturers and suppliers to provide all needed information including field dimensions, photographs, information on related materials and equipment, etc.). The Contractor and all manufacturers and suppliers shall include written confirmation (with the submittal) of the following:

1. The materials, products, and equipment being supplied are of the correct size, materials and type.
2. The materials, products and equipment being supplied do not conflict with existing or proposed/new facilities.
3. The products/equipment being supplied are intended for use in this application.
4. All manufacturer(s) and supplier(s) shall provide (either with submittals or separately) written concurrence/acknowledgement of their review/coordination and concurrence with the items above.
5. Shop drawings and product data submitted for review by the Engineer shall bear the Contractor's certification that he has reviewed, checked, and approved the submittals, that they comply with the requirements of the project and with the provisions of the Contract Documents, and that he has verified all sizes, dimensions, locations, field measurements, construction criteria, materials, catalog numbers, and similar data. Field dimensions, sizes and other pertinent information shall be clearly shown on the shop drawings/submittals. The Contractor shall also certify that the work represented by the shop drawings is recommended by the Contractor and that the Contractor's warranty and guaranty will fully apply.

- B. Product Data:

1. Rated capacities.
2. Furnished specialties
3. Accessories
4. Details of construction relative to materials
5. Dimensions of individual components
6. Profiles

7. Finishes.
8. Description of all materials.
9. Complete bill of materials.
10. Weight of equipment and each component.
11. Equipment structural design calculations and process design calculation.

C. Shop Drawings:

1. Drawings showing:
 - a. Complete dimensional data.
 - b. Equipment outline dimensions.

D. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of Architect/Engineer and owners, and other information specified.

E. Maintenance Data: For effluent sand filters to include in the maintenance manuals specified in Division 1. Include name, address, and telephone number of manufacturer's nearest authorized service representative.

F. Warranties: Special warranties specified in this Section.

1.3 DELIVERY, STORAGE, AND HANDLING

- A. Retain shipping flange protective covers and protective coatings during storage.
- B. Protect bearings and couplings against damage.
- C. Comply with pump manufacturer's rigging instructions for handling.

1.4 WARRANTY

- A. Warranty Period: One year from the date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 1. Aurora Pump
 2. Chicago Pump Co.
 3. Ingersoll-Dresser Pump Co.
 4. PACO Pumps, Inc.
 5. Peerless Pump Co.
 6. Barnes Pumps, Inc.

7. Ebara International Corp.;Standard Pump Div.
8. Gorman-Rupp Co.
9. Goulds Pumps, Inc.
10. Grundfos Pumps Corp.
11. Myers: F. E. Myers Co.
12. Milton Roy Co.; Hartell Div.
13. Bell and Gossett

2.2 SUM PUMS AND SAMPLE PUMPS, GENERAL

- A. Description: Factory-assembled and tested, single-stage, centrifugal, end-suction pump units complying with UL 778. Include motor, operating controls, and construction for permanent installation.
- B. Simplex or duplex configuration as shown or specified.
- C. Discharge Pipe End Connections NPS 2 inches and Smaller: Threaded. Pumps available only with flanged-end discharge pipe may be furnished with threaded companion flanges.
- D. Discharge Pipe End Connections NPS 2-1/2 inches and Larger: Flanged.
- E. Finish: Manufacturer's standard paint applied to factory-assembled and -tested units before shipping.
- F. Manufacturer's Preparation for Shipping: Clean flanges and exposed machined metal surfaces and treat with anticorrosion compound after assembling and testing. Protect flanges, pipe openings, and nozzles with wooden flange covers or with screwed-in plugs.

2.3 SAMPLE PUMPS

- A. Description:
 1. Each installation shall be complete with pump and motor mounted on common cast iron bed plate; concrete foundation pads; or, fabricated steel shelf type wall brackets; supply tap, supply piping and valves; discharge piping; gate valves; check valves; by-pass piping (recirculation water), valves and fittings; strainer; adjustable pressure relief valve in by-pass piping; and any miscellaneous appurtenances, fittings, unions, support clamps, etc., required for proper installation.
 2. All fabricated steel brackets shall be epoxy coated and all anchor bolts shall be stainless steel.
 3. All piping shall be installed in a neat, orderly manner and access shall be provided to all gate valves, strainers, and check valves.
 4. Pump shall be self-priming centrifugal type.

B. Electrical:

1. Motors: Motors shall be open drip-proof machines, not less than 1/3 HP, nor greater than 1/2 HP, RPM not greater than 1,800 at no load, 40°C rise, continuous duty, not less than Class B insulation, suitable for operation on 115 volt, 1 Ø, 60 cycle. Motors shall be Century, Louis-Allis, General Electric or equivalent.
2. Coordinate electrical requirements with electrical plans. Furnish and install all conduit, wiring, contacts and other appurtenances required for pump operation.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine roughing-in of plumbing piping systems to verify actual locations of piping connections before pump installation.
- B. Examine pumps for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.
- C. Examine pumps for cleanliness, freedom from foreign matter, and corrosion.

3.2 INSTALLATION

- A. Drawings indicate general arrangement of pumps, piping and/or valves.
- B. Comply with manufacturer's detailed written instructions for installing equipment. Install pumps according to manufacturer's written instructions.
- C. Install pumps and arrange to provide access for maintenance, including removal of motors, impellers, couplings, and accessories.
- D. Support piping so weight of piping is not supported by pumps.
- E. Wet-Pit-Mounted, Vertical Sump Pumps: Suspend pumps from basin covers. Make direct connections to drainage piping.
- F. Submersible Sump Pumps: Set pumps on basin, pit, or sump floor. Make direct connections to drainage piping.
- G. Sump Pump Basins: Install basins and connect to drainage piping. Brace interior of basins according to manufacturer's written instructions to prevent distortion or collapse during concrete placement. Set basin cover and fasten to basin top

flange. Install so top surface of cover is flush with finished floor.

- H. Sump Pump Pits: Construct concrete pits and connect to drainage piping. Set basin cover and fasten to top edge of concrete pit. Install so top surface of cover is flush with finished floor.
- I. Electrical: Install electrical connections for power, controls, and devices.
 - 1. Electrical power and control components, wiring, and connections are specified in Division 16 Sections.
 - 2. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B
 - 3. Pump Controls: Set pump controls for automatic start, stop, and alarm operation as required for system application.

3.3 CLEANING AND PROTECTING

- A. Restore marred, abraded surfaces to their original condition.
- B. Provide final protection and maintain conditions, in a manner acceptable to manufacturer and installer that ensure equipment is without damage or deterioration at the time of Substantial Completion.

3.4 START-UP ASSISTANCE AND TRAINING

- A. A factory authorized service representative of the pump manufacturer shall perform all necessary on-site assistance for installation supervision and pre-startup wiring verification, and shall perform eight (4) hours of on-site start-up assistance/operator training once the equipment has been installed correctly and is operating as intended.

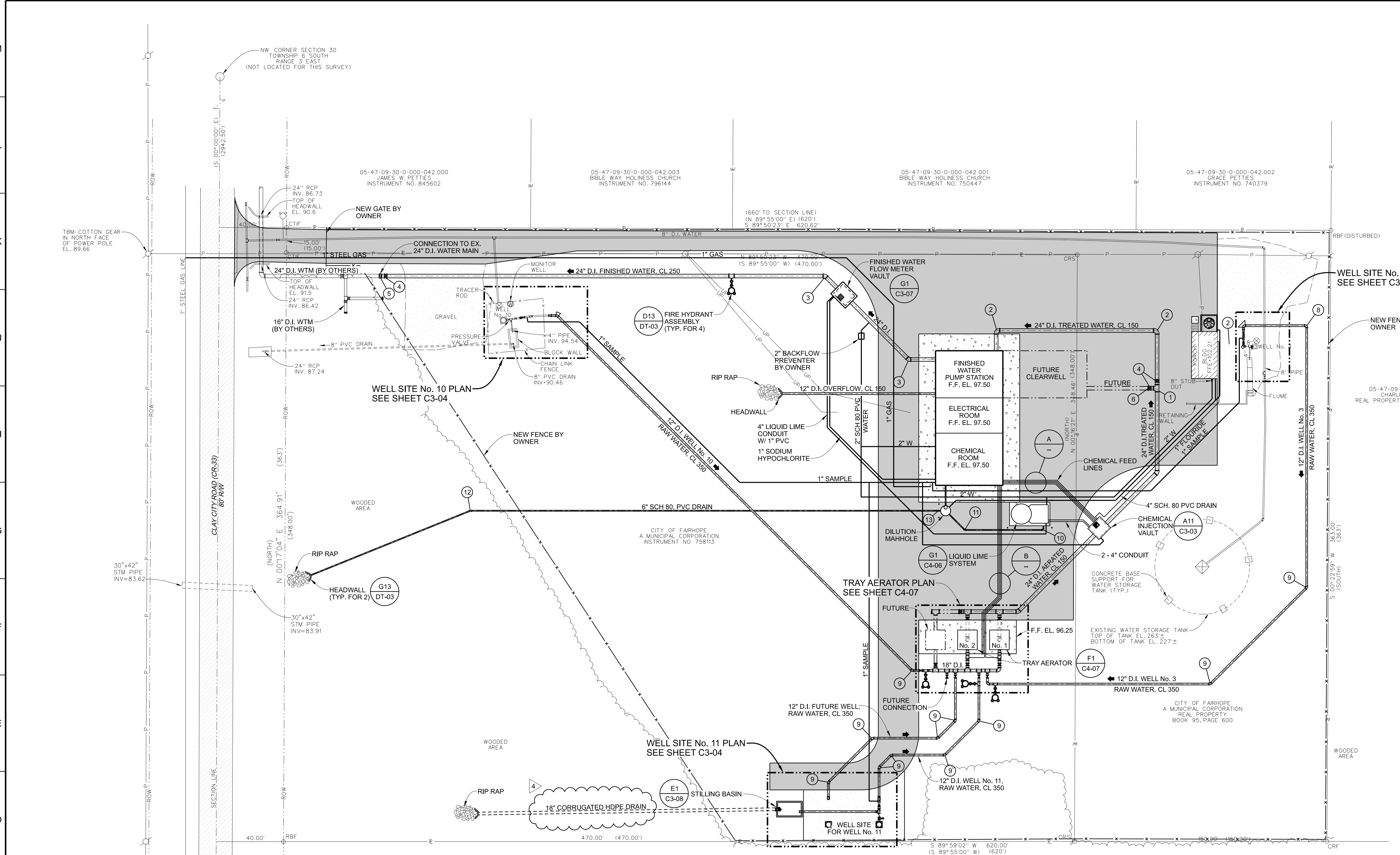
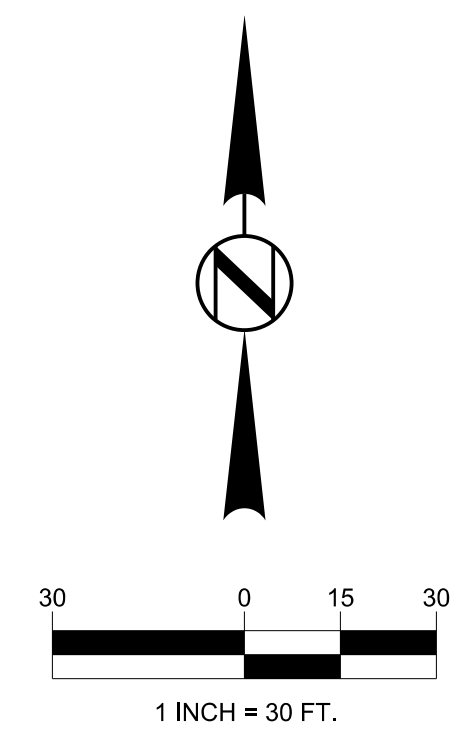
END OF SECTION 44 42 56.16



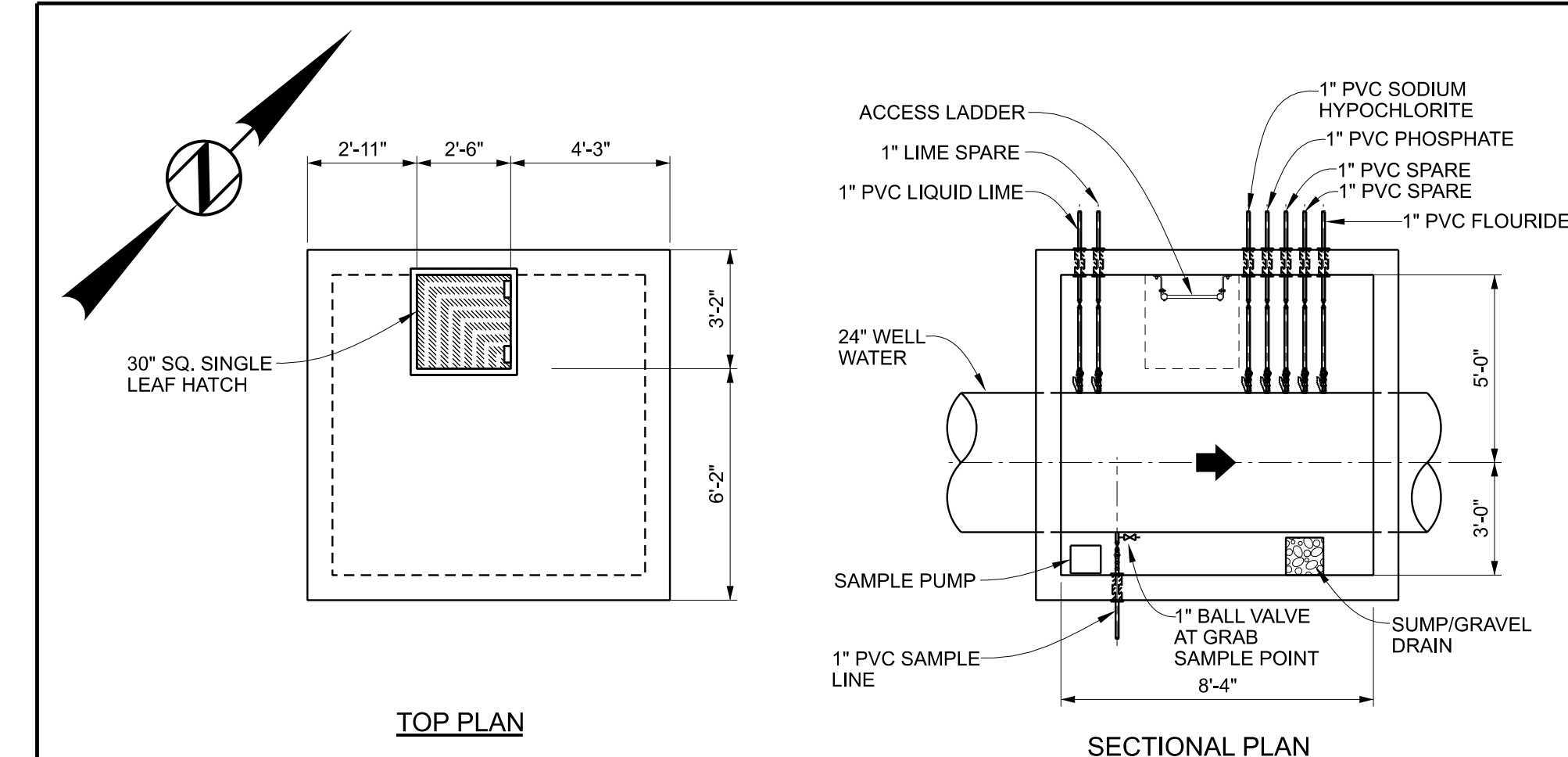
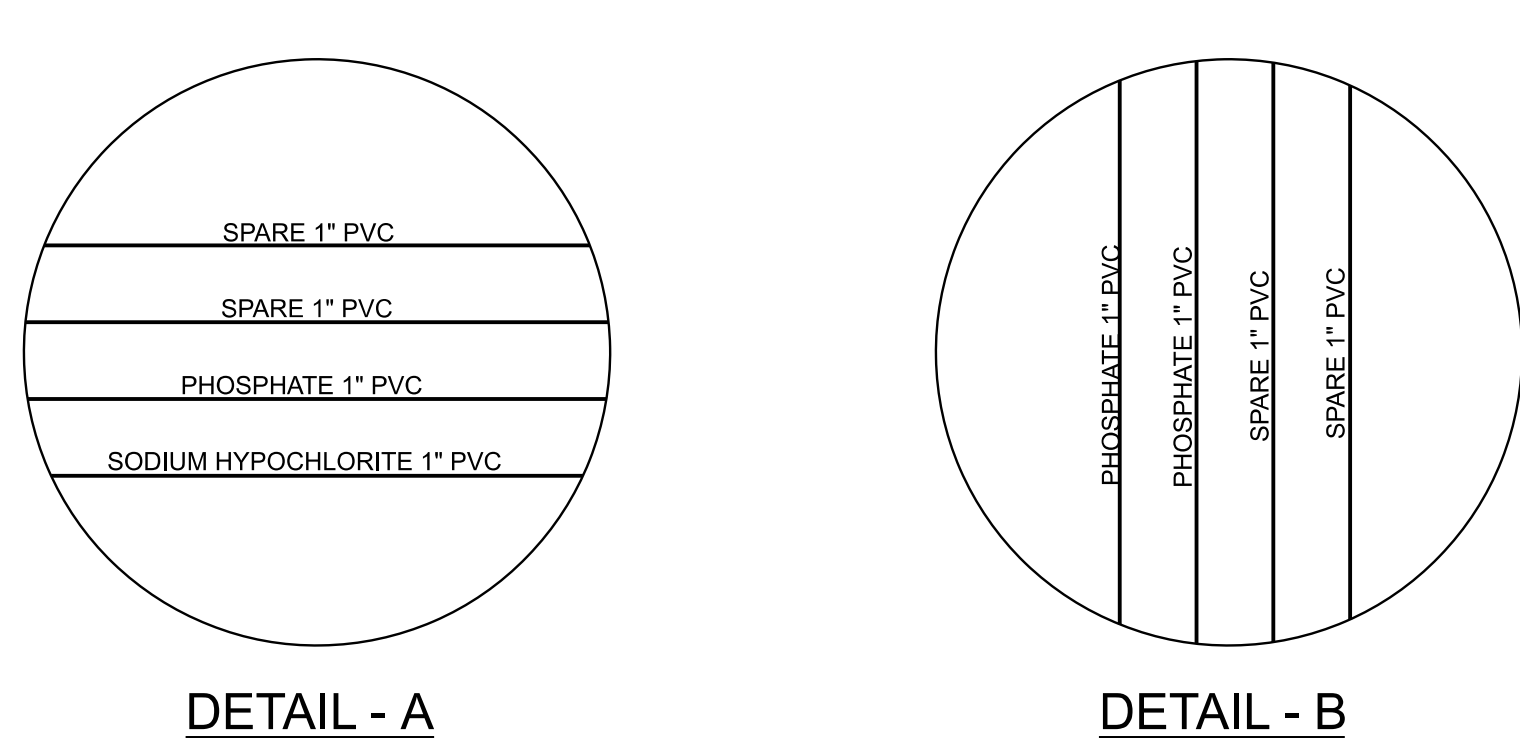
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Drawn	ADM / CLM		
Checked	CLL		

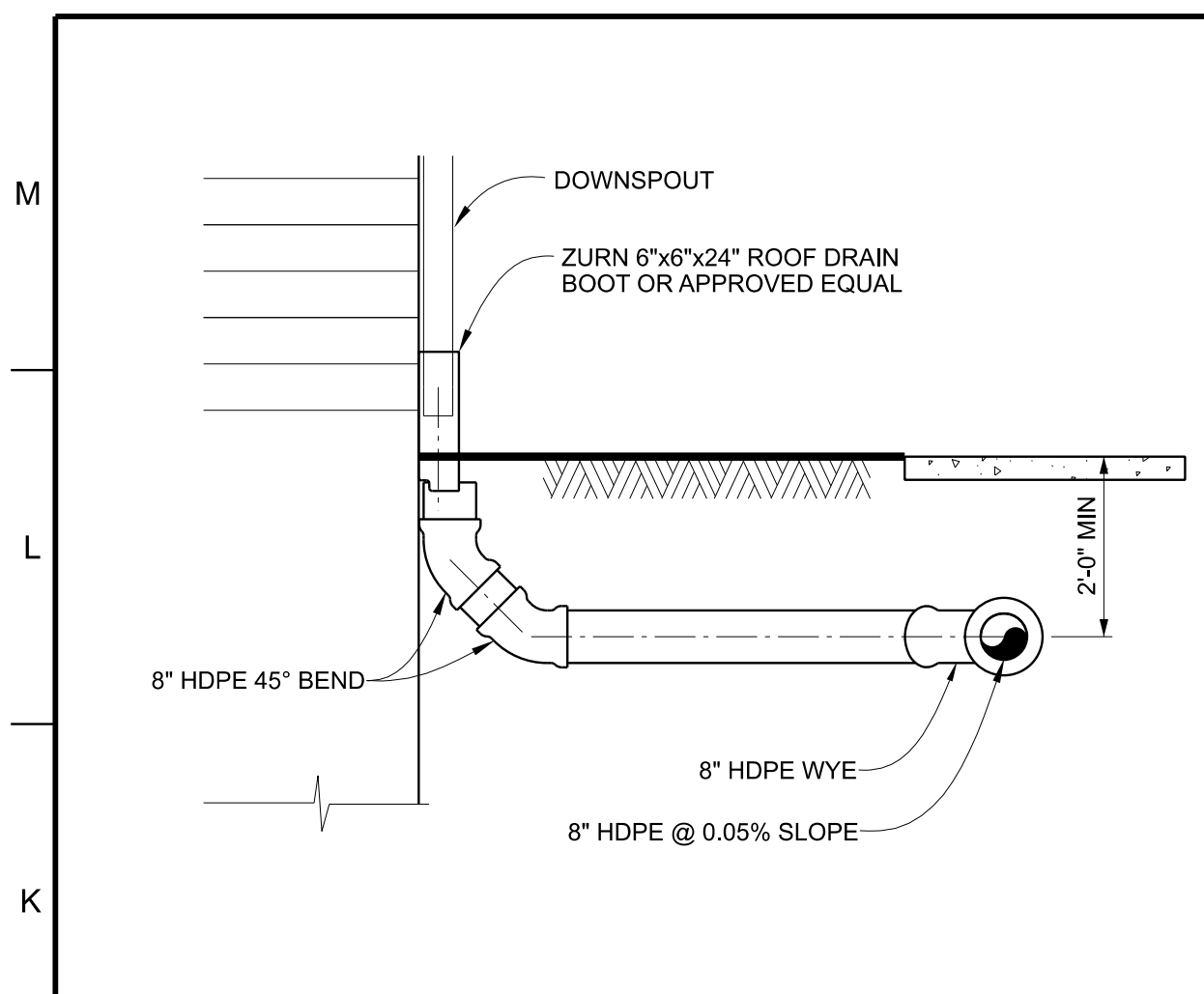
Revisions	No.	Date	Description
	1	6/6/2022	ADDENDUM NO. 1
	4	6/24/2022	ADDENDUM NO. 4

Sheet Title	YARD PIPING PLAN
Issue Date	MAY, 2022
Sheet No.	C3-03
Sequence	20 of 92

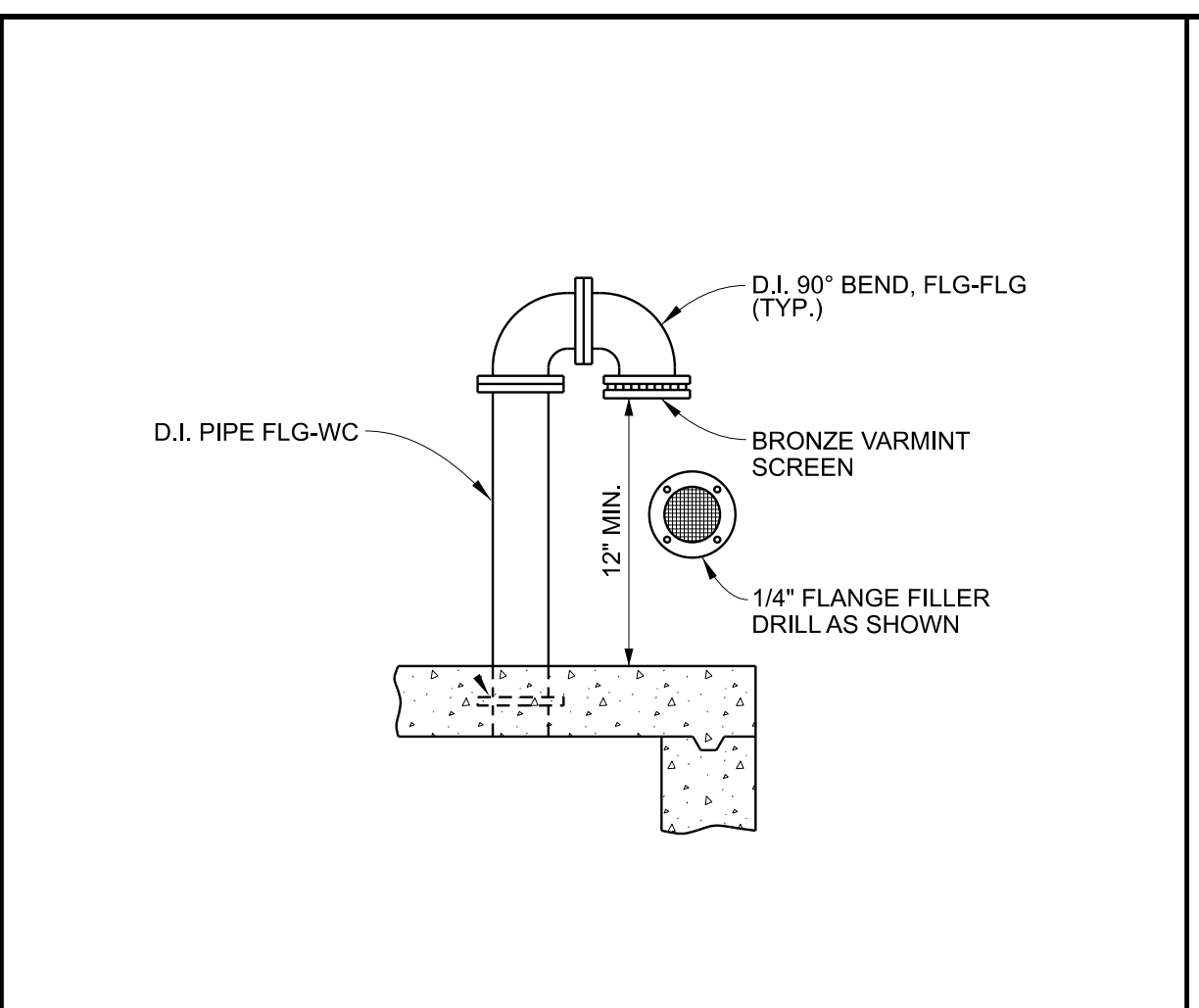


- FITTINGS LIST**
- 1 24" x 24" D.I. TEE, ALL RJ
 - 2 24" D.I. 90° BEND, RJ-RJ
 - 3 24" D.I. 45° BEND, RJ-RJ
 - 4 24" D.I. BUTTERFLY VALVE, RJ-RJ
 - 5 24" D.I. SLEEVE, RJ-RJ
 - 6 24" D.I. PLUG, RJ
 - 7 RESERVED
 - 8 12" D.I. 90° BEND, RJ-RJ
 - 9 12" D.I. 45° BEND, RJ-RJ
 - 10 6" D.I. 90° BEND, MJ-MJ
 - 11 6" D.I. 45° BEND, MJ-MJ
 - 12 6" D.I. 22 1/2° BEND, MJ-MJ
 - 13 6" D.I. GATE VALVE, MJ-MJ

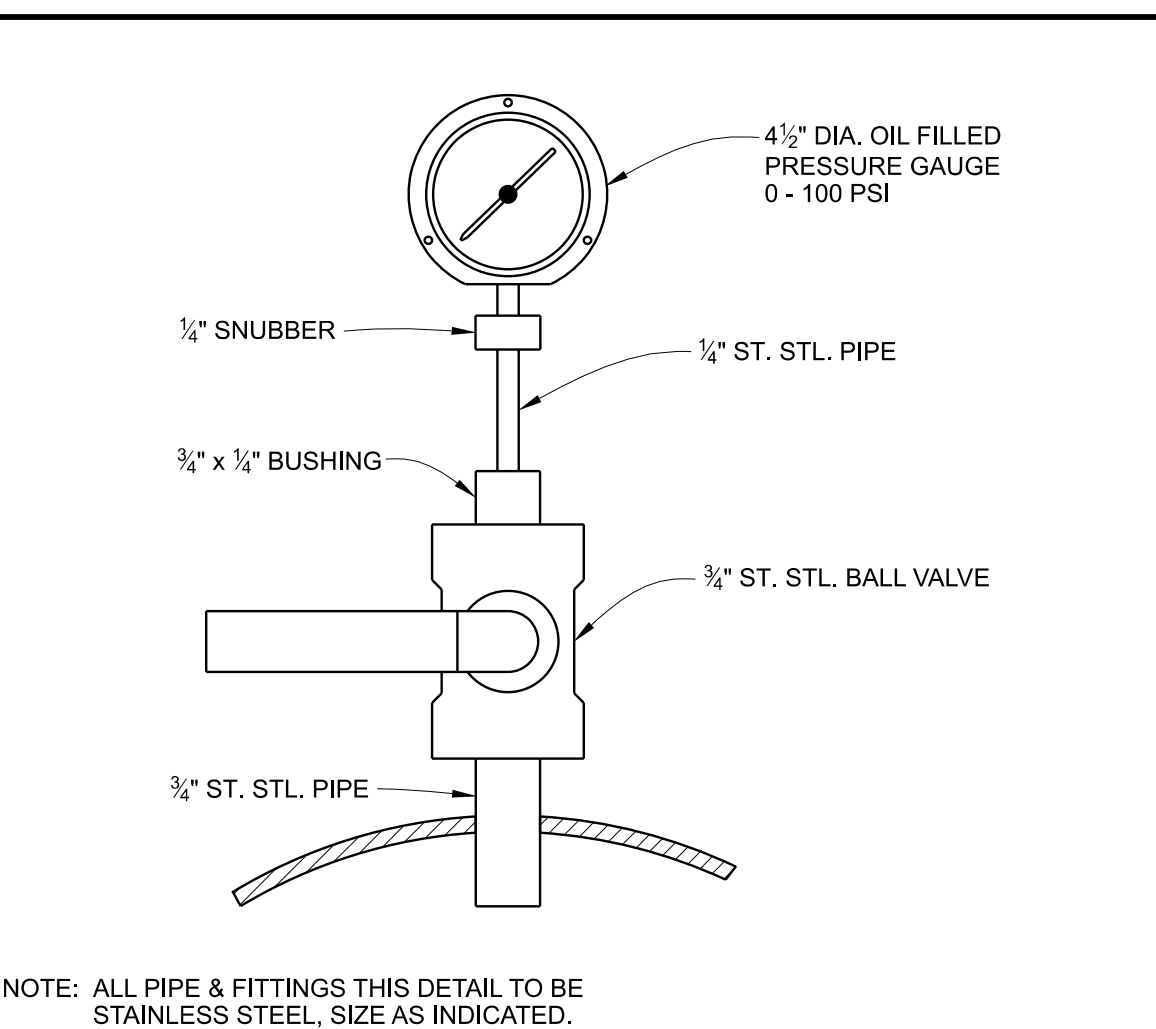




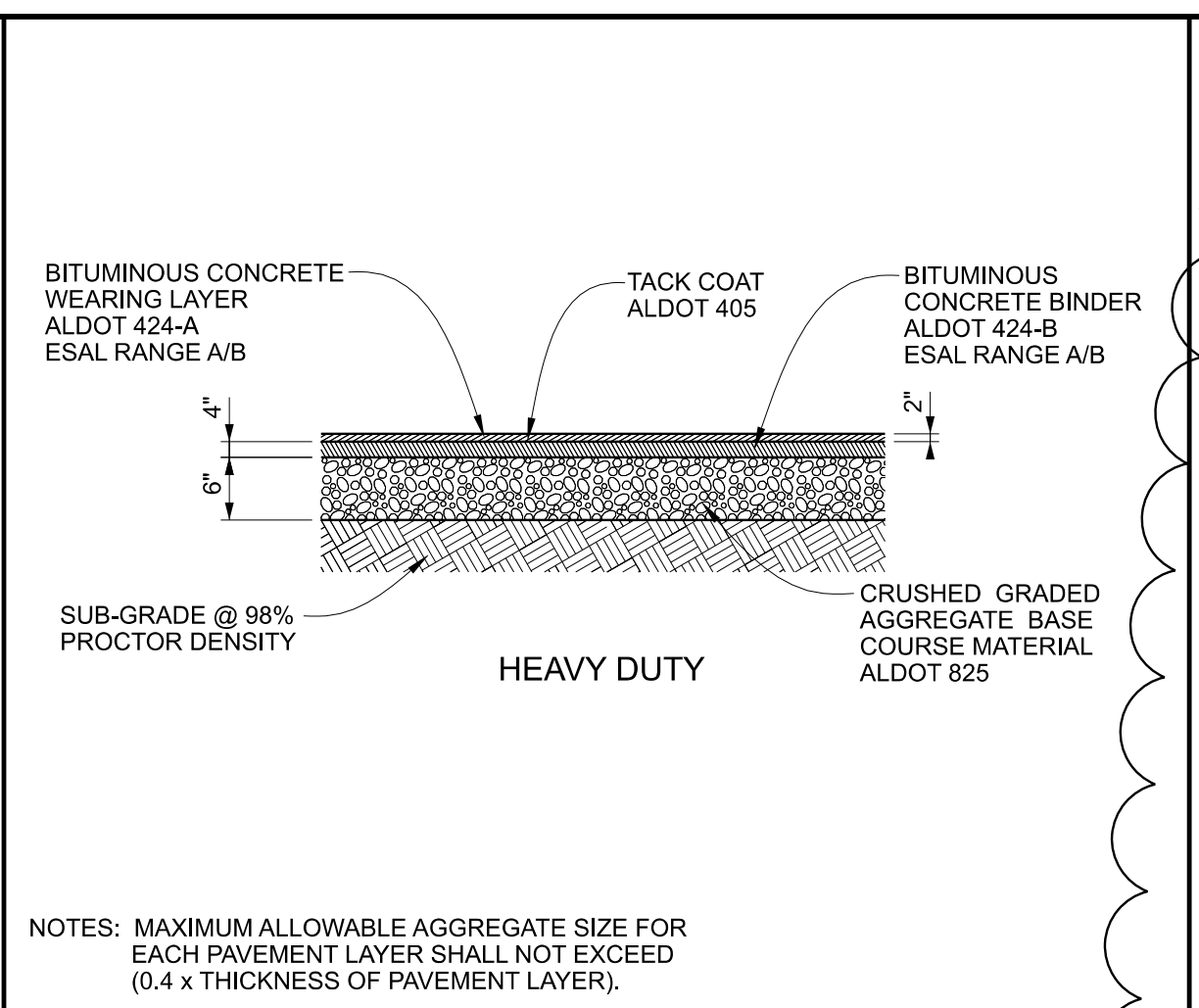
K1 ROOF DRAIN CONNECTION NO SCALE



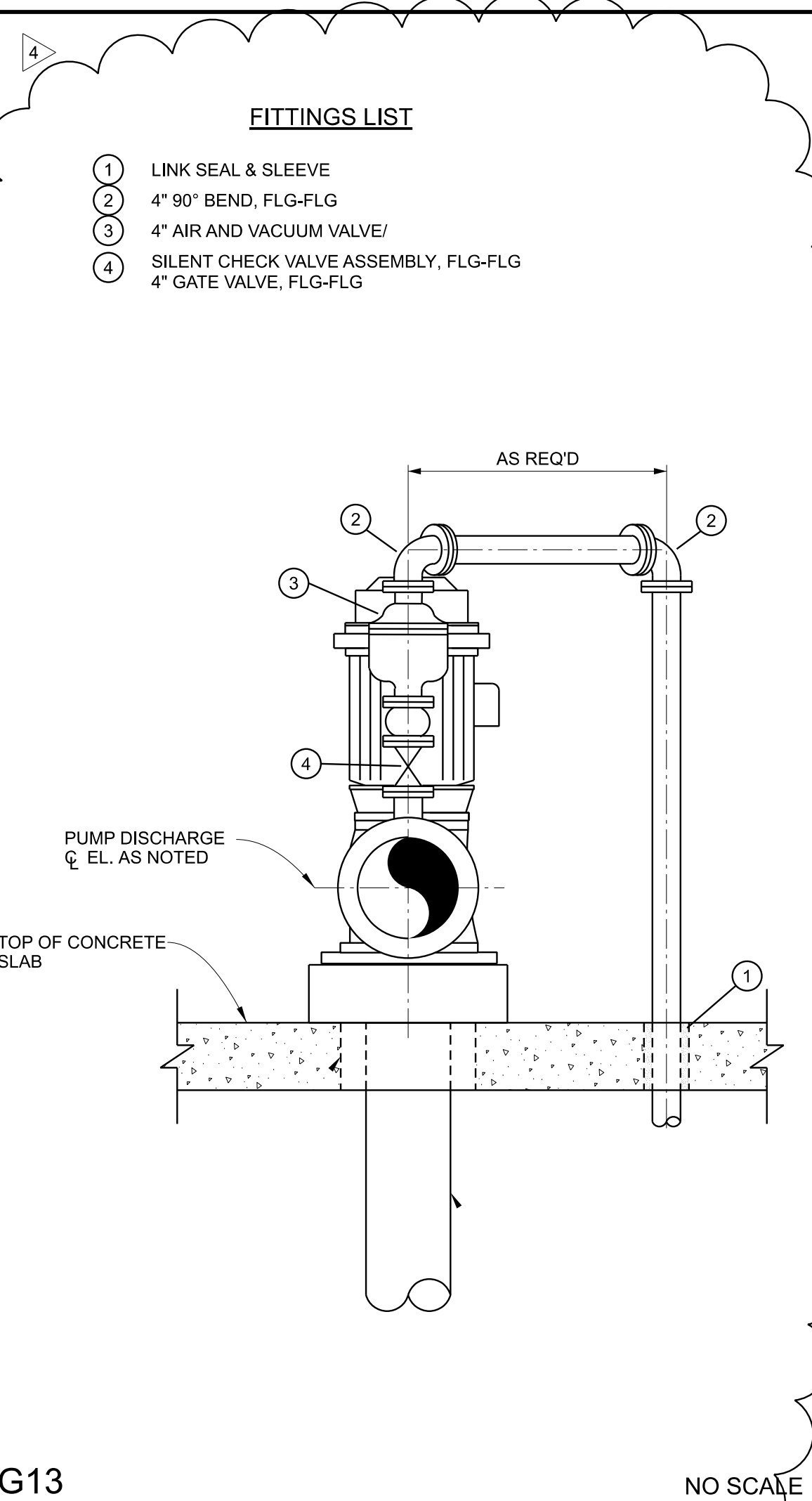
K4 VENT ASSEMBLY DETAIL NO SCALE



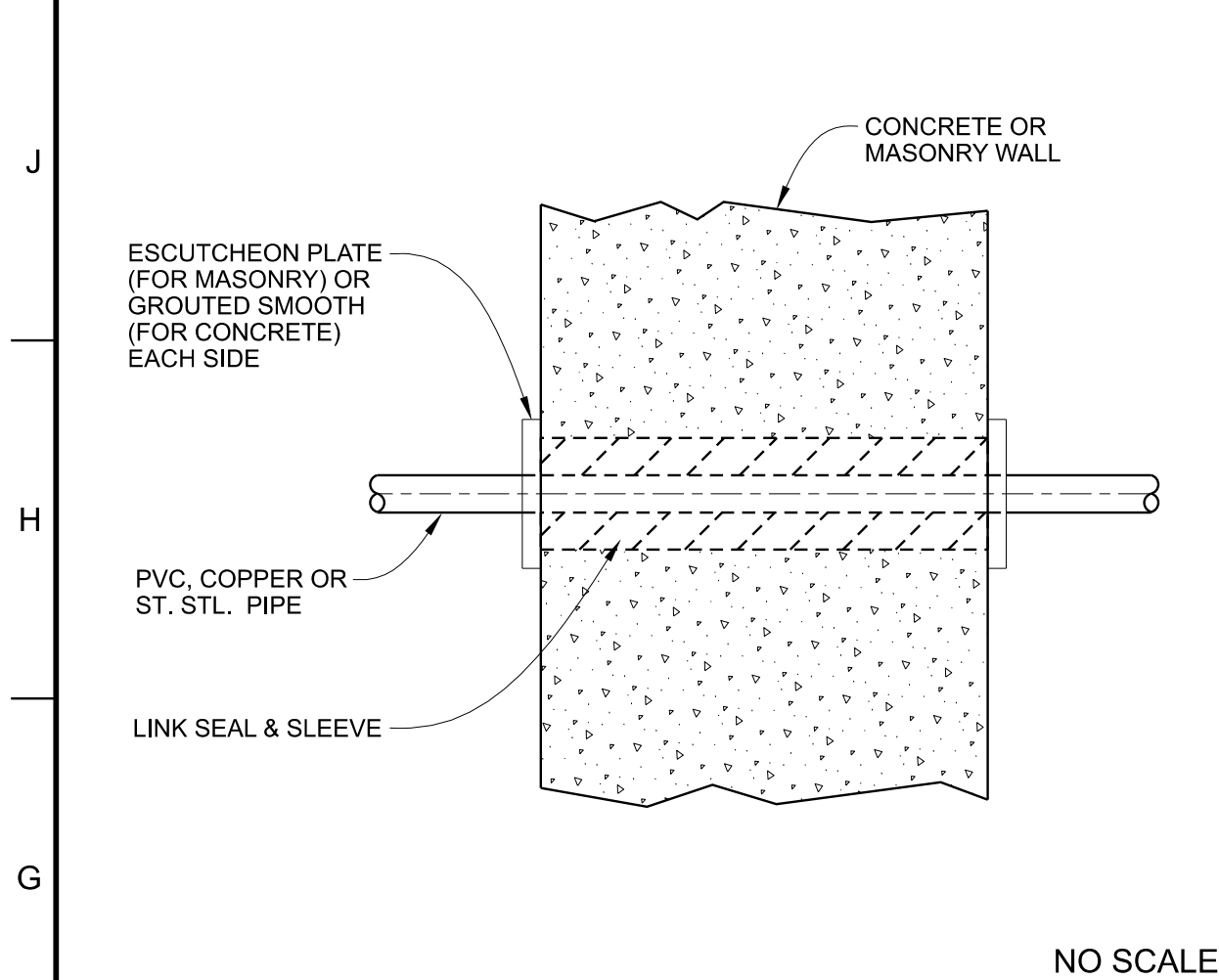
K7 PRESSURE GAUGE ASSEMBLY NO SCALE



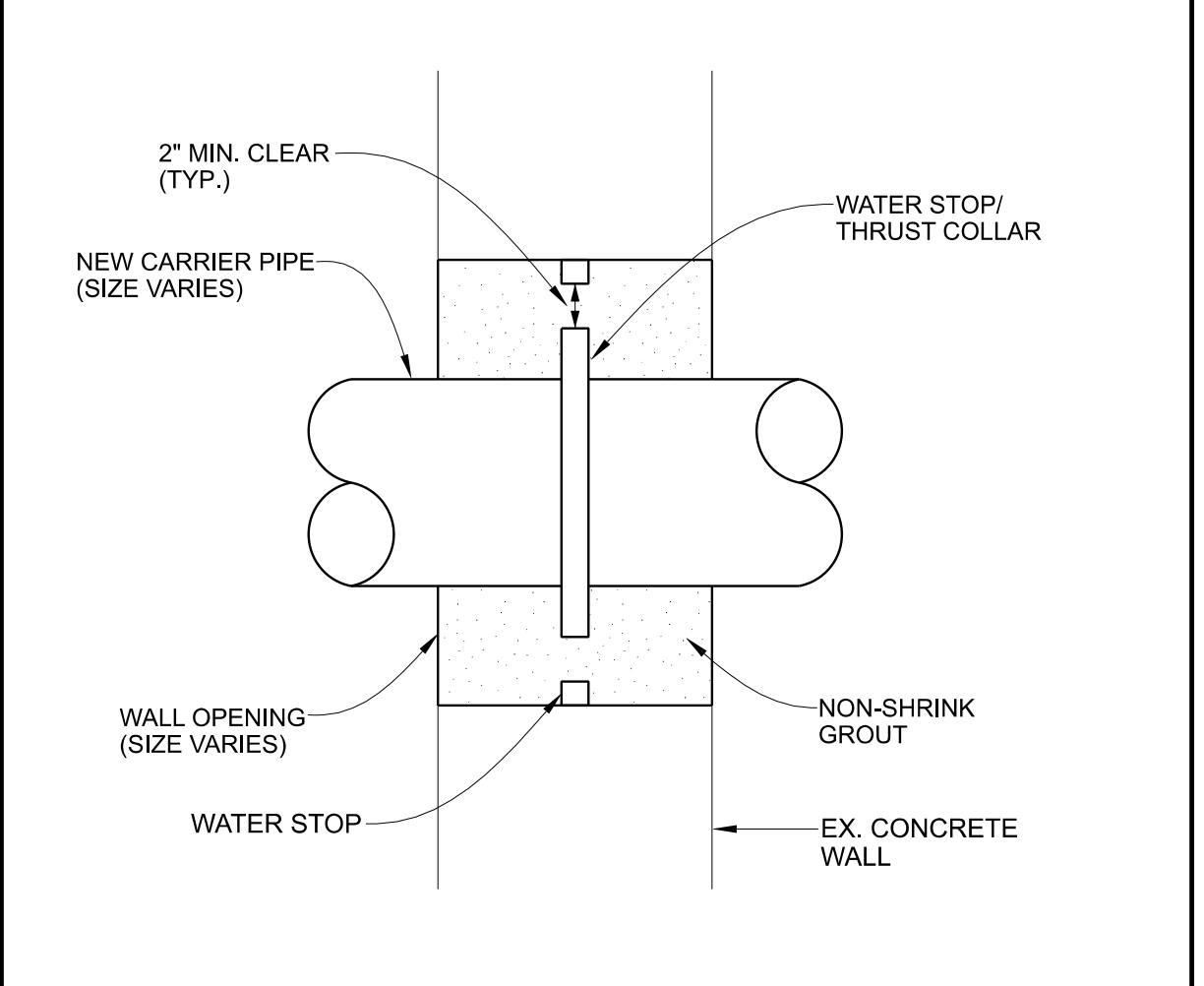
K10 PAVEMENT SECTION DETAIL NO SCALE



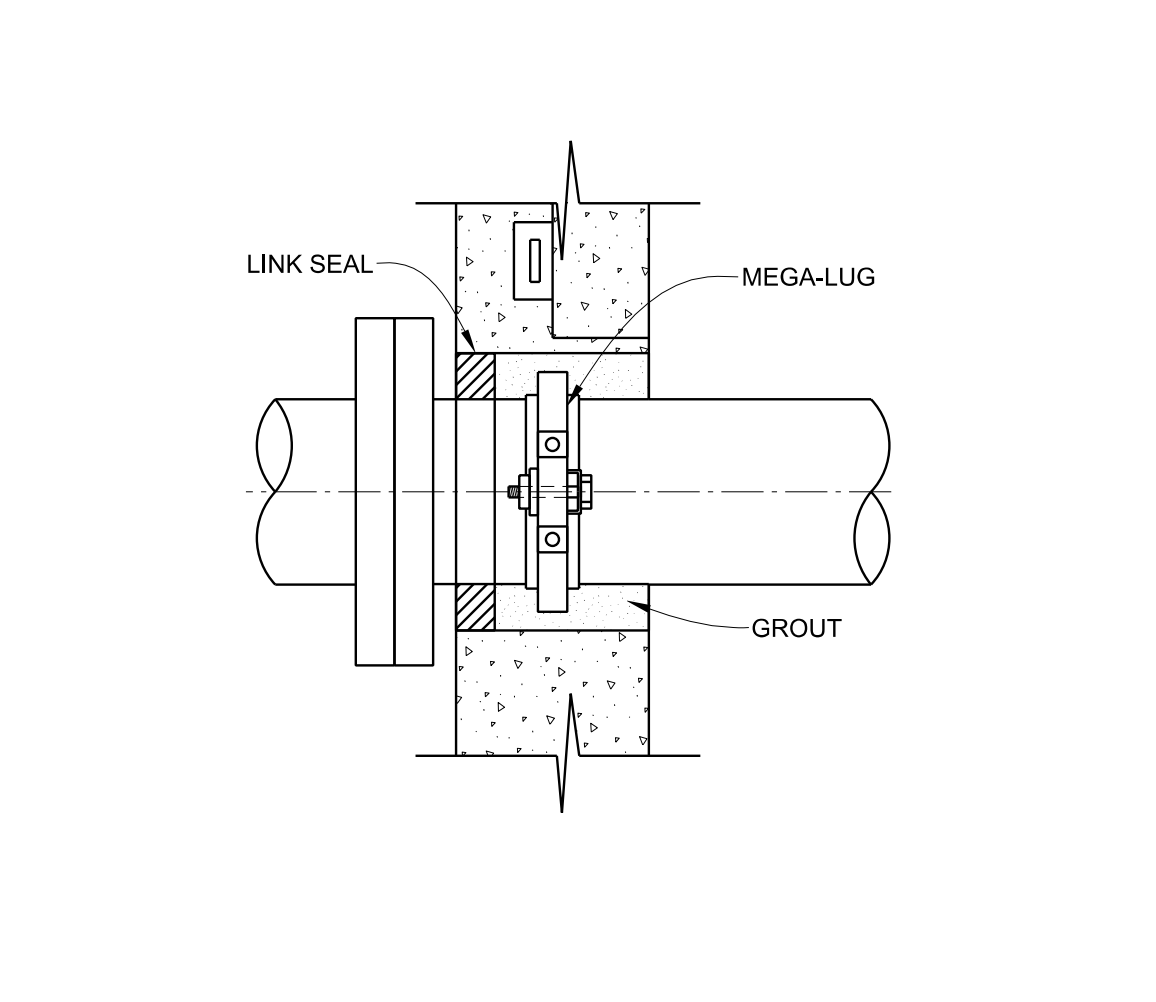
G13 AIR RELEASE VALVE & PIPING DETAIL NO SCALE



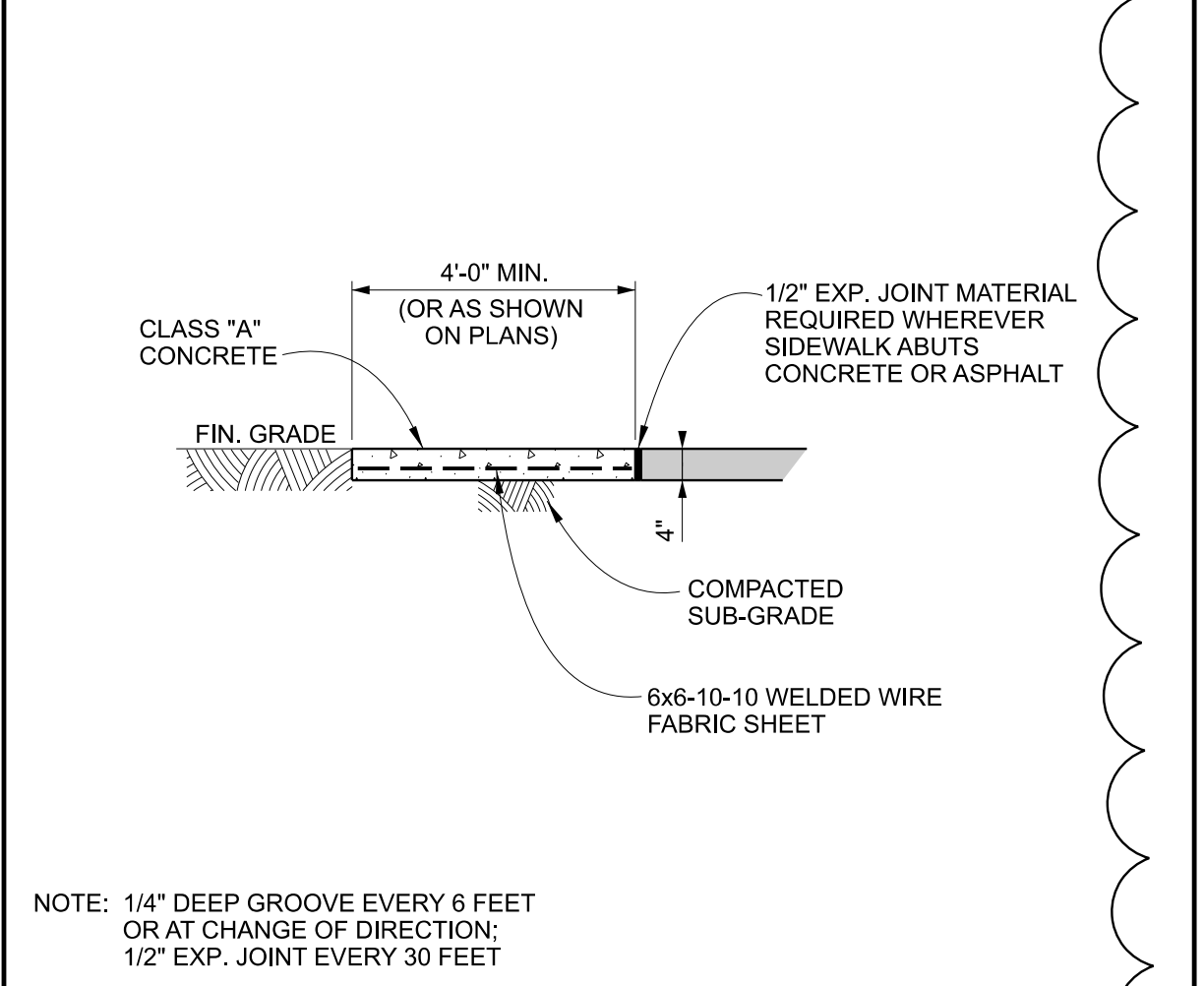
G1 TYP. WALL PENETRATION (SM. DIA. PIPE) NO SCALE



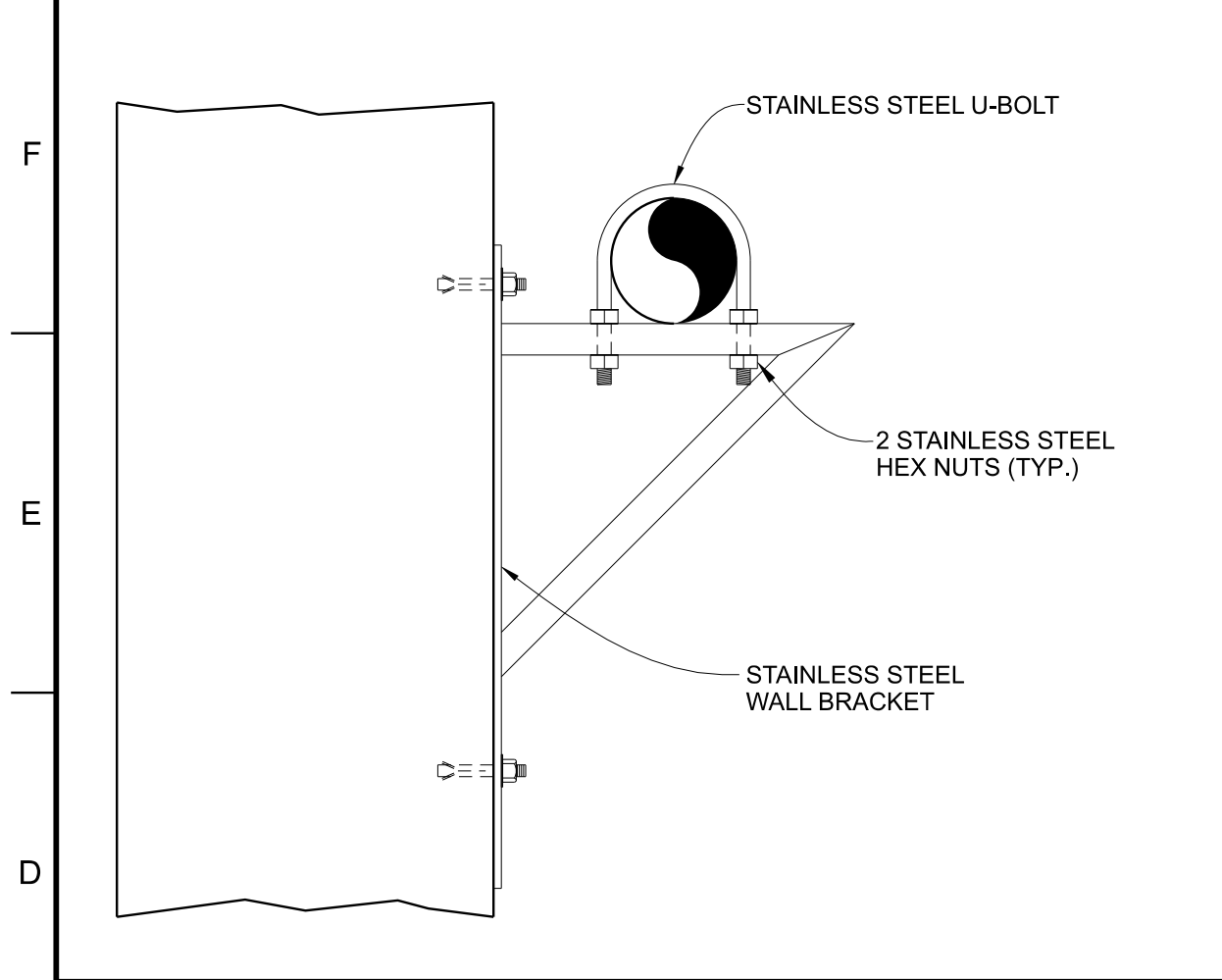
G4 WALL PENETRATION DETAIL NO SCALE



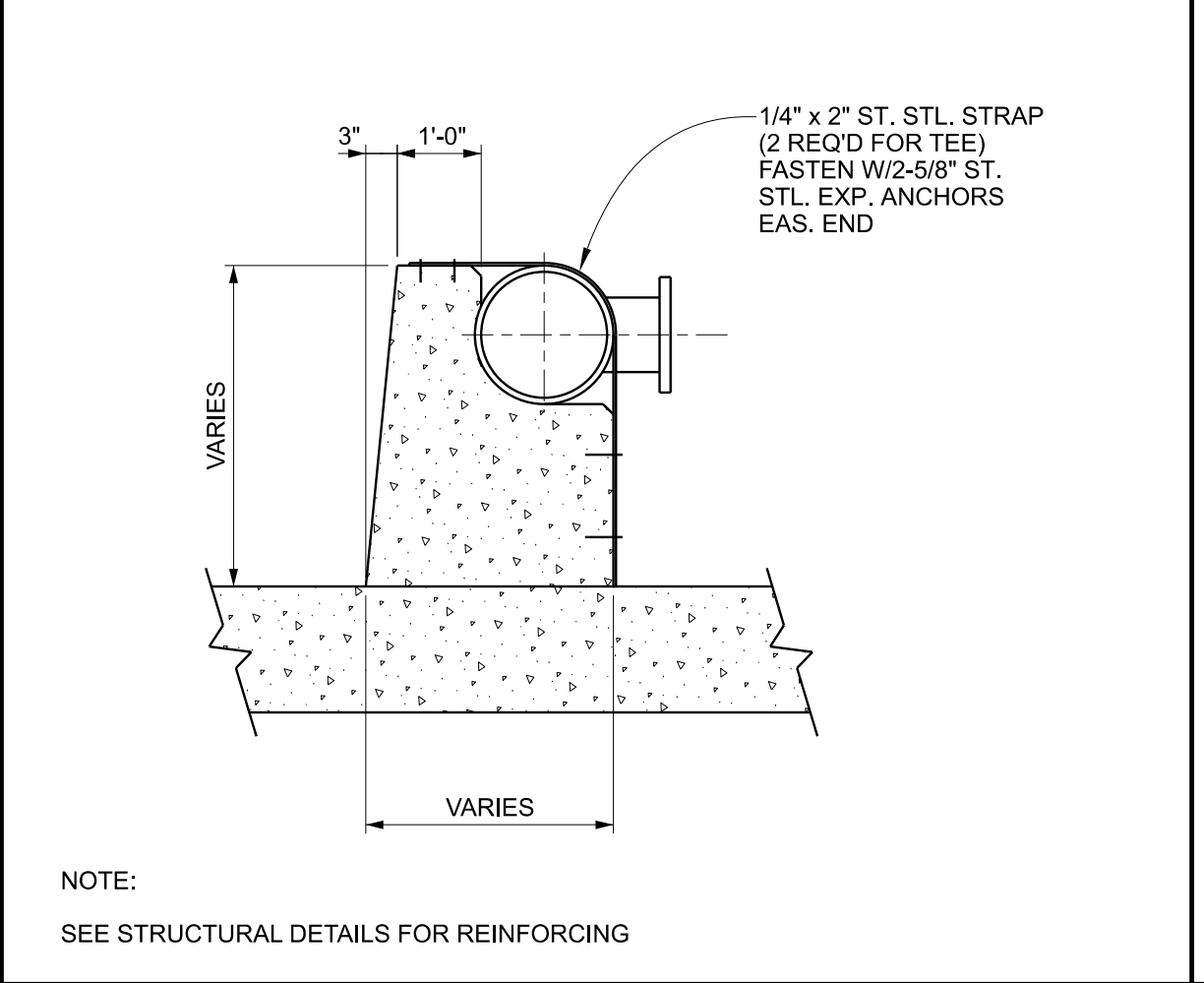
G7 LINKSEAL DETAIL NO SCALE



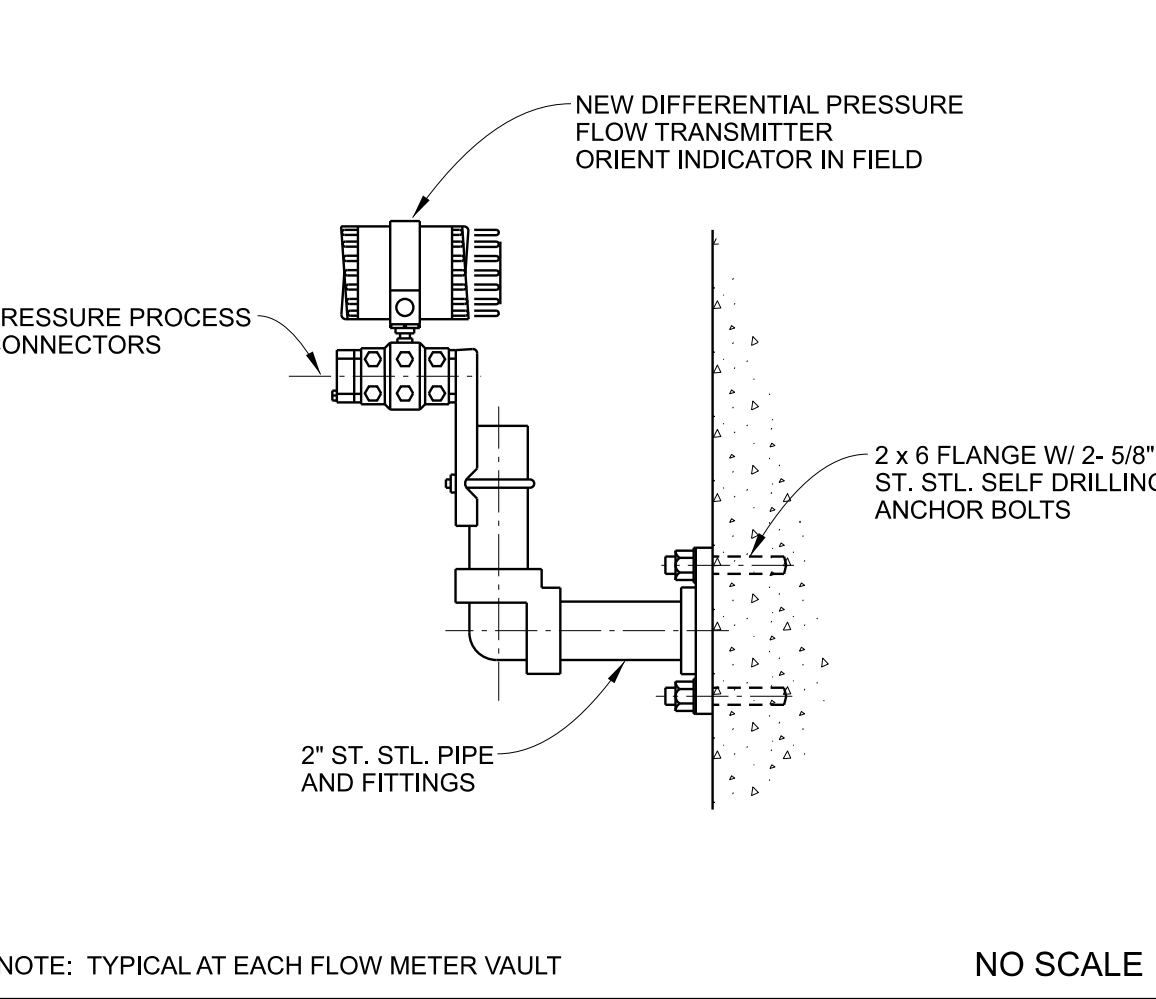
G10 CONCRETE SIDEWALK DETAIL NO SCALE



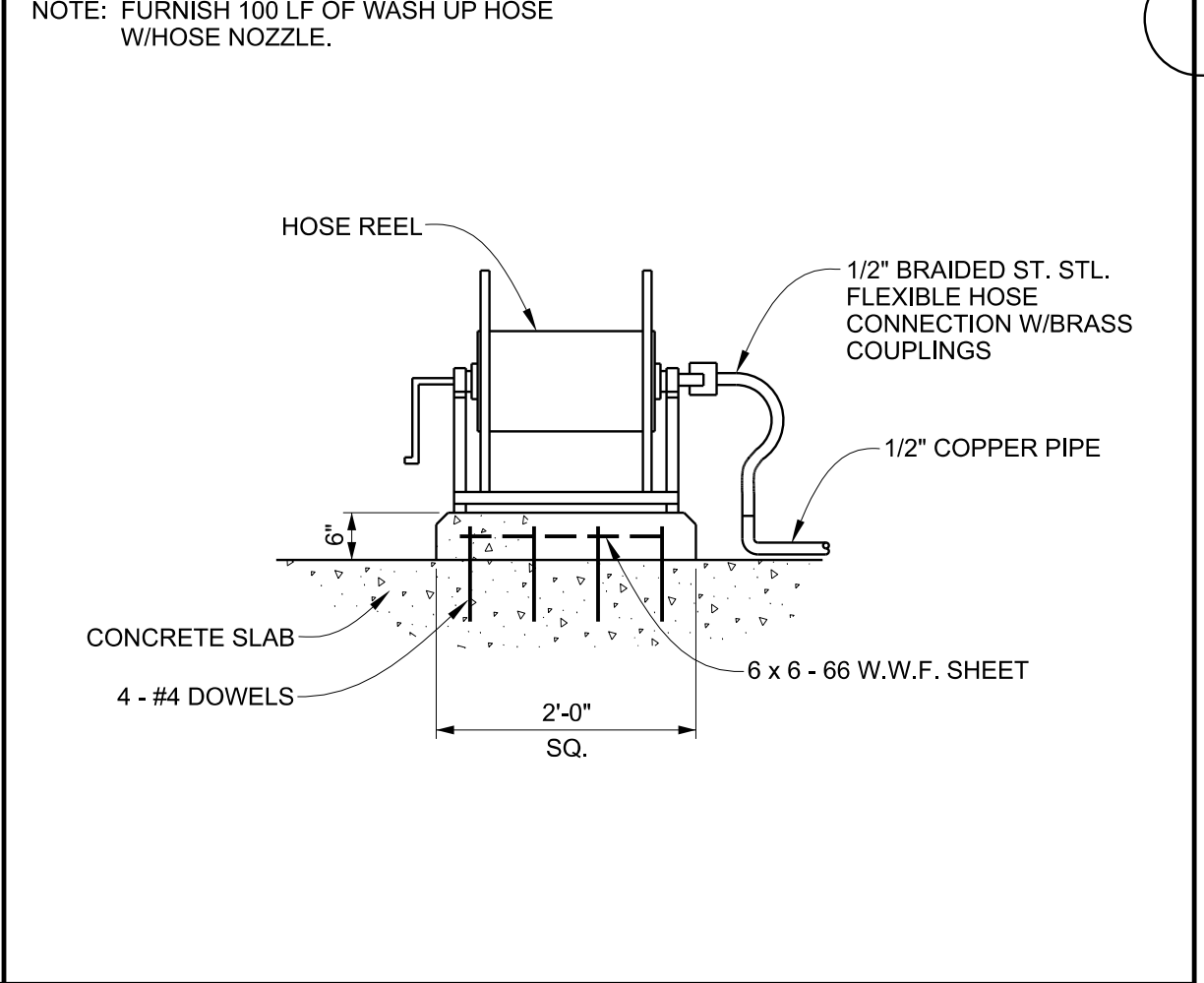
D1 PIPE SUPPORT DETAIL NO SCALE



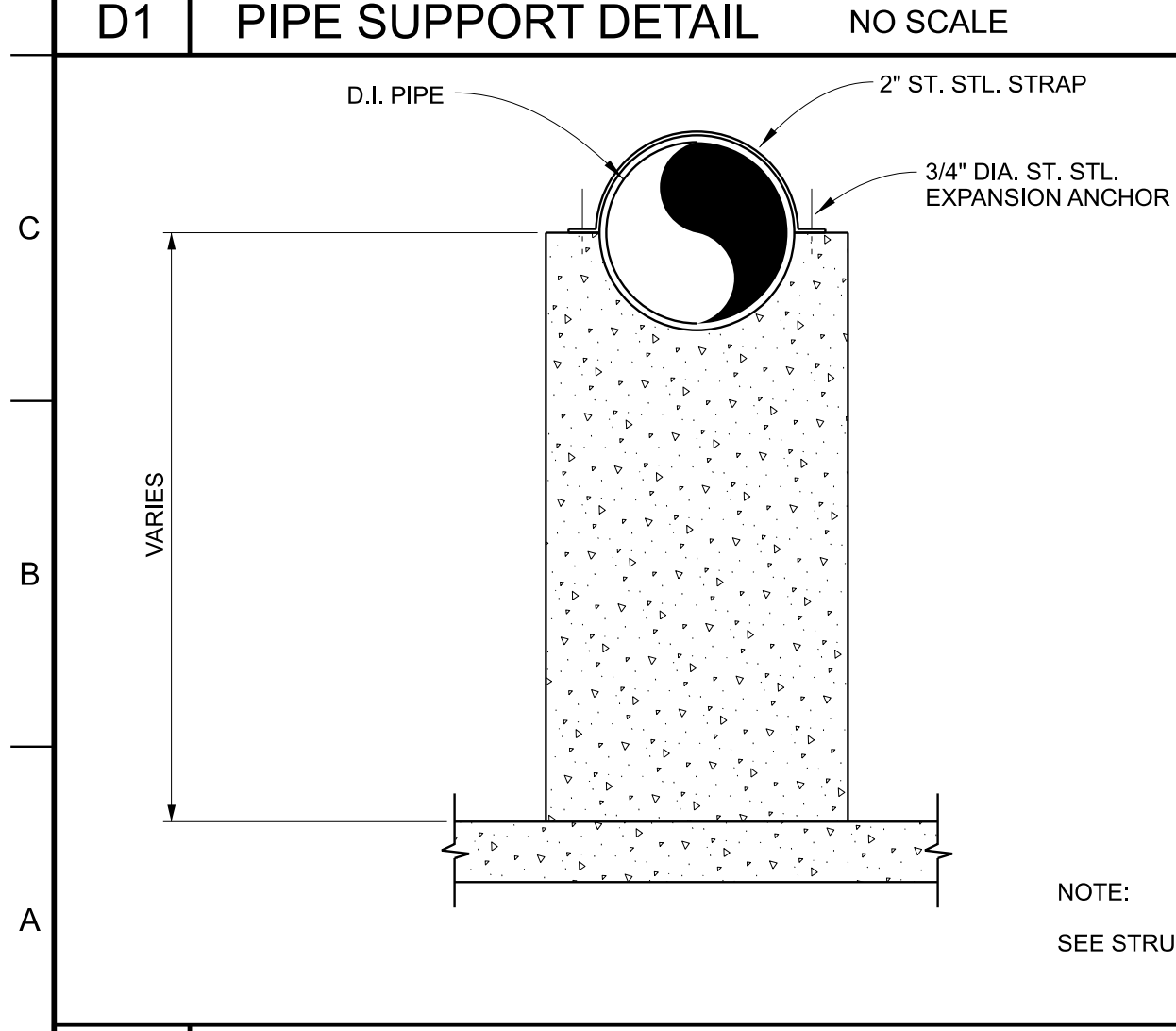
D4 CONCRETE PIPE SUPPORT NO SCALE



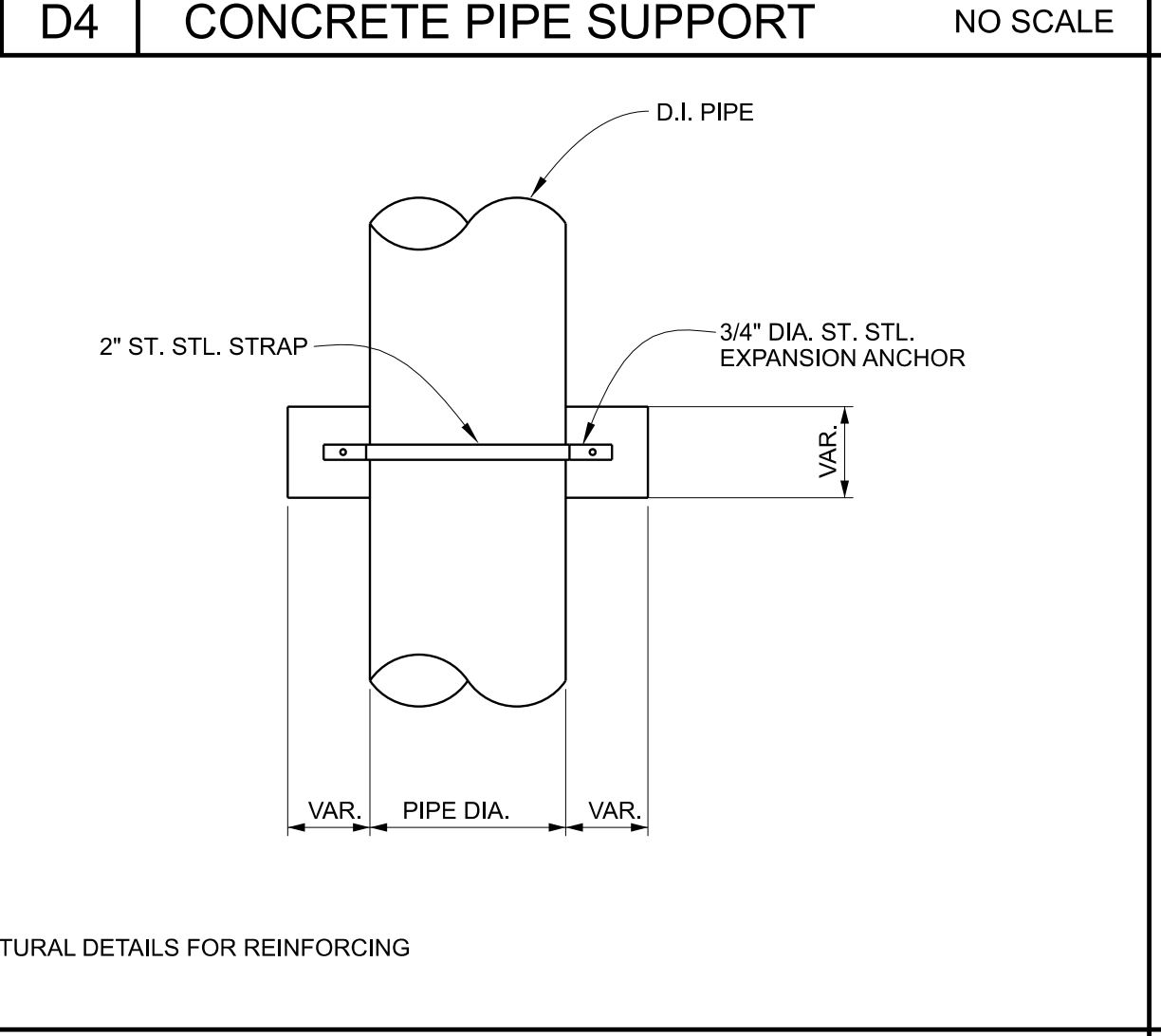
D7 TRANSMITTER MOUNTING DETAIL NO SCALE



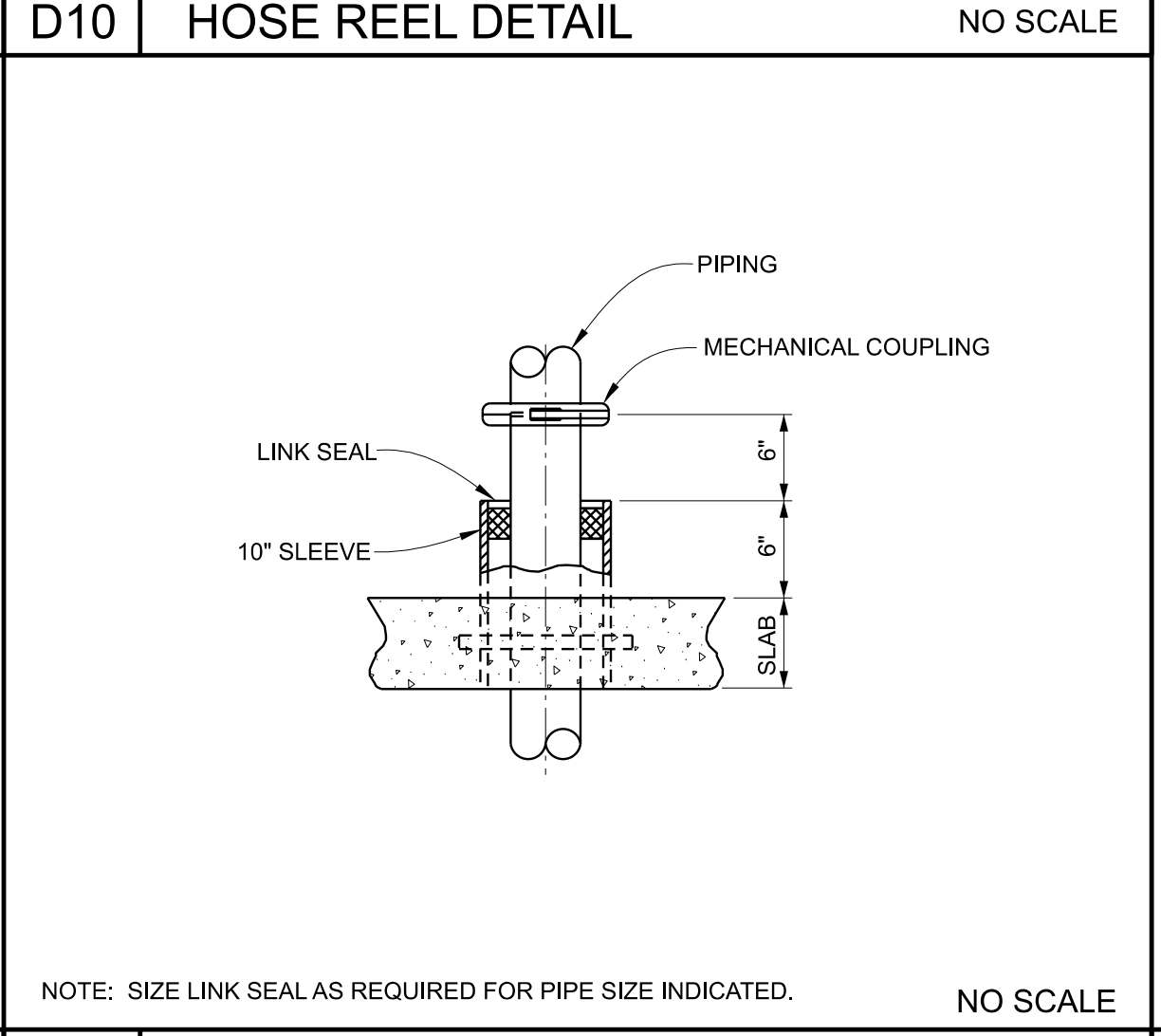
D10 HOSE REEL DETAIL NO SCALE



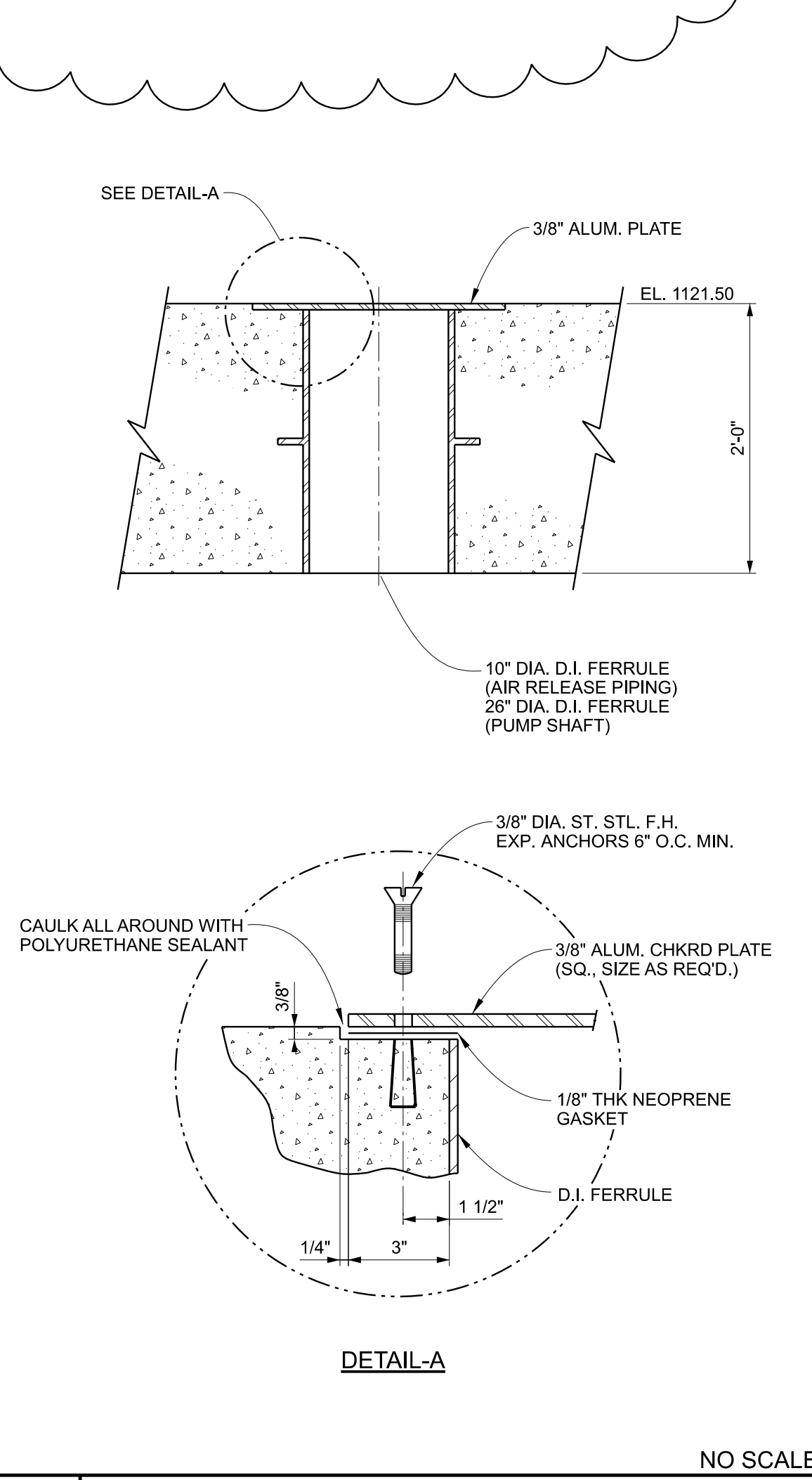
A1 CONCRETE PIPE SUPPORT DETAIL NO SCALE



A7 FERRULE FOR LEVEL PROBE DETAIL NO SCALE



A10 SLAB PENETRATION FERRULE DETAIL NO SCALE



A13 FERRULE FOR FUTURE PIPING DETAIL NO SCALE

KREBS ENGINEERING

Alabama License No. 31631
Professional Engineer
05/15/2022

BID SET

CITY OF FAIRHOPE

WATER TREATMENT PLANT NO. 3 EXPANSION

FAIRHOPE, ALABAMA

CITY OF FAIRHOPE ALABAMA

Designed	ADM	Project No.	
Drawn	ADM / CLM		21036
Checked	OLL		
Revisions	No.	Date	Description
	4	6/24/2022	ADDENDUM NO. 4

Sheet Title: **MISCELLANEOUS DETAILS**

Issue Date: **MAY, 2022** Sheet No. **DT-02**

Sequence: 63 of 92

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 05/15/2022
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