

**ADDENDUM NO. 1**

**PROJECT NAME: City Campus Utility Plant Chiller Replacement Project General Installation Contract Package**

**UNL PROJECT NUMBER: C028P232**

DATE OF ISSUANCE: December 9, 2011

DATE PROPOSALS DUE: December 20, 2011 2PM CST

The bid documents dated November 23, 2011 for the above referenced project are amended by this addendum.

NOTICE: This Addendum is issued to all interested prospective proposers as an amendment to the Project Manual or other parts of the bidding (contract) documents for the above named project. Reference to this Addendum must be included in the Bid proposal. The information contained herein shall be fully incorporated into the contract documents as though originally included therein.

**GENERAL INFORMATION:**

**1. Chiller Shipping Weight**

The shipping weight of each chiller is 87,283 lbs; the operating weight is 109,159 lbs.

**2. Chiller Delivery, Section 01 10 00 Page 8 of 12**

Paragraphs 1.8B1a and b.: After Item b insert the following paragraph:

In the event the Contractor has not completed the new chiller structural support framing and foundation by the date of arrival of the two new chillers, the two new chillers shall be stored in an Owner approved indoor structure by the Contractor. Once the new chiller structural support framing and new concrete support foundations have been installed, the new chillers may be installed at their permanent locations.

As an option to the above, the Contractor may make arrangement with the chiller manufacturer, York/JCI to schedule delivery of the chillers to the site that will allow the Contractor to unload the chillers and set them at their permanent locations once the new chiller structural support framing and foundation have been installed.

**3. Appendix B, Chilled Water Pump & Tower Water Pump Submittals-Minor changes to the Patterson Pump Company Chilled Water Pump & Tower Water Pump submittals in Appendix B have been made. New replacement Appendix B pages will be provided to the Contractor at a later date.**

4. **Prebid Meeting Notes**-The prebid meeting notes are attached hereto and are made an integral part of the contract documents.

5. **MODIFICATIONS TO THE PROJECT DRAWINGS**

- 1) The month printed in the PE seal of Tom Shepard should have been "11" and not "1".
- 2) New Drawings MN804, MN805 and MN806 shall be included in the contract drawing set. These drawings shall be added to the Drawing Lists on Drawing GN001 and specification Section 00 01 15.
- 3) Rev 1 of Drawings AN403, AN501 and AN502 have been revised to show additional expansion joint details for new CBA wall interface to existing chiller building as well as revised tower water pump anchor bolt dimensions.
- 4) Drawing MN101: Note in the lower right hand corner just above the title block shall be revised to read as follows:

PROTECT AIR/DIRT SEPARATOR BELOW GRADE DRAIN PIPING FROM CORROSION BY APPLYING TWO COATS OF COAL TAR EPOXY PAINT TO CLEAN, DRY EXTERIOR PIPE METAL SURFACE. THE FIRST COAT SHALL BE DRY AND HARD BEFORE THE SECOND COAT IS APPLIED. COAL TAR EPOXY COATING SHALL BE 46-413 TNAME-TAR OR ENGINEER APPROVED EQUAL.

END OF ADDENDUM NO. 1

Attachments to Addendum:

- 1) One Page Prebid Meeting Notes
- 2) Six Drawings: New Drawings MN804, MN805 and MN806 as well as revised Drawings AN403, AN501 and AN502.

## MEETING NOTES

**Project Name:** CCUP Chiller Replacement,  
General Installation Contract Package  
**Project Number:** C028P232

**FP&C Representative:** Brooke Hay  
**Location:** 1901 Y St., 905 N. 14<sup>th</sup> St.  
**Date:** 12/6/11      **Time:** 10 AM CST

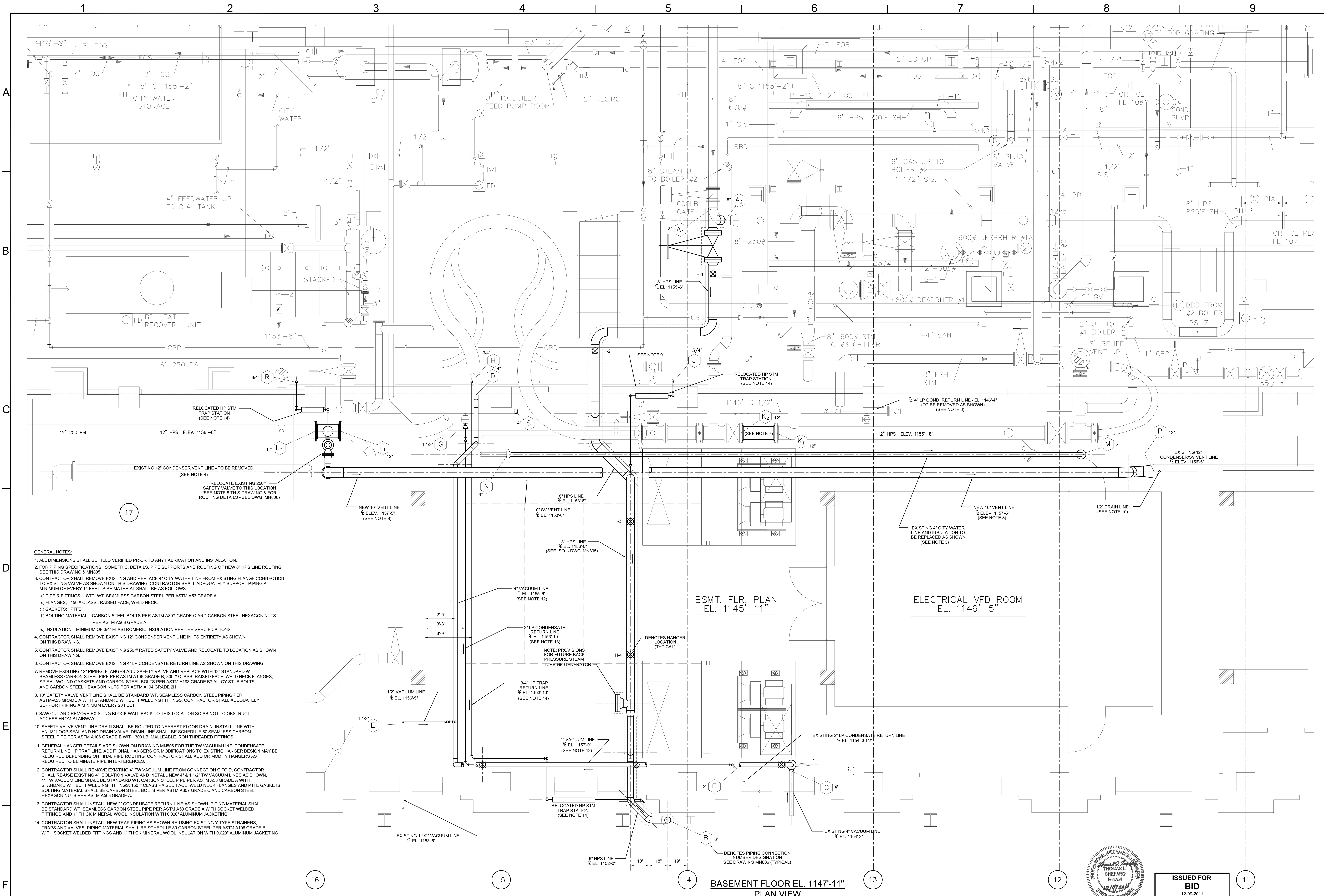
**ATTENDEES:** See attached list.

Highlights of the pre-bid discussion follow.

1. Questions and requests for substitution must be submitted in writing to Brooke by end of the day, 12/9/11. (bhay2@unl.edu)
2. No addenda have been issued to date. First one is planned for Friday, 12/9/11. Final one will be issued no later than Tuesday, 12/14.
3. Addendum 1 will include the relocation of a high pressure steam line and other miscellaneous piping. Questions from the pre-bid that need to be incorporated into the contract documents will also be addressed, including the weight of the chillers.
4. Note the required breakdown of the total lump sum on the bid form. This is for funding tracking purposes. The Schedule of Values for the project will also have to be split according to these 3 categories.
5. Contractor to provide the duration of the project. Date should be realistic; contract date with liquidated damages will be based on bid. Timely completion is beneficial to UNL and thus preferred.
6. The switchgear package bids on 12/16/11.
7. Some work will have to be performed during UNL pre-scheduled utility outages.
  - a. The CW outage will be March 18 – 24, 2012. Contractor should expect 1 day to drain the system at the start and 1 day to fill the system at the end. All associated work must be completed during the provided window.
  - b. The steam outage will be May 6 – 11, 2012. The safety relief valve in addendum 1 will have to be handled during this time.
8. The sidewalk on the west side of 14<sup>th</sup> St., on the east side of the project, may be closed when necessary. However, the sidewalk should remain open as much as possible. To close, prior approval and arrangements with UNL are required. Appropriate signage must be provided during the closure.
9. Delivery of Owner provided equipment/materials to the site will be coordinated with the Contractor. Timing will be adjusted to the extent possible when requested.
10. A 3D model has been prepared during design and will be available to the selected Contractor.
11. Estimated GIC budget is \$2 million.
12. The East window wall is to be fully removed. Some of it has already been replaced with a temporary structure.
13. Asbestos abatement will be handled by a separate contract; work will have to be coordinated for the abandoned steam duct that is being removed.

Notes prepared by Brooke Hay. Any comments or corrections should be provided to Project Manager Brooke Hay by 12/9/11.

cc: Attendees, Project File

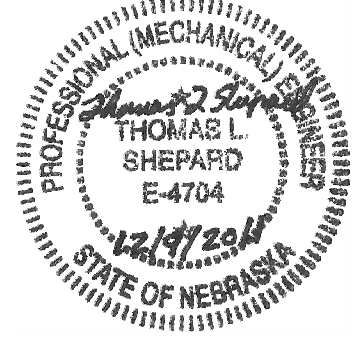
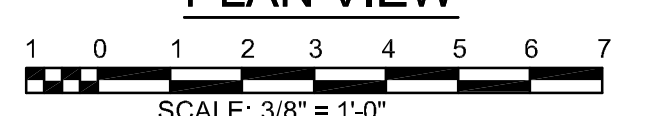


- GENERAL NOTES:**
- ALL DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO ANY FABRICATION AND INSTALLATION.
  - FOR PIPING SPECIFICATIONS, ISOMETRIC, DETAILS, PIPE SUPPORTS AND ROUTING OF NEW 8\"/>

BSMT. FLR. PLAN  
EL. 1145'-11"

ELECTRICAL VFD ROOM  
EL. 1146'-5"

BASEMENT FLOOR EL. 1147'-11"  
PLAN VIEW



ISSUED FOR  
BID  
12-09-2011

ISSUED AS PART OF ADDENDUM NO. 1

CAD DATA	
FILENAME:	240910-CCUP-MN804-REV0
PLOT SCALE:	1:1 (3/4\"/>

ISSUED FOR BID	12-09-2011
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REV	REV

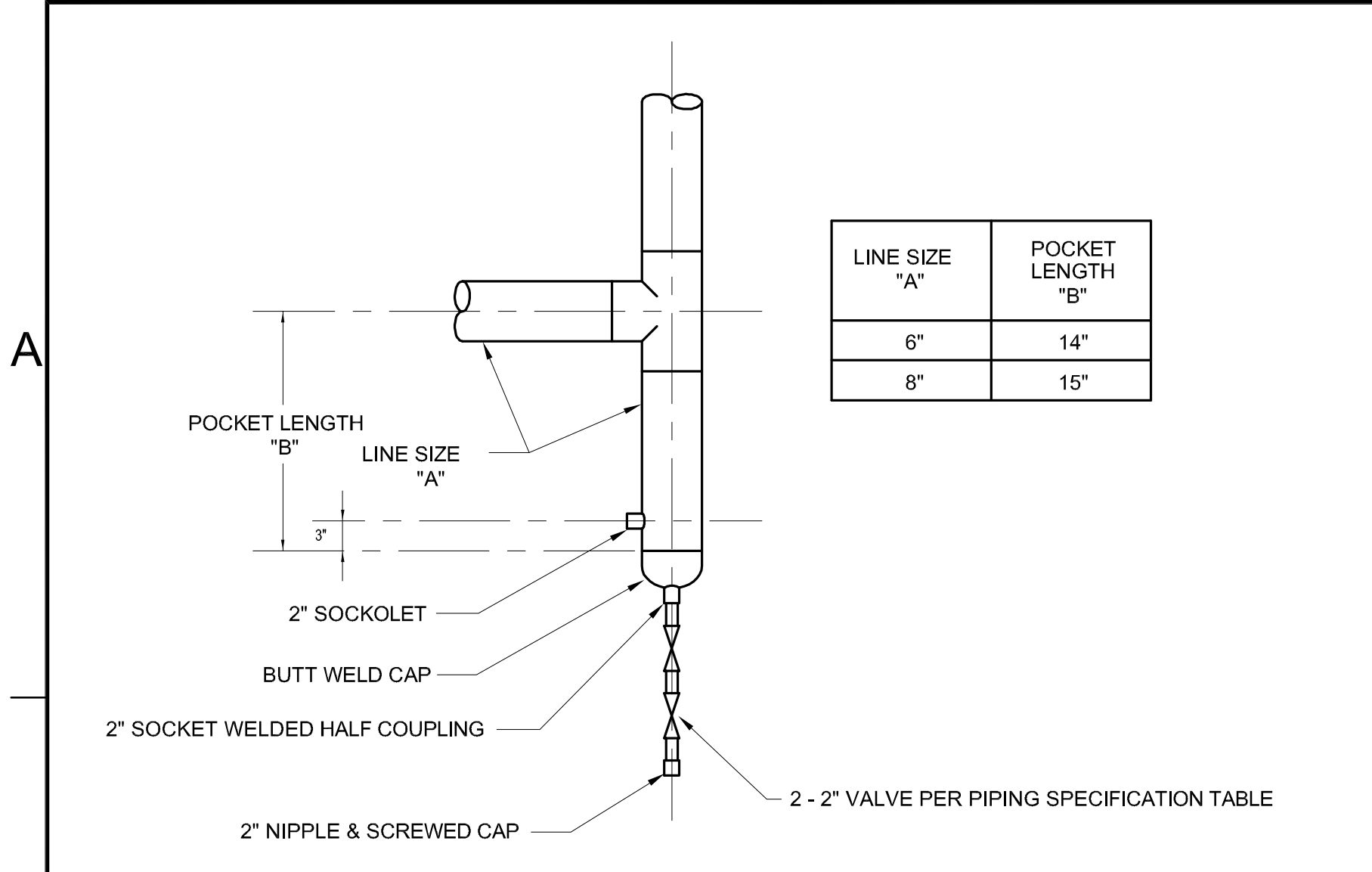
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DESIGN BY:	HWS	CHECKED BY:	HWS
DRAWN BY:	SEL	APPROVED BY:	TLS



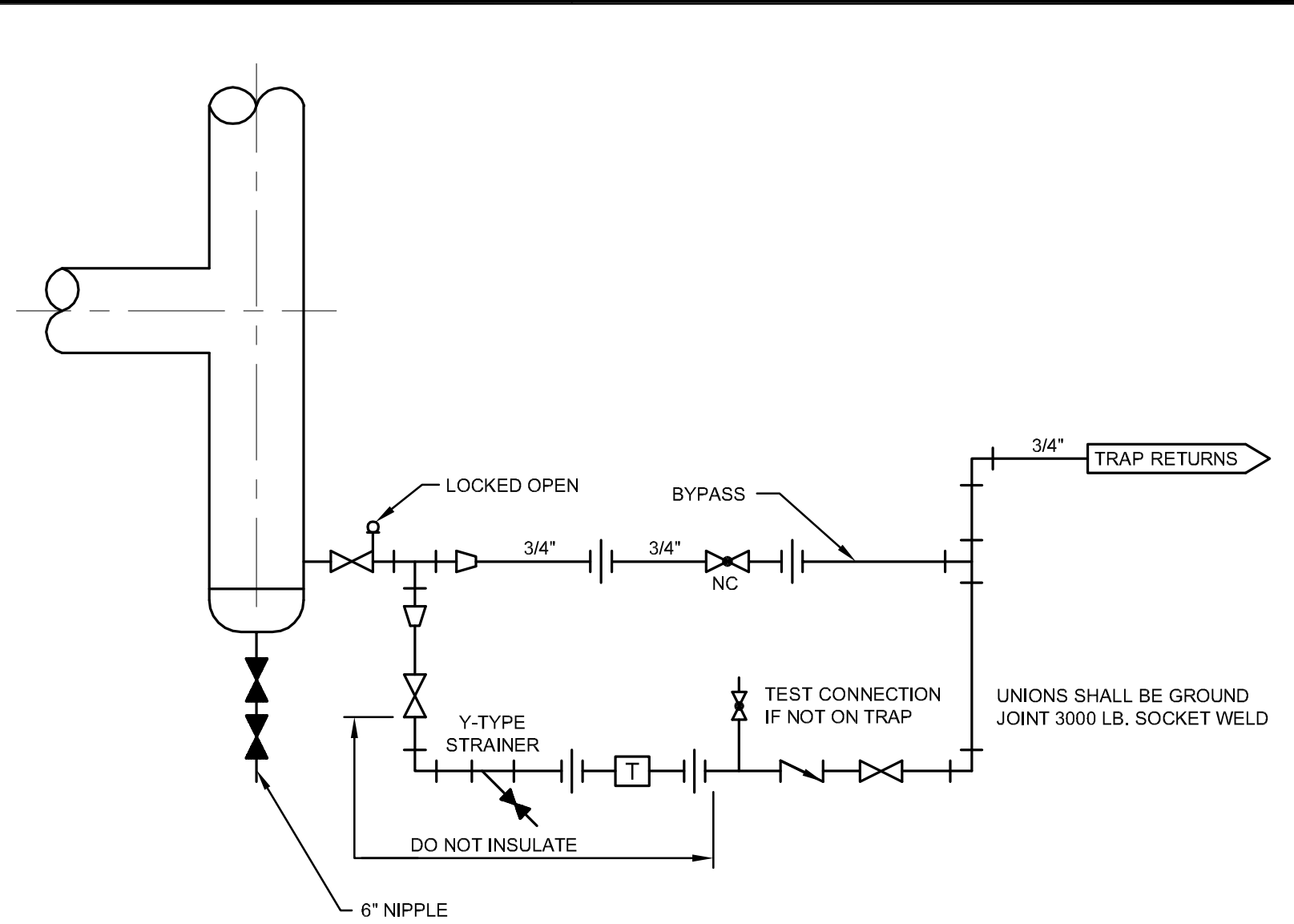
CITY CAMPUS UTILITY PLANT  
CHILLERS 1 & 2 REPLACEMENT PROJECT ID: CO28P232  
GENERAL INSTALLATION CONTRACT PACKAGE

PARTIAL PLAN - TURBINE BAY BASEMENT AREA  
FLOOR EL. 1145'-11"  
REVISED EXISTING PIPE ROUTING

DRAWING NUMBER	MN804
1 OF 3	



**TEE, TRAP DRIP POCKET ASSEMBLY**  
NOT TO SCALE



**STEAM TRAP STATION**  
CONTRACTOR SHALL RE-USE EXISTING STEAM TRAPS, Y-TYPE STRAINERS AND VALVES.

**SPECIFICATIONS**

UNLESS OTHERWISE NOTED PIPING AND THE PIPING SPECIFICATIONS SHALL BE AS FOLLOWS:

PIPE SCHEDULE & MATERIAL: 8" & SMALLER - SCHEDULE 80, SEAMLESS CHROME MOLY STEEL PER ASTM A335 GRADE P11.

FITTINGS: 8" & 6" - SCHEDULE 80, BUTT WELDED PER ASTM A234 GRADE WP11 OR ASTM A217 GRADE WC6, 2" & SMALLER - 3000-LB SOCKET WELDED PER ASTM A234 GRADE WP11 OR ASTM A217 GRADE WC6.

VALVES: 8" 600 # CLASS GATE VALVE WITH RAISED FACE FLANGES, CHROME MOLY STEEL PER ASTM A182 GRADE F11 OR A217 GRADE WC6 WITH STELLITE FACING.

VALVES: 2" & SMALLER 900 # CLASS SOCKET WELDED GATE VALVES, CHROME MOLY STEEL PER ASTM A182 GRADE F11 OR A217 GRADE WC6 WITH STELLITE FACING.

FLANGES: 600 # CLASS, RAISED FACE, WELD NECK, FORGED CHROME MOLY ALLOY STEEL CONFORMING TO ANSI B16.5 WITH SURFACE FINISH CONFORMING TO MSS-SPR.

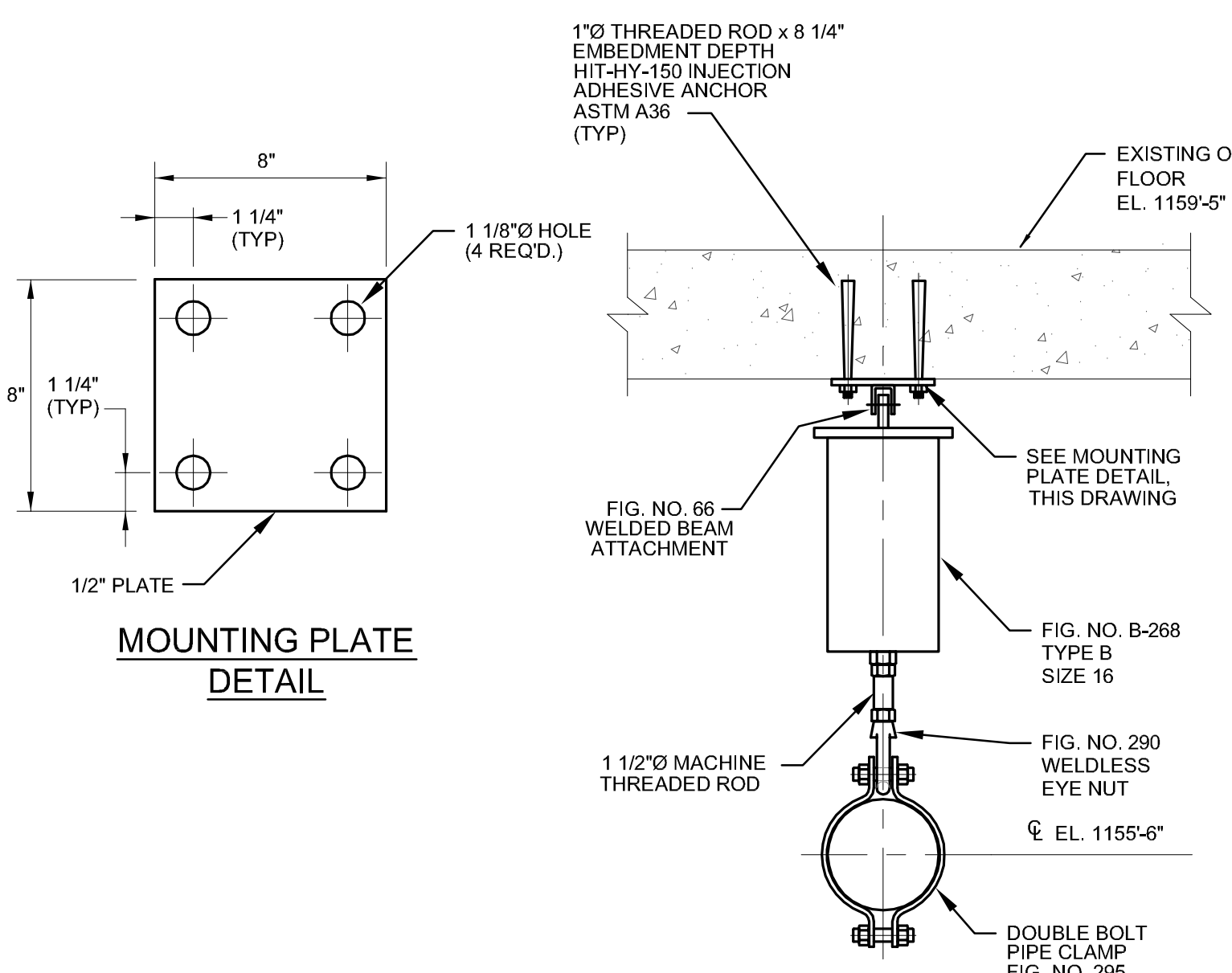
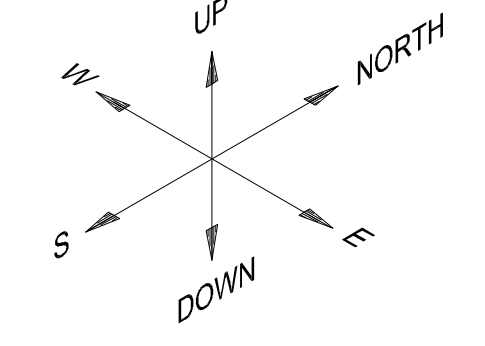
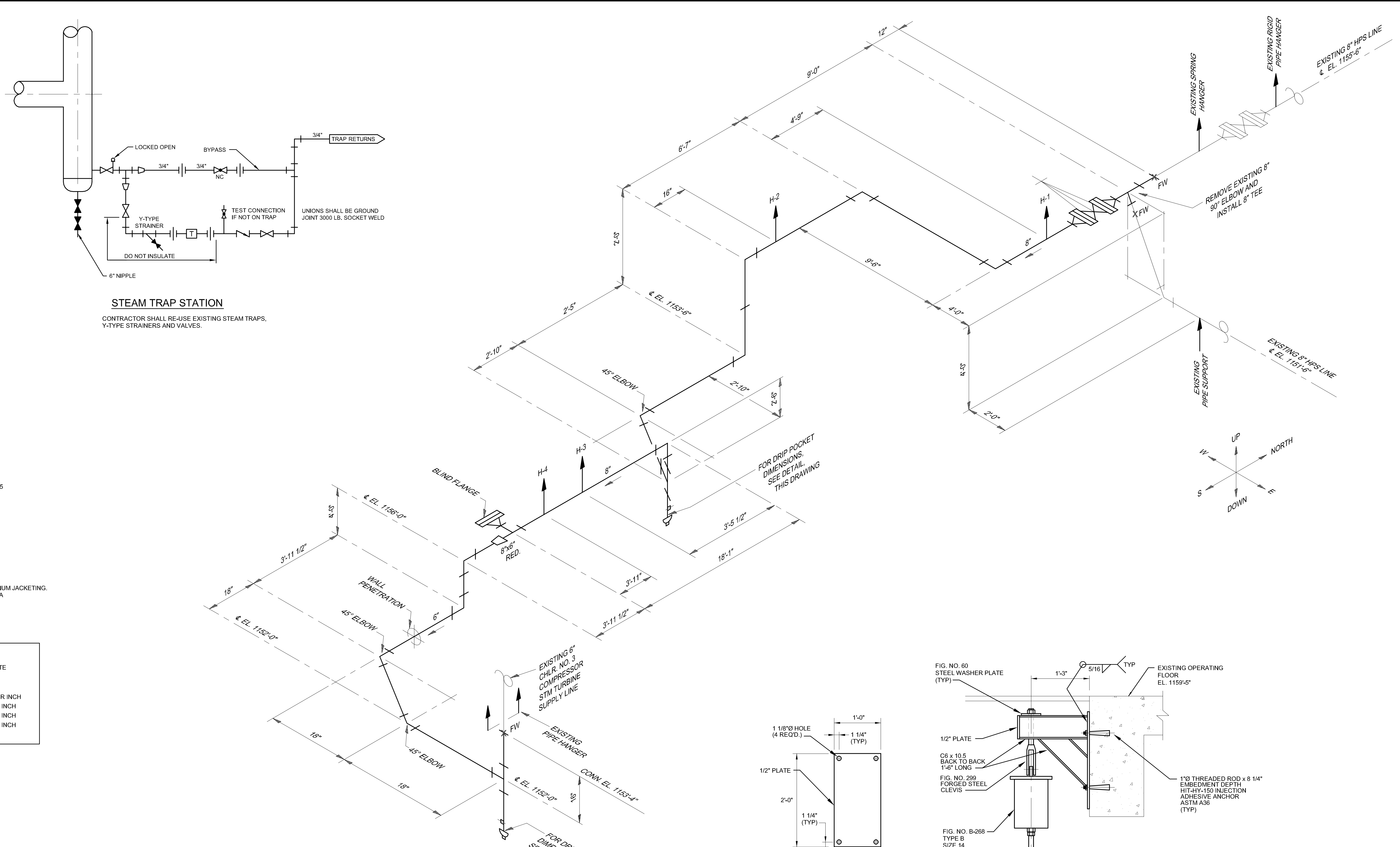
FLANGE BOLTS: ASTM A193 B16 GRADE 4 CHROME MOLY ALLOY STEEL STUD-BOLTS THREADED THE ENTIRE LENGTH AND ASTM A194 GRADE 4 CHROME MOLY ALLOY STEEL HEXAGON NUTS.

FLANGE GASKETS: 1/16" THICK SPIRAL WOUND MANUFACTURED WITH AN ALTERNATING COMBINATION OF FORMED METAL WIRE AND SOFT FILLER MATERIALS. WINDING AND FILLER MATERIALS SHALL BE AS RECOMMENDED BY THE MANUFACTURER FOR STEAM AT 625 PSIG AND 900° F. GASKETS SHALL BE GARLOCK FLEX SEAL RW OR RW1 OR ENGINEER APPROVED EQUAL.

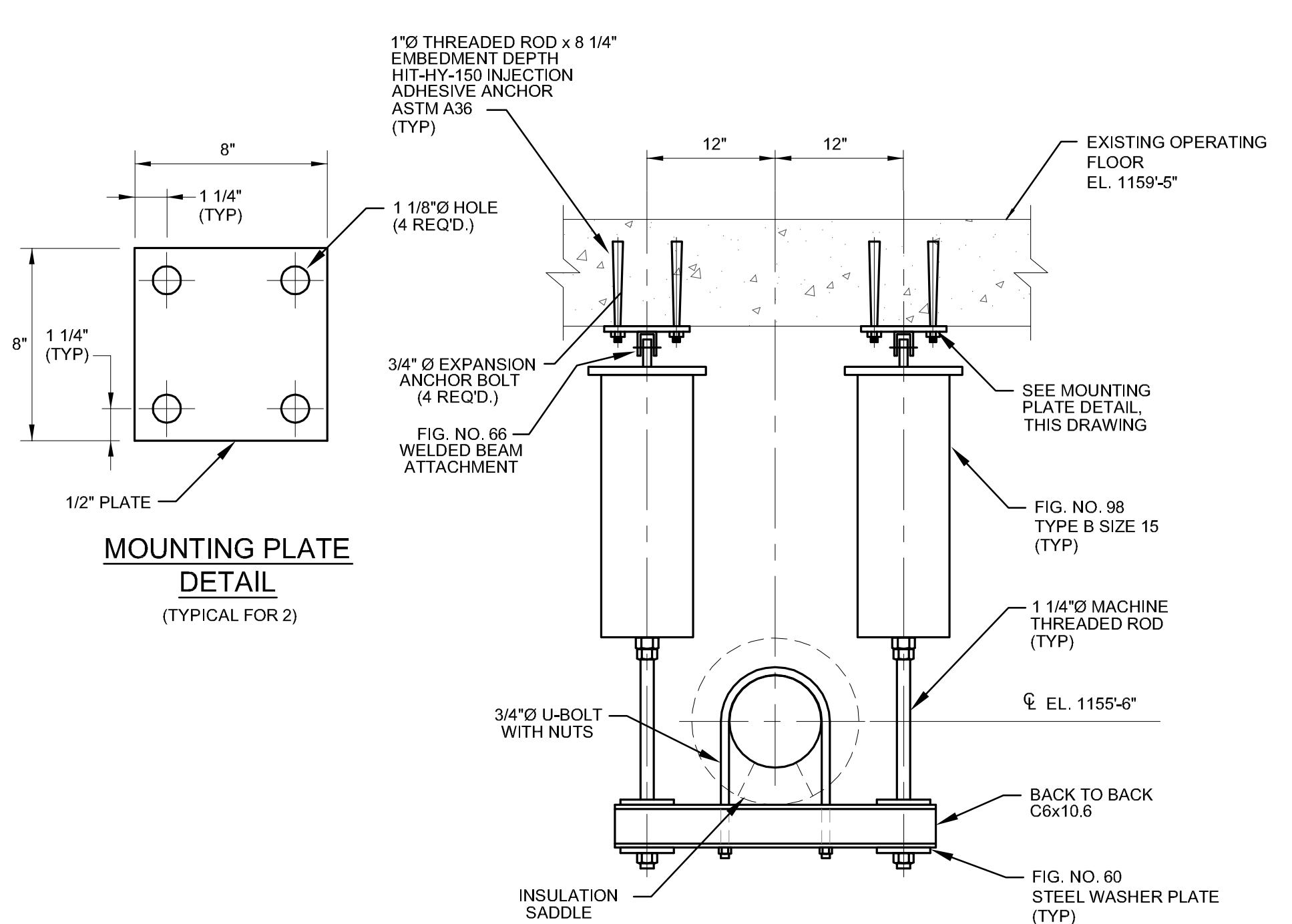
INSULATION: TWO STAGGERED JOINT 1 1/2" THICK LAYERS OF MINERAL WOOL INSULATION PER ASTM C-612 WITH ALUMINUM JACKETING. JACKETING SHALL BE 0.020" THICK ALUMINUM ALLOY 3003, 3105 OR 5005 CONFORMING TO ASTM B209 WITH A SMOOTH FINISH.

HIGH PRESSURE STEAM SUPPLY LINE TO CHILLER 3					
HANGER NUMBER	OPERATION LOAD, LBS.	THERMAL MOVEMENTS			SPRING RATE
		X	Y	Z	
		E-W	UP-DN	N-S	
H-1	8,035	1.328" W	0.854" UP	0.949" N	1,500 LBS. PER INCH
H-2	8,084	3.186" W	1.218" UP	2.003" N	540 LBS. PER INCH
H-3	6,066	2.717" W	1.240" UP	1.285" N	800 LBS. PER INCH
H-4	6,150	1.470" W	0.910" UP	0.437" N	800 LBS. PER INCH

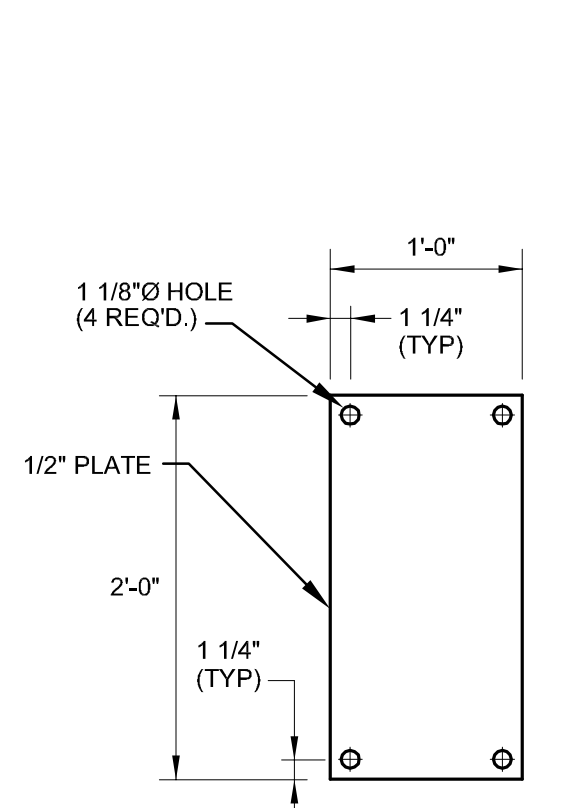
**GENERAL NOTES:**  
1. HANGER FIGURE NUMBERS REFER TO ANVIL INTERNATIONAL FIGURE NUMBERS.



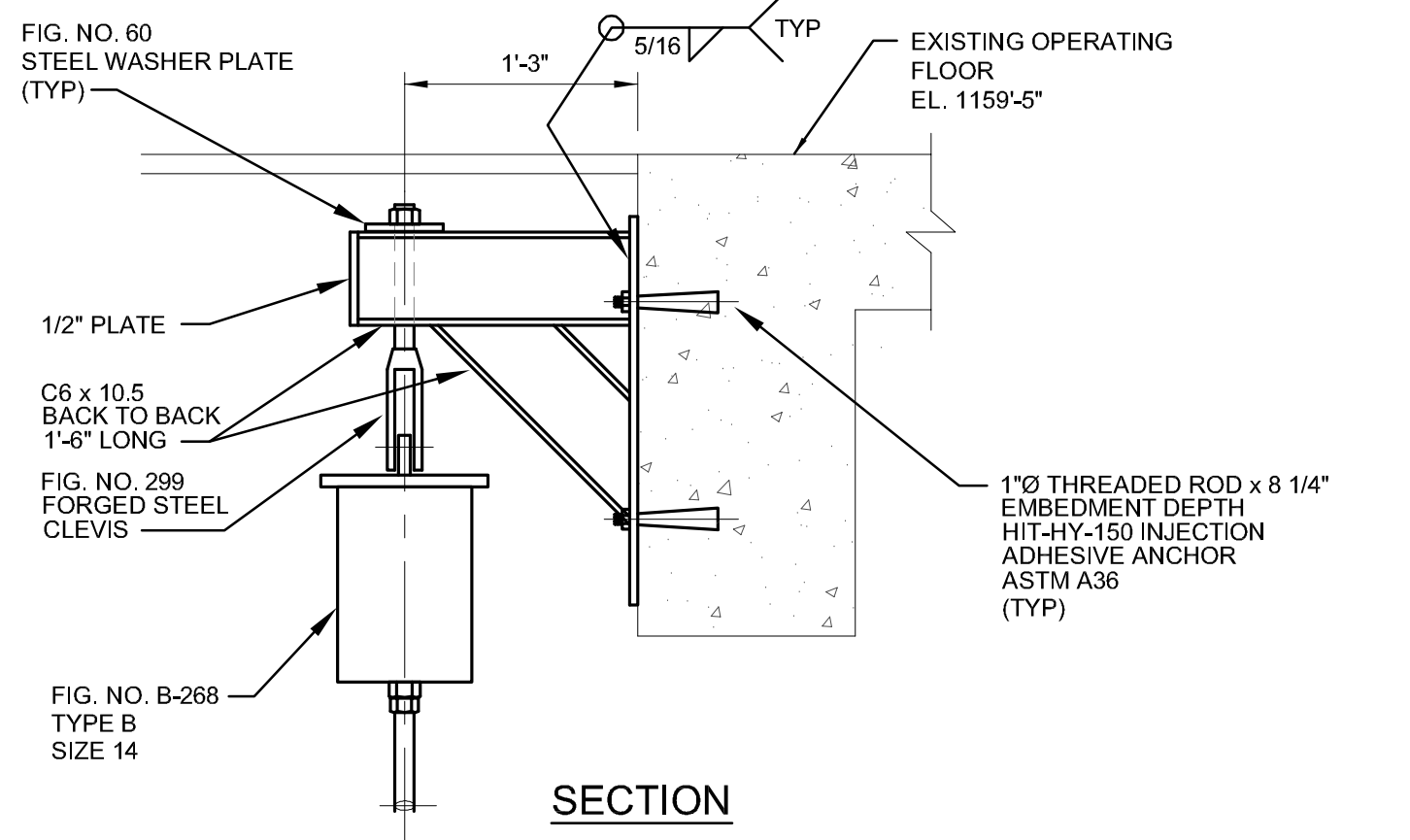
**MOUNTING PLATE DETAIL**



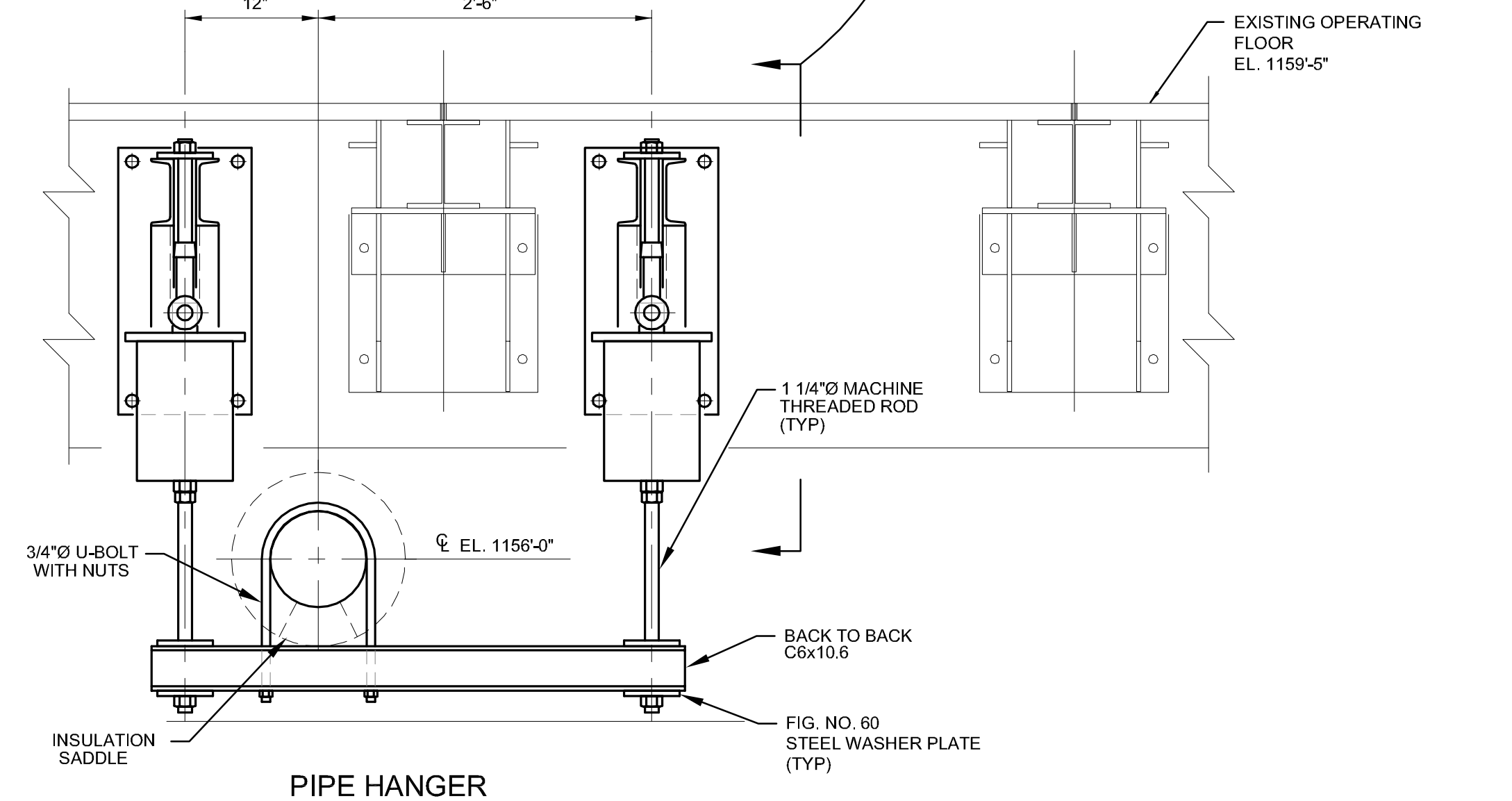
**PIPE HANGER H-2**  
(LOOKING NORTH)



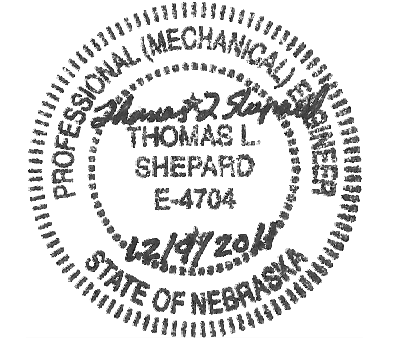
**MOUNTING PLATE DETAIL**  
(TYPICAL FOR 2)



**SECTION**



**PIPE HANGER H-3**  
(LOOKING NORTH)  
**PIPE HANGER H-4 (SIMILAR)**  
(LOOKING SOUTH)

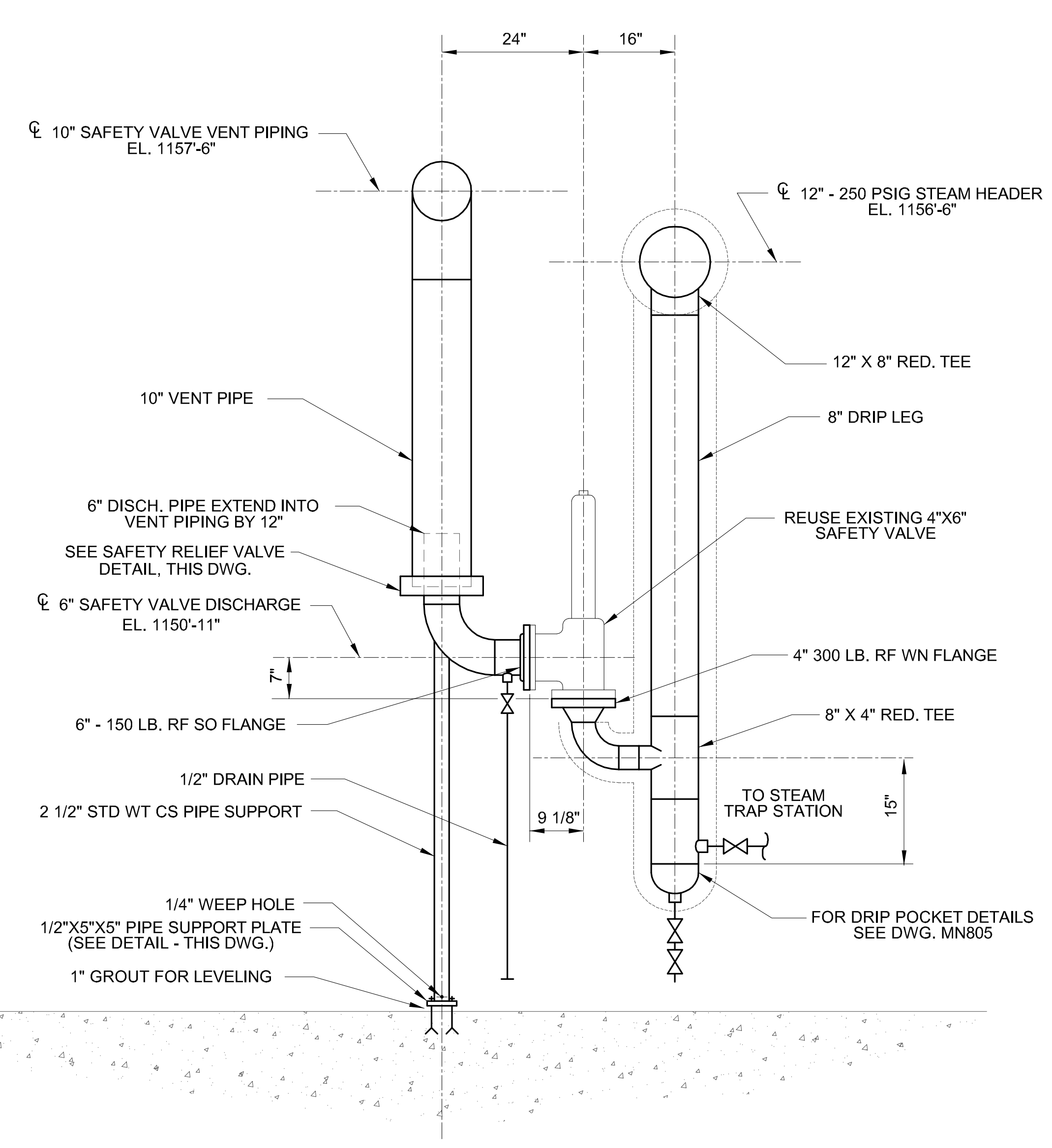


**ISSUED FOR BID**  
12-09-2011

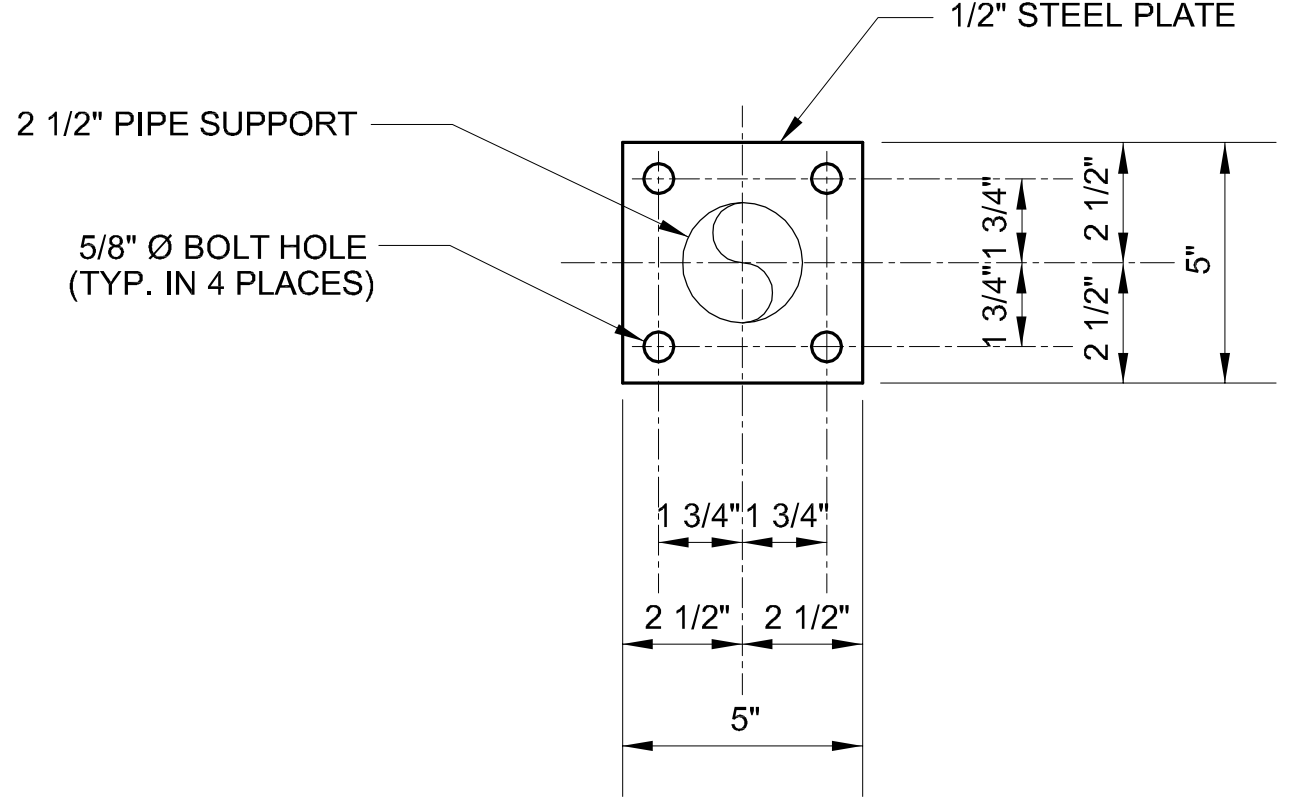
ISSUED AS PART OF ADDENDUM NO. 1

A  
B  
C  
D  
E  
F

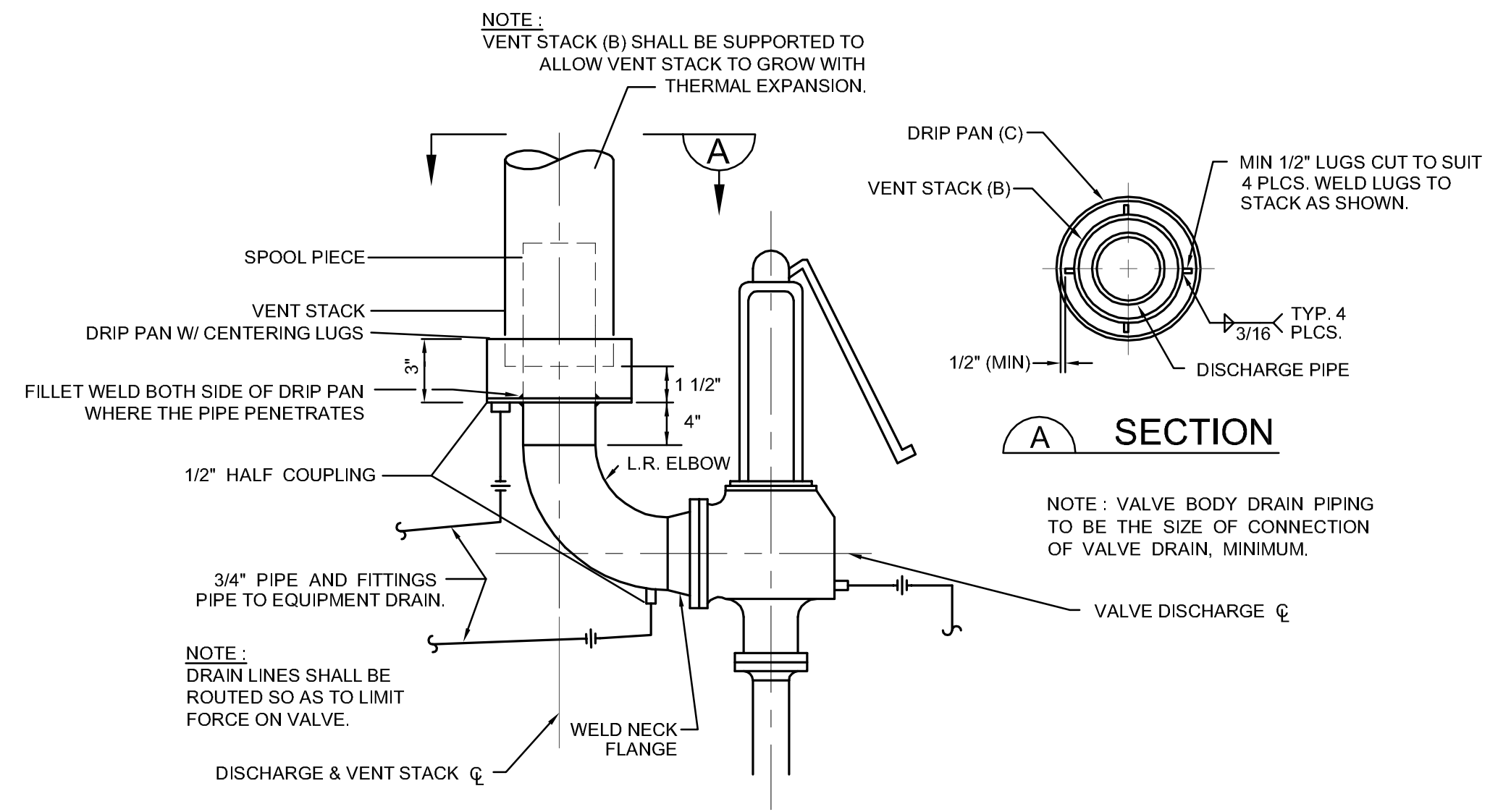
1 2 3 4 5 6 7 8 9



**250 PSIG SAFETY VALVE PIPING**  
LOOKING WEST  
SCALE: 3/4"=1'-0"



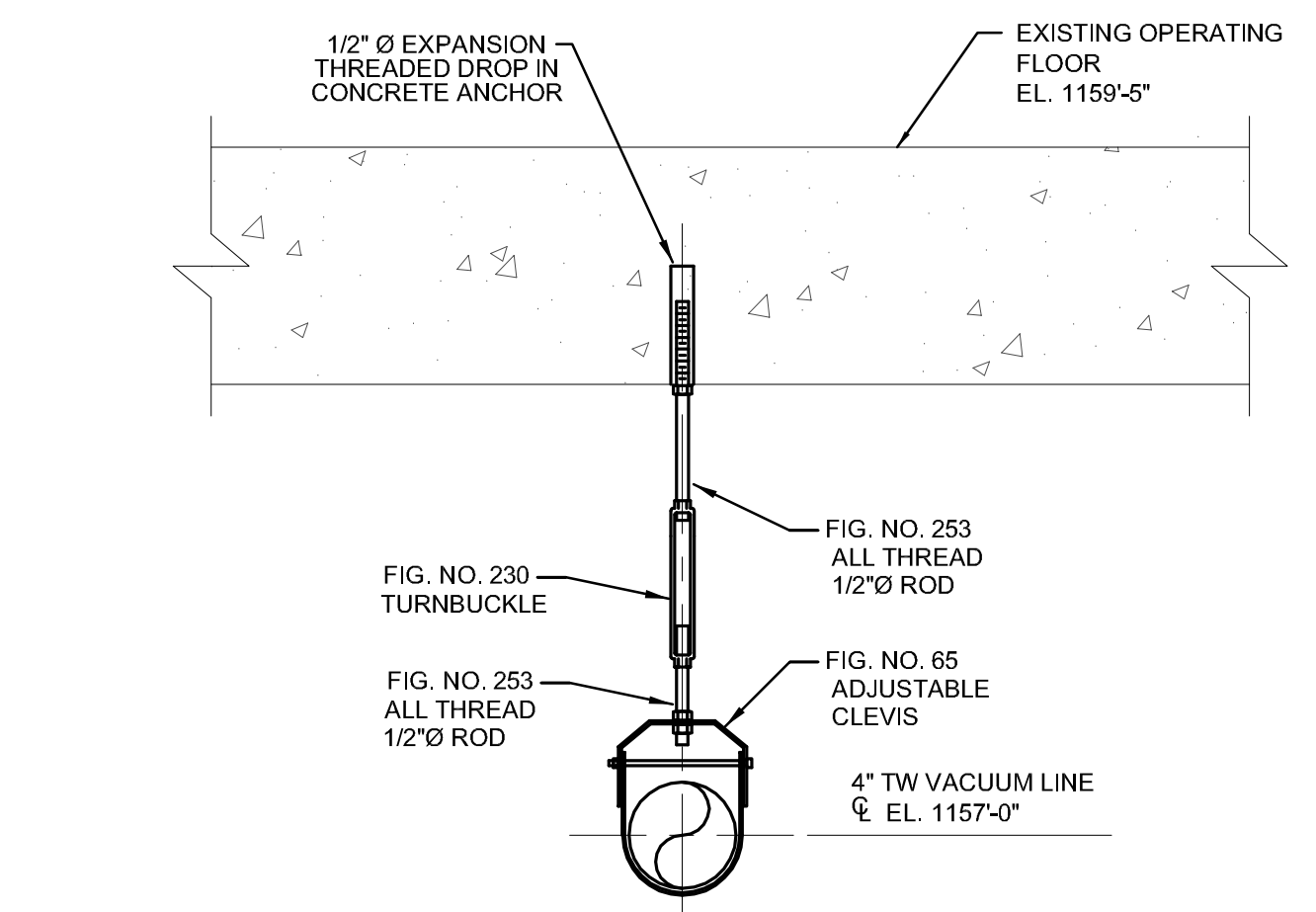
**PIPE SUPPORT PLATE**  
SCALE: 3"=1'-0"



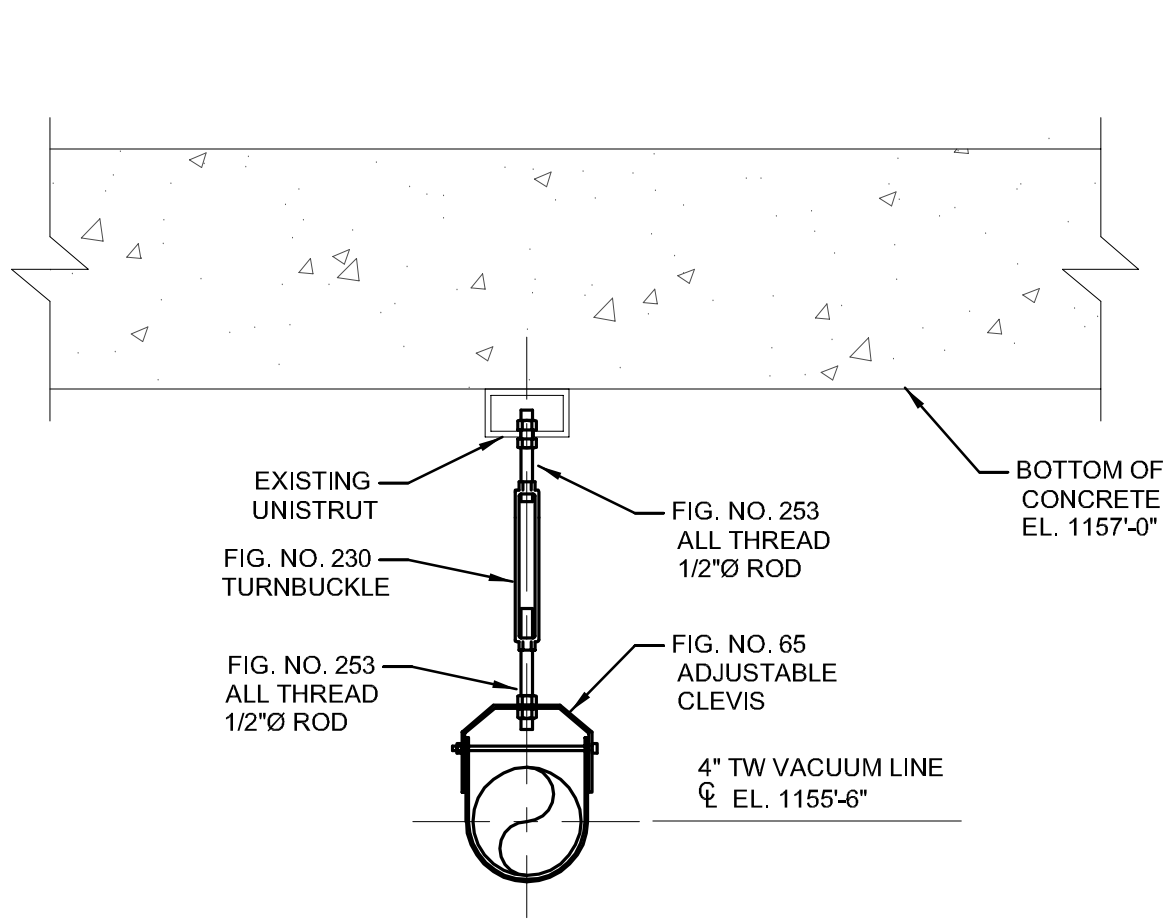
**SAFETY RELIEF VALVE (SRV) DETAIL**  
SIDE VIEW - NOT TO SCALE

**EXISTING PIPING CONNECTION LIST - SEE DRAWING MN804**

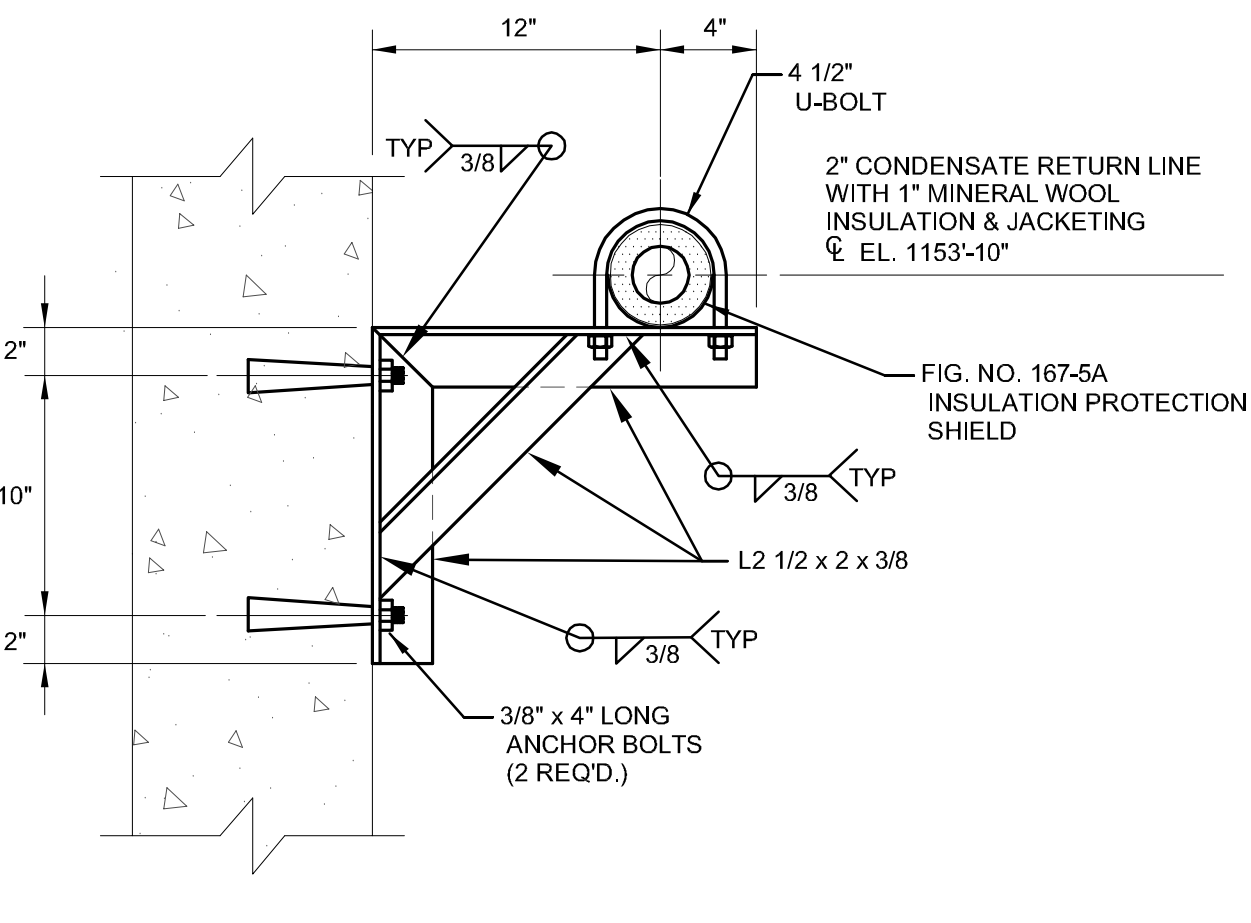
CONNECTION NO.	CONNECTION SIZE	CONNECTION TYPE	DESCRIPTION	REMARKS
A <sub>1</sub>	8"	BUTT WELD	600 PSIG STEAM SUPPLY	REMOVE 8" 90° ELBOW
A <sub>2</sub>	8"	BUTT WELD	600 PSIG STEAM SUPPLY	REMOVE 8" 90° ELBOW
B	6"	BUTT WELD	600 PSIG STEAM SUPPLY TO CHILLER NO. 3 COMPRESSOR TURBINE	ROUTE FROM CONNS. A <sub>1</sub> & A <sub>2</sub>
C	4"	BUTT WELD	TW VACUUM LINE TO VACUUM PUMPS	ROUTE PIPE TO CONN. D
D	4"	BUTT WELD	TW VACUUM LINE TO VACUUM PUMPS	ROUTE PIPE TO CONN. C
E	1 1/2"	THREADED	TW VACUUM LINE	FIELD ROUTE TO NEW 4" TW VACUUM LINE
F	2"	SOCKET WELD	LP CONDENSATE RETURN FROM CHILLER NO. 3 STEAM CONDENSER	ROUTE PIPE TO CONN. G
G	1 1/2"	SOCKET WELD	LP CONDENSATE RETURN FROM CHILLER NO. 3 STEAM CONDENSER	ROUTE PIPE TO CONN. F
H	3/4"	THREADED	HP TRAP RETURN FROM 600 LB. STEAM LINE TO CHILLER NO. 3 COMPRESSOR TURBINE	FIELD ROUTE FROM DRIP POCKET
J	3/4"	SOCKET WELD	HP TRAP RETURN FROM 600 LB. STEAM LINE TO CHILLER NO. 3 COMPRESSOR TURBINE	INSTALL NEW SOCKETLET ON EXIST. 4" HP CONDENSATE RETURN LINE
K <sub>1</sub>	12"	300 LB. FLANGE	EXISTING 250 PSIG SV CONN. LOCATION	REMOVE AND REPLACE WITH PIPE AND FLANGES
K <sub>2</sub>	12"	300 LB. FLANGE	EXISTING 250 PSIG SV CONN. LOCATION	REMOVE AND REPLACE WITH PIPE AND FLANGES
L <sub>1</sub>	12"	300 LB. FLANGE	NEW LOCATION FOR 250 PSIG SV	ADD EITHER 300 LB. CAST STEEL 12"x8" RED. TEE OR C.S. 12"x8" RED. TEE W/300LB. FLGS.
L <sub>2</sub>	12"	300 LB. FLANGE	NEW LOCATION FOR 250 PSIG SV	ADD EITHER 300 LB. CAST STEEL 12"x8" RED. TEE OR C.S. 12"x8" RED. TEE W/300LB. FLGS.
M	4"	150 LB. FLANGE	CITY WATER LINE	REMOVE EXISTING 4" LINE AND REPLACE WITH NEW 4" LINE
N	4"	150 LB. FLANGE	CITY WATER LINE	REMOVE EXISTING 4" LINE AND REPLACE WITH NEW 4" LINE
P	12"	BUTT WELD	SAFETY VALVE VENT LINE	REMOVE EXISTING 12" CONDENSER SV VENT LINE AND REPLACE W/NEW 10" VENT LINE
R	3/4"	SOCKET WELD	SAFETY VALVE DRIP POCKET TRAP RETURN	INSTALL NEW SOCKETLET ON EXISTING 4" HP CONDENSATE RETURN LINE
S	4"	BUTT WELD	LP CONDENSATE RETURN LINE	REMOVE EXIST. 4" LP COND. RETURN HDR. TO THIS LOCATION & INSTALL STD. WT. WELDED CAP



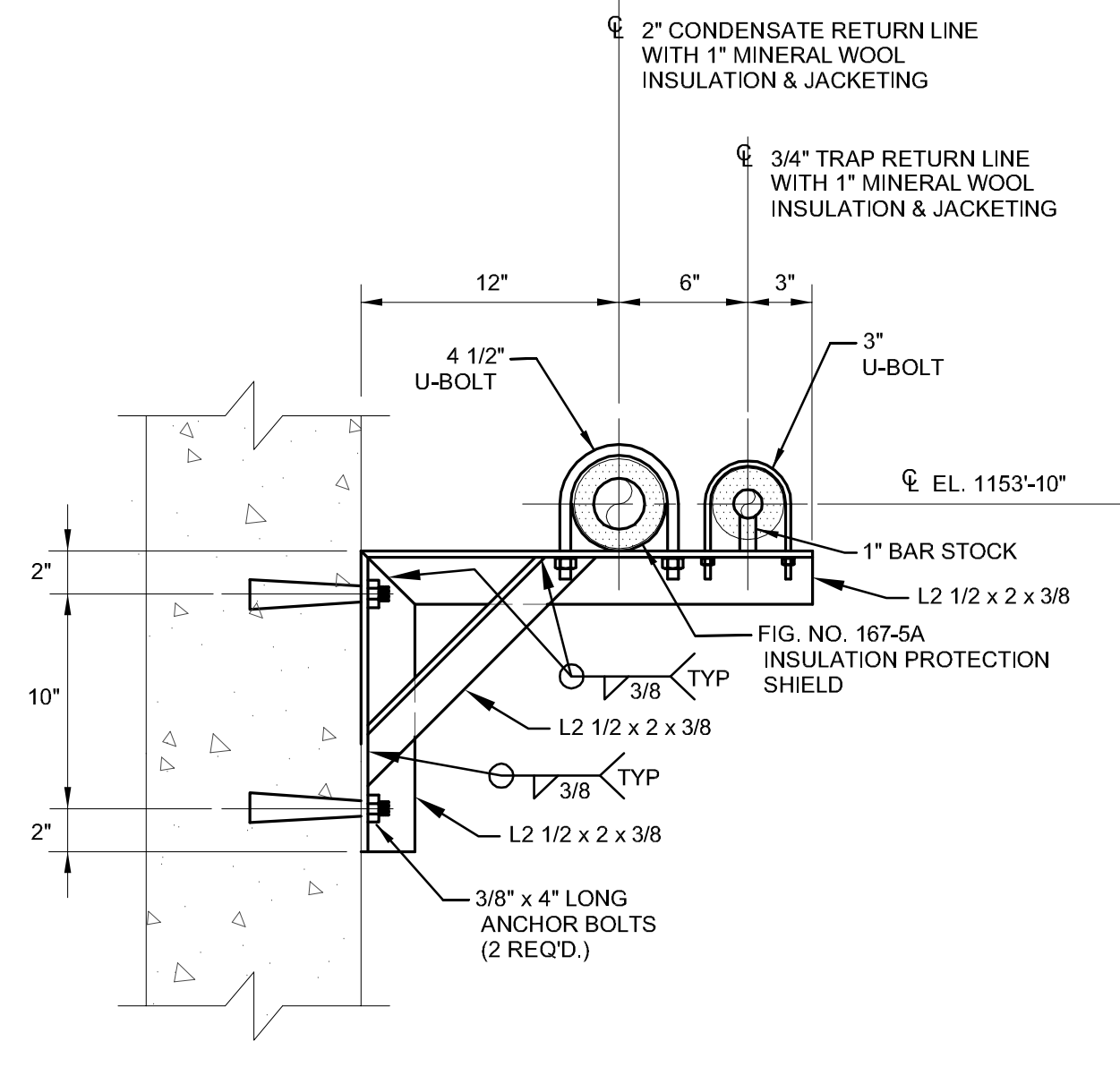
**PIPE HANGER VL-1 THRU VL-3**  
(3 REQ'D.)



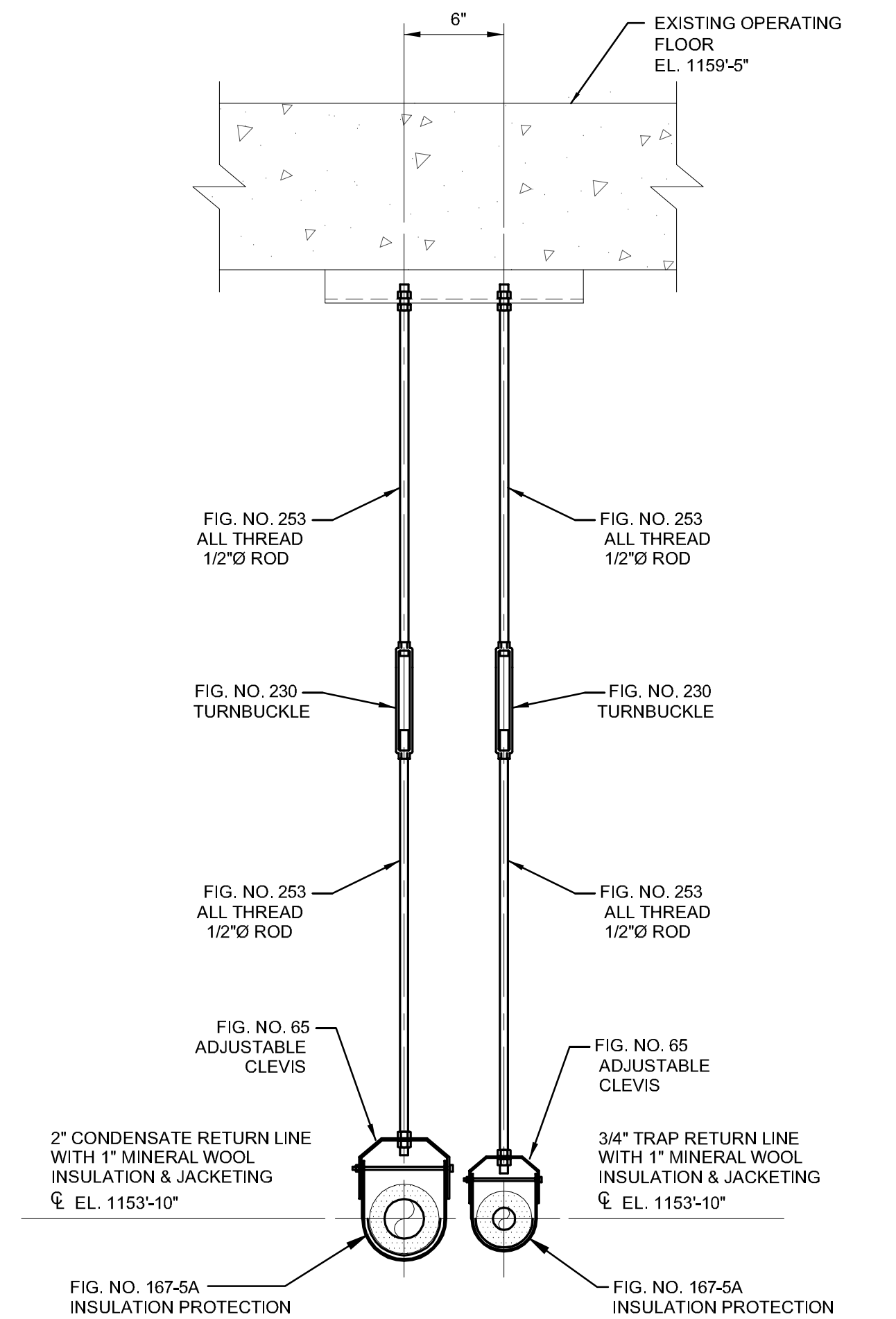
**PIPE HANGER VL-4 & VL-5**  
(2 REQ'D.)



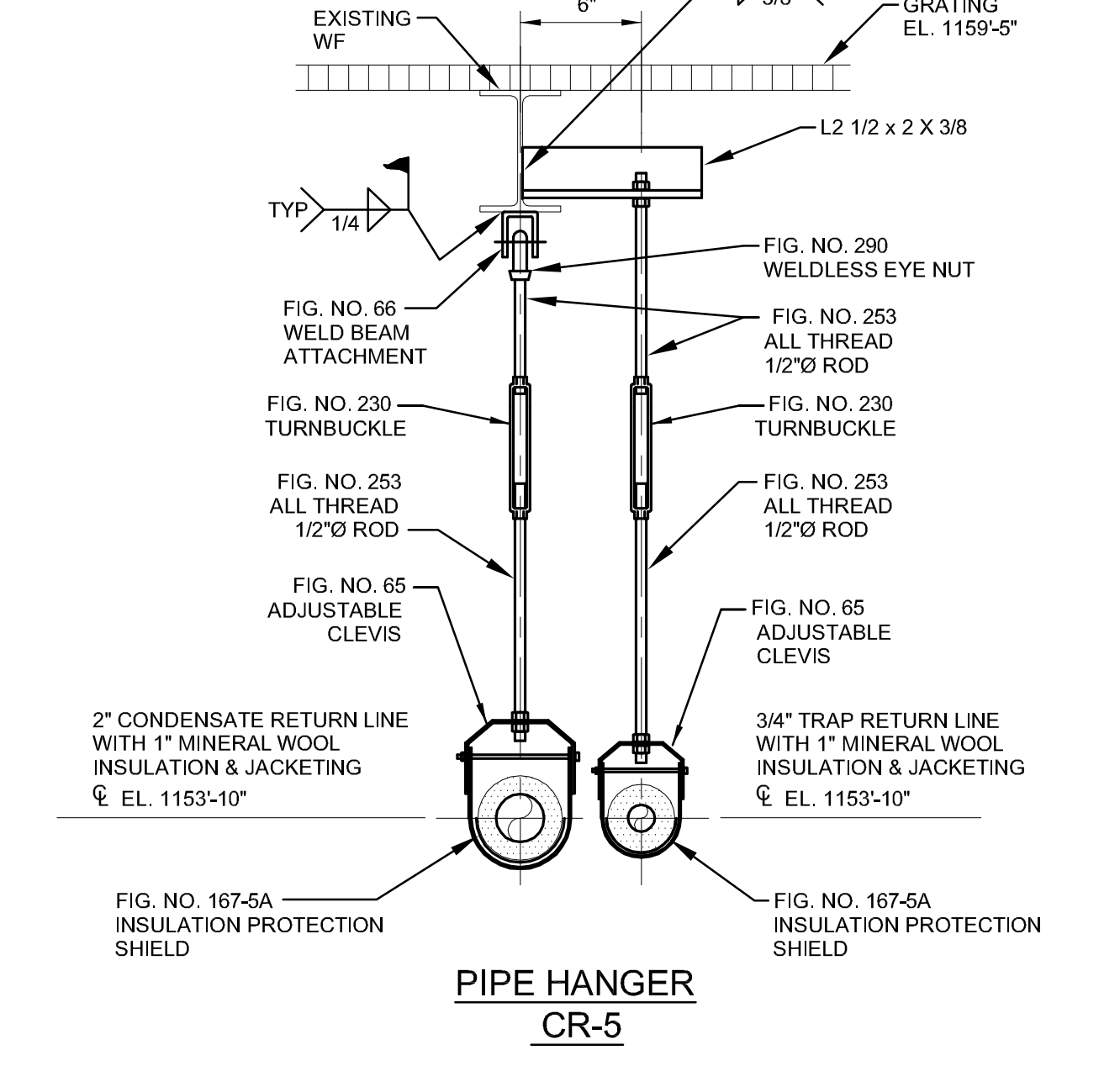
**PIPE HANGER CR-1**  
(1 REQ'D.)



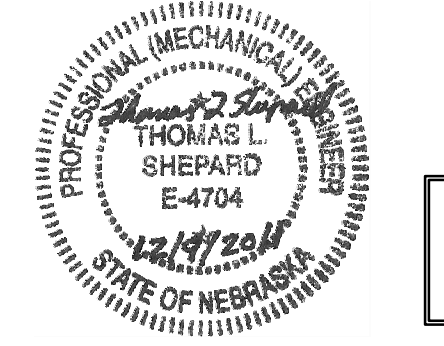
**PIPE HANGER CR-2 & CR-3**  
(2 REQ'D.)



**PIPE HANGER CR-4 & CR-6**



**PIPE HANGER CR-5**



**ISSUED FOR BID**  
12-09-2011

ISSUED AS PART OF ADDENDUM NO. 1

CAD DATA  
FILENAME: 240910-CCUP-MN806-REV0  
PLOT SCALE: 1/1 (30 x 42)  
LAST MODIFIED: 12/9/2011  
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REV	DESCRIPTION	DATE	REV	DESCRIPTION
1	ISSUED FOR BID	12-09-2011		

**LUTZ, DAILY & BRAIN, LLC**  
CONSULTING ENGINEERS  
6400 GLENWOOD SUITE 200  
OVERLAND PARK, KANSAS 66202

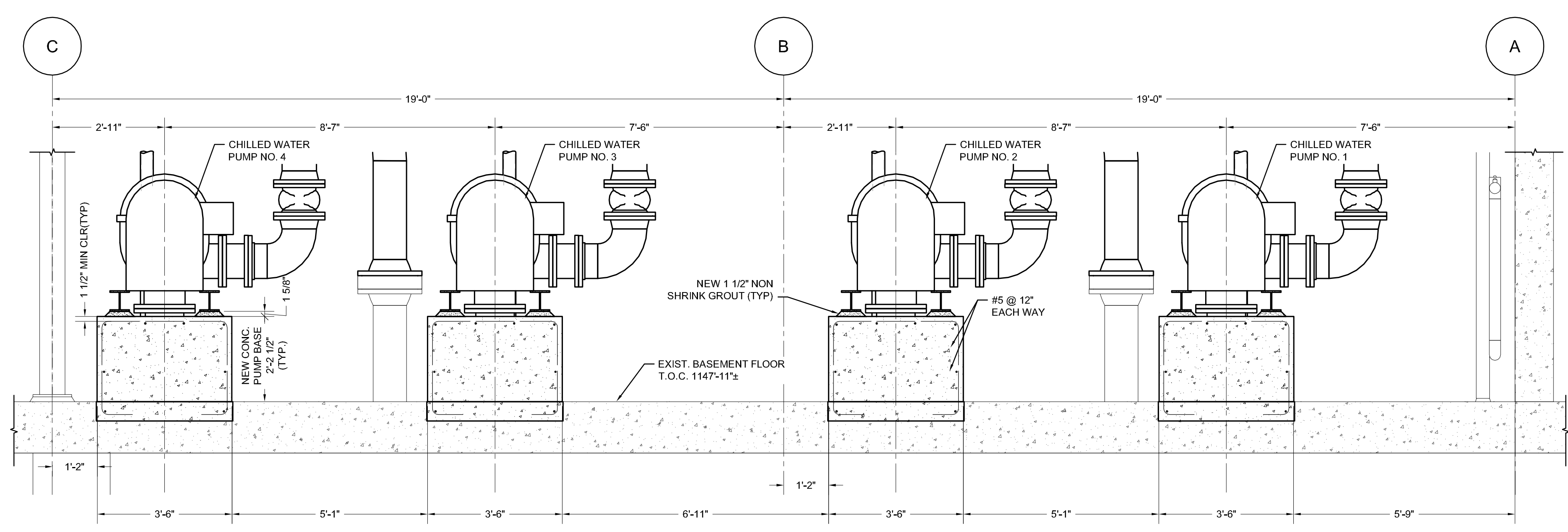
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DRAWN BY: SEL APPROVED BY: TJS

**UNIVERSITY OF NEBRASKA - LINCOLN**

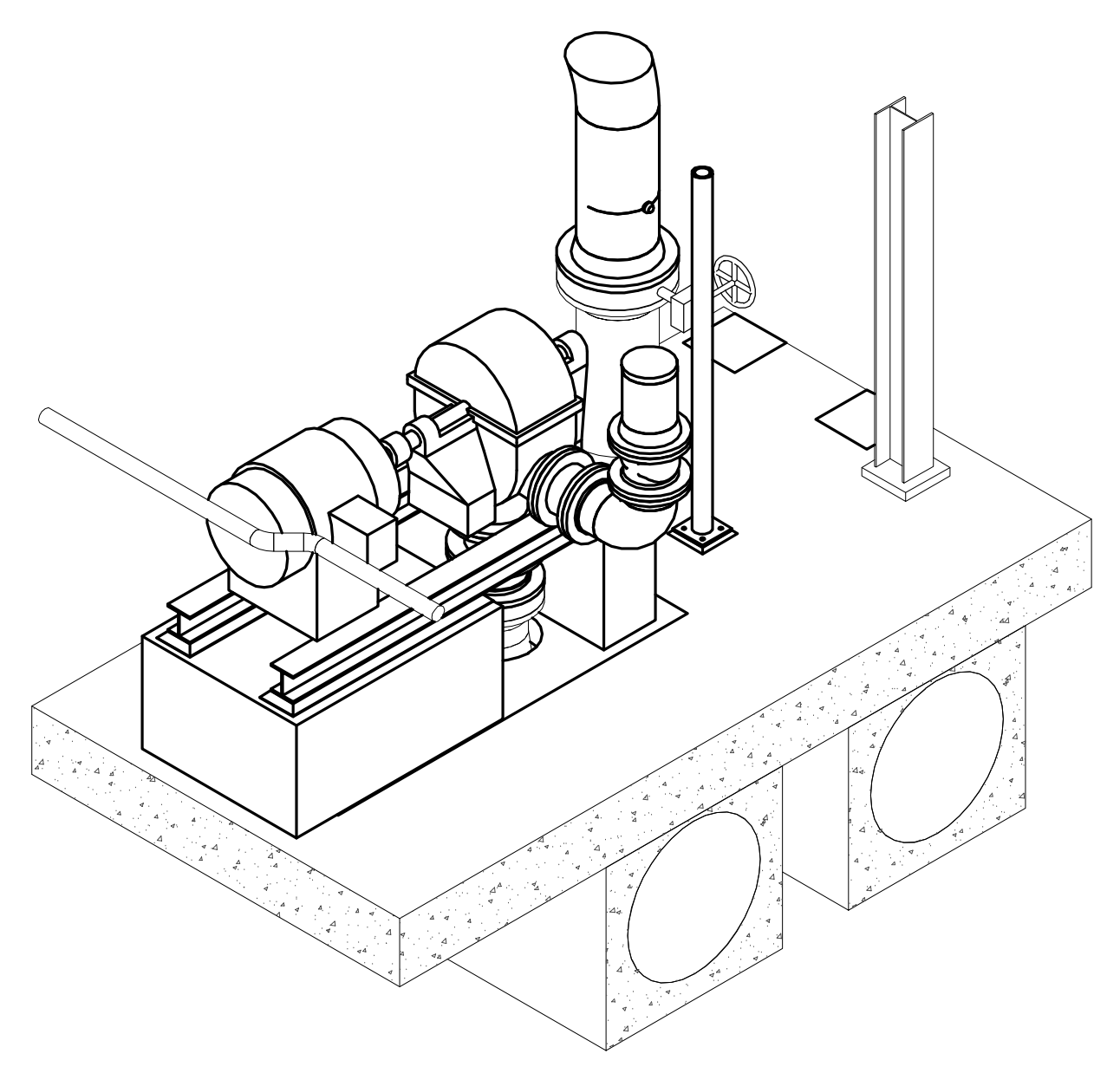
CITY CAMPUS UTILITY PLANT  
CHILLERS 1 & 2 REPLACEMENT PROJECT ID: CO28P232  
GENERAL INSTALLATION CONTRACT PACKAGE

REVISED EXISTING PIPING IN TURBINE BAY AREA  
MISCELLANEOUS DETAILS

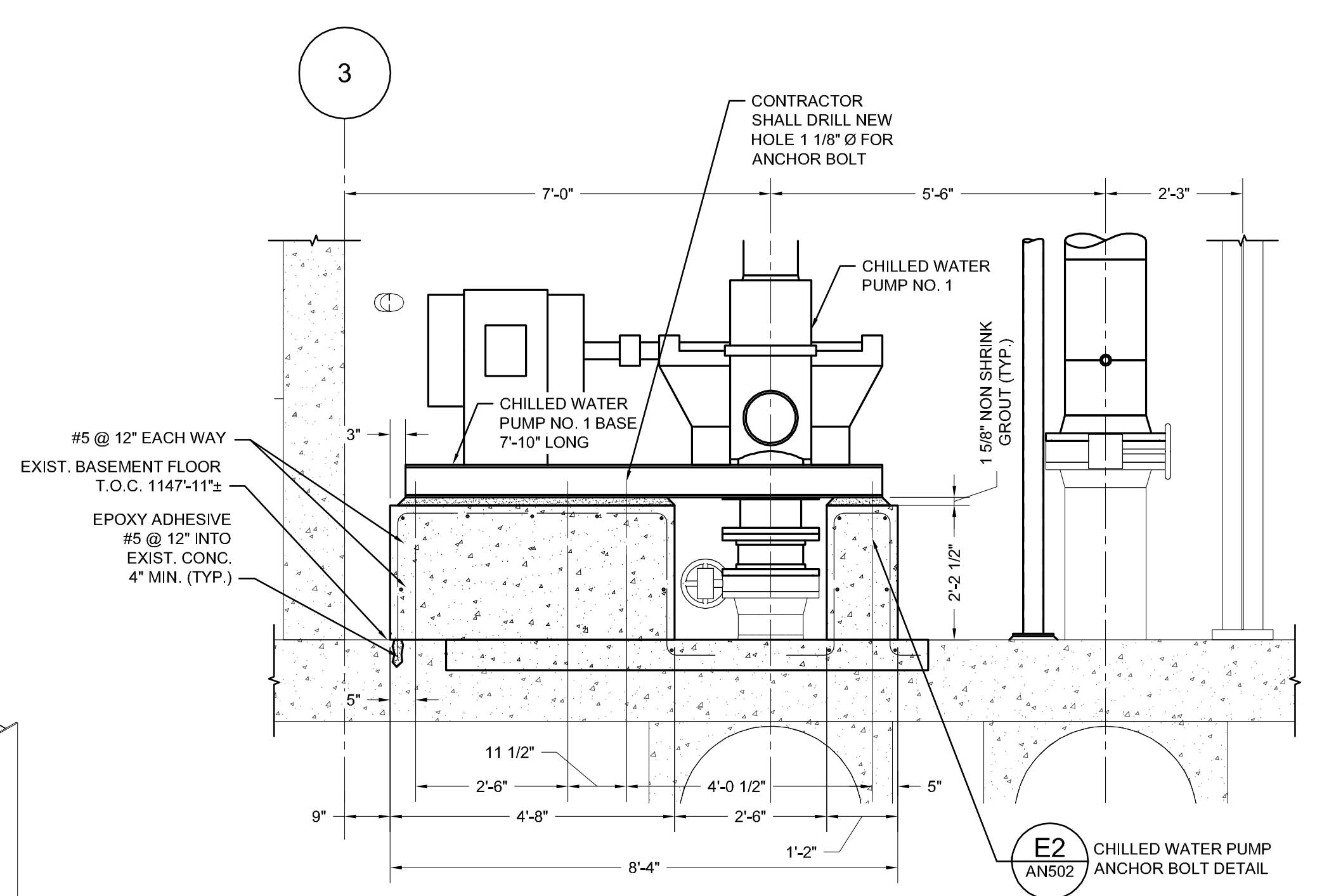
DRAWING NUMBER  
**MN806**  
3 OF 3



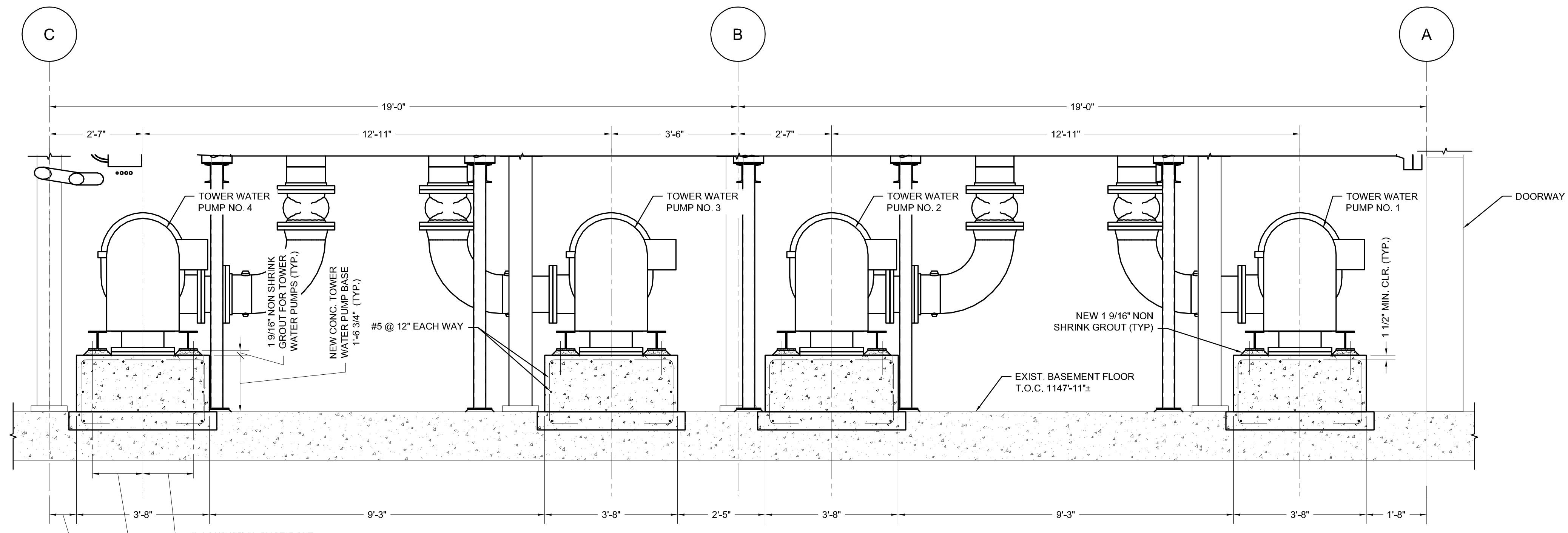
**CHILLED WATER PUMP FOUNDATIONS SECTION P2**  
(LOOKING NORTH)  
AN106 / AN403  
SCALE: 1/2" = 1'-0"



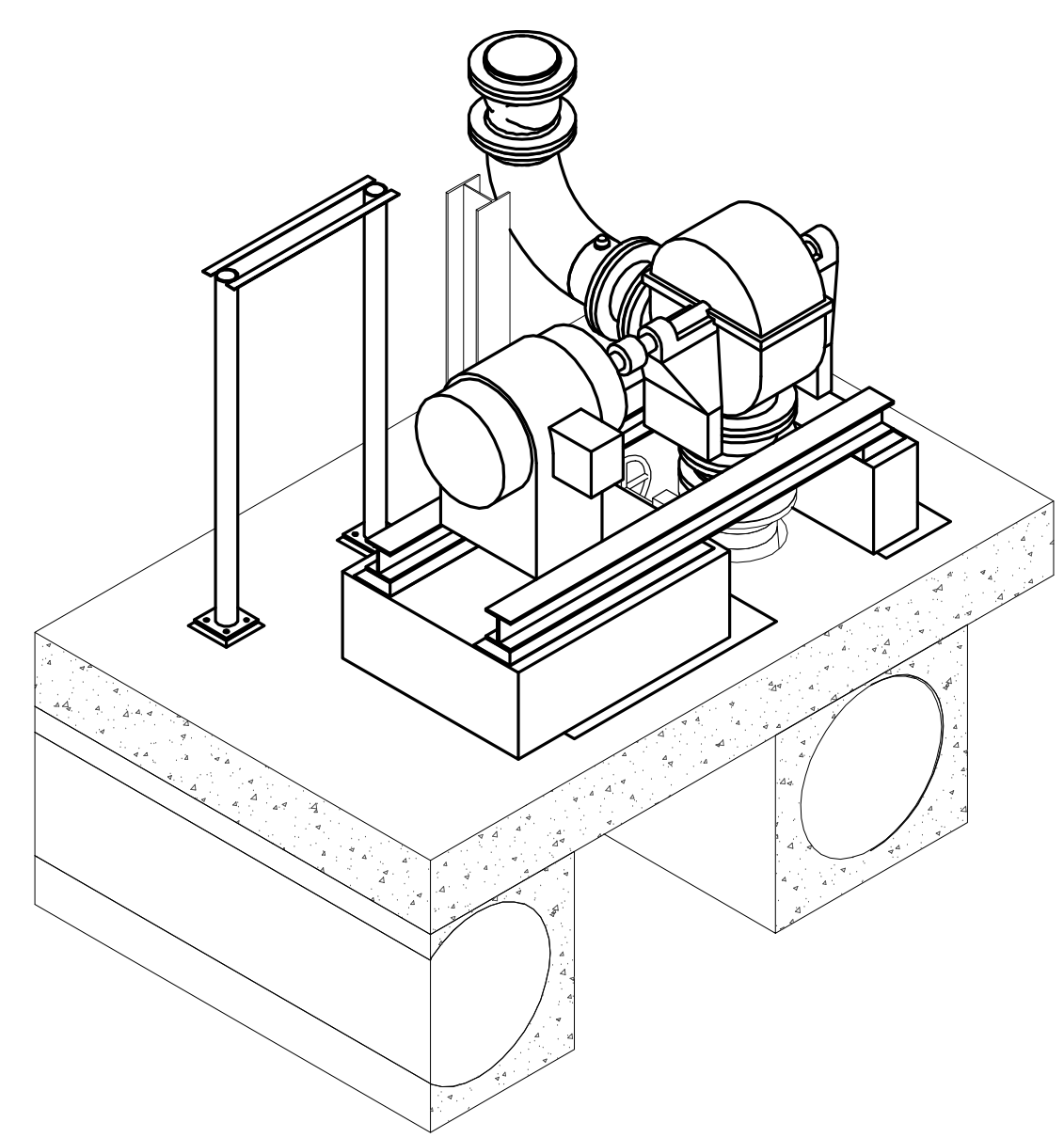
**CHILLED WATER PUMP FOUNDATIONS ISOMETRIC VIEW LOOKING NORTHWEST**



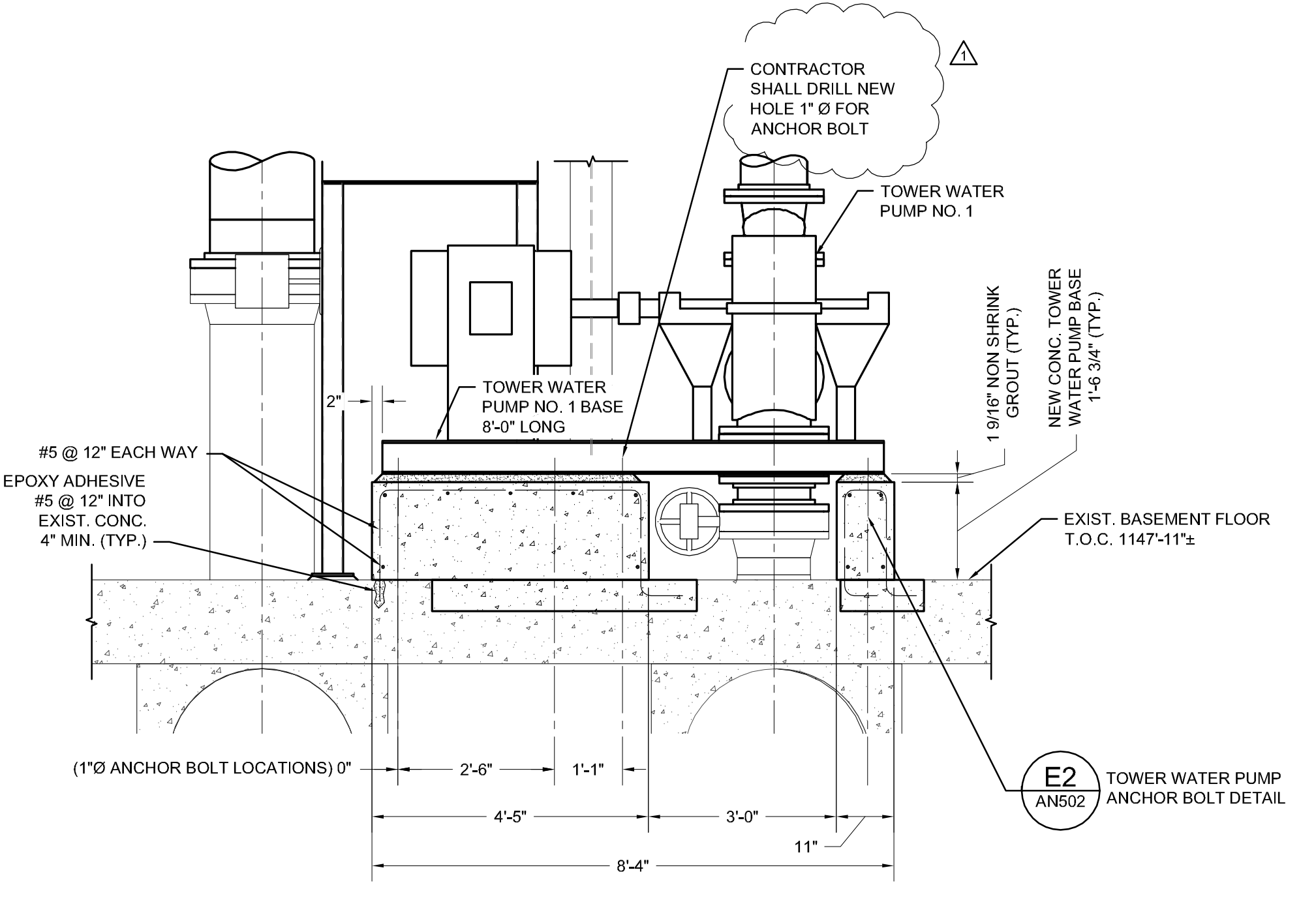
**CHILLED WATER PUMP FOUNDATIONS SECTION R2**  
(LOOKING WEST)  
AN106 / AN403  
SCALE: 1/2" = 1'-0"



**TOWER WATER PUMP FOUNDATIONS SECTION Q2**  
(LOOKING NORTH)  
AN106 / AN403  
SCALE: 1/2" = 1'-0"



**TOWER WATER PUMP FOUNDATIONS ISOMETRIC VIEW LOOKING NORTHWEST**



**TOWER WATER PUMPS FOUNDATIONS SECTION S2**  
(LOOKING WEST)  
AN106 / AN403  
SCALE: 1/2" = 1'-0"



**ISSUED FOR BID**  
11-23-2011

**CAD DATA**

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LAST MODIFIED	12/9/2011

REV	DESCRIPTION	DATE
1	REVISED PER ADDENDUM NO. 1	12-09-2011
2	ISSUED FOR BID	11-23-2011

**LUTZ, DAILY & BRAIN, LLC**  
CONSULTING ENGINEERS

6400 GLENWOOD SUITE 200  
OVERLAND PARK, KANSAS 66202

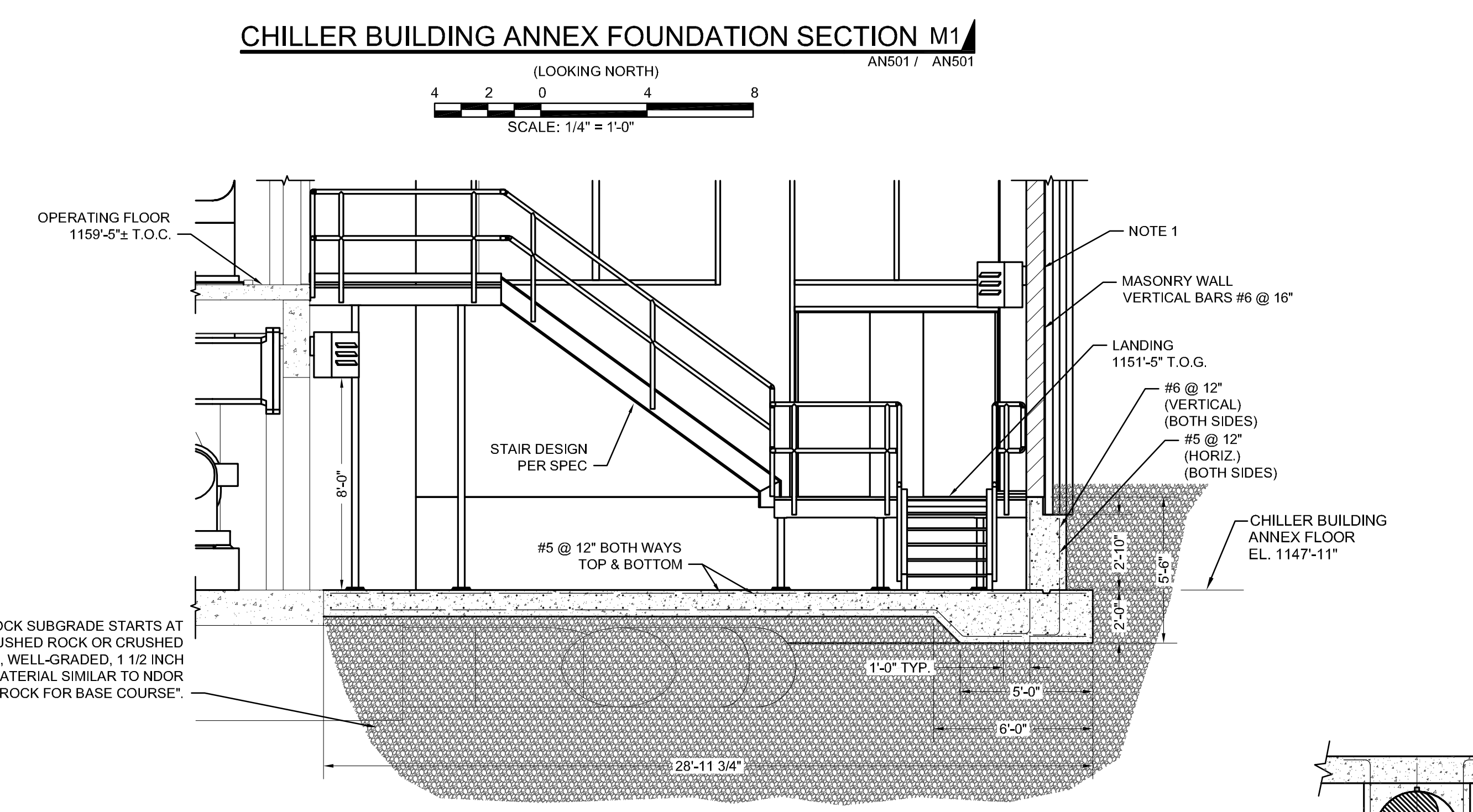
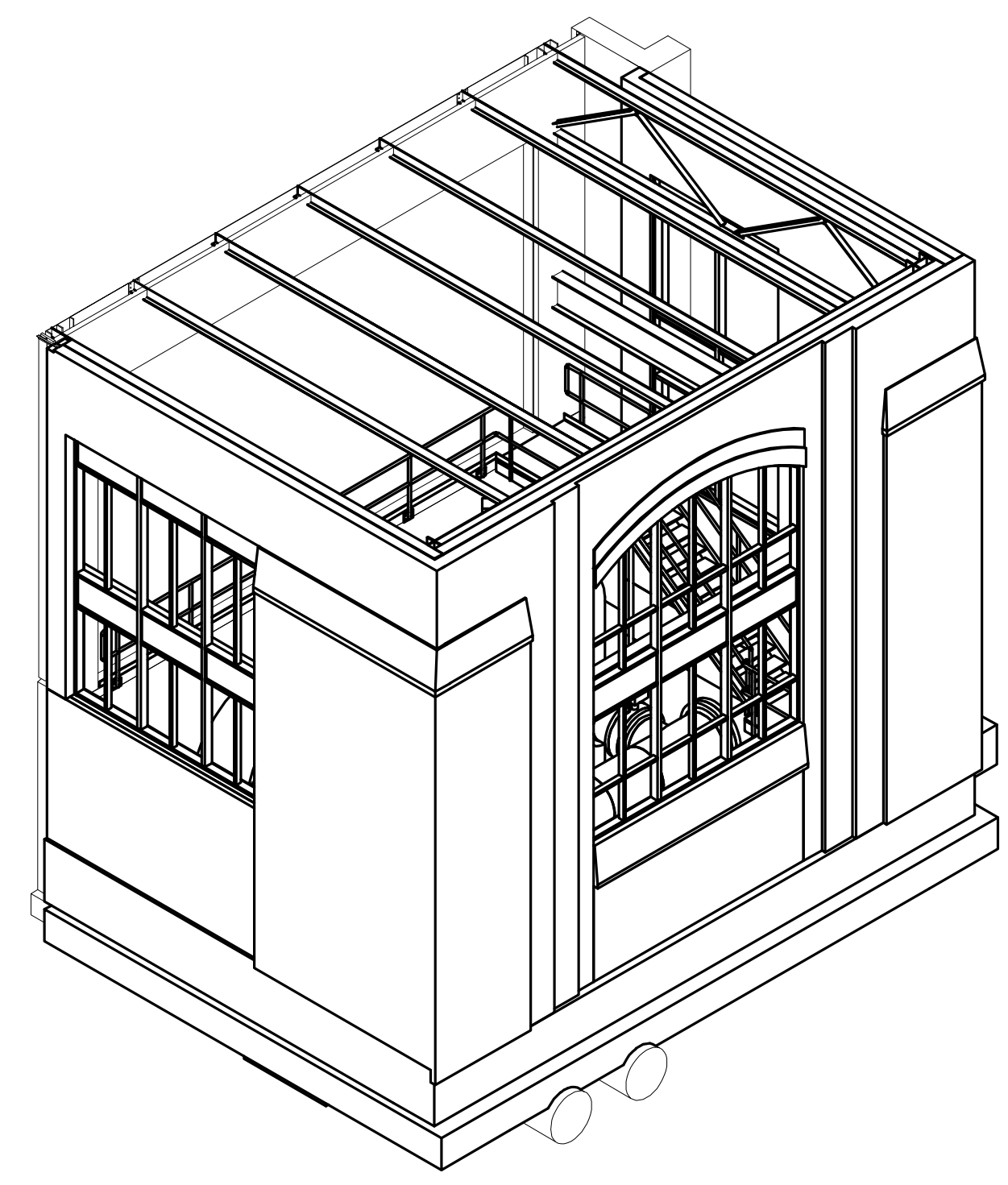
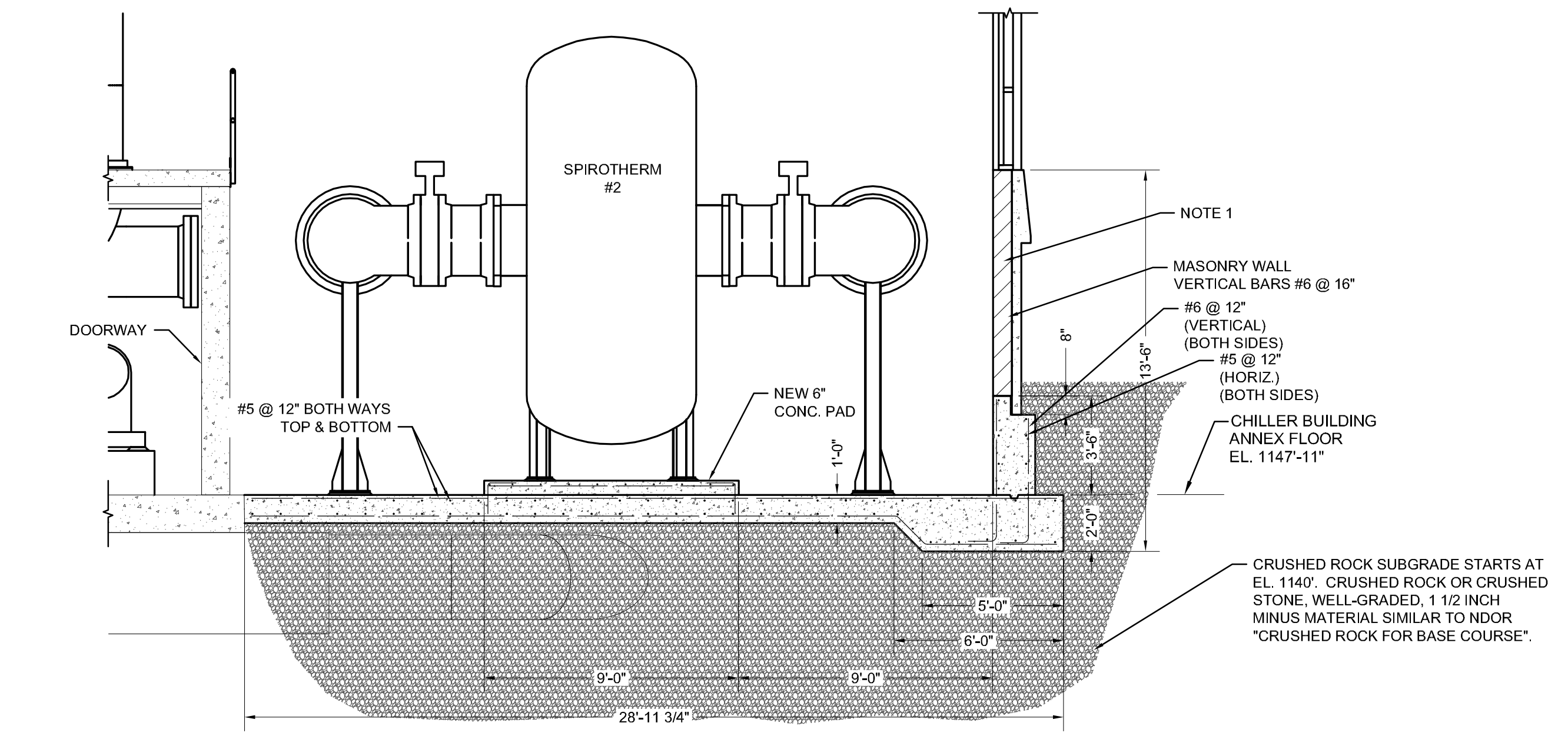
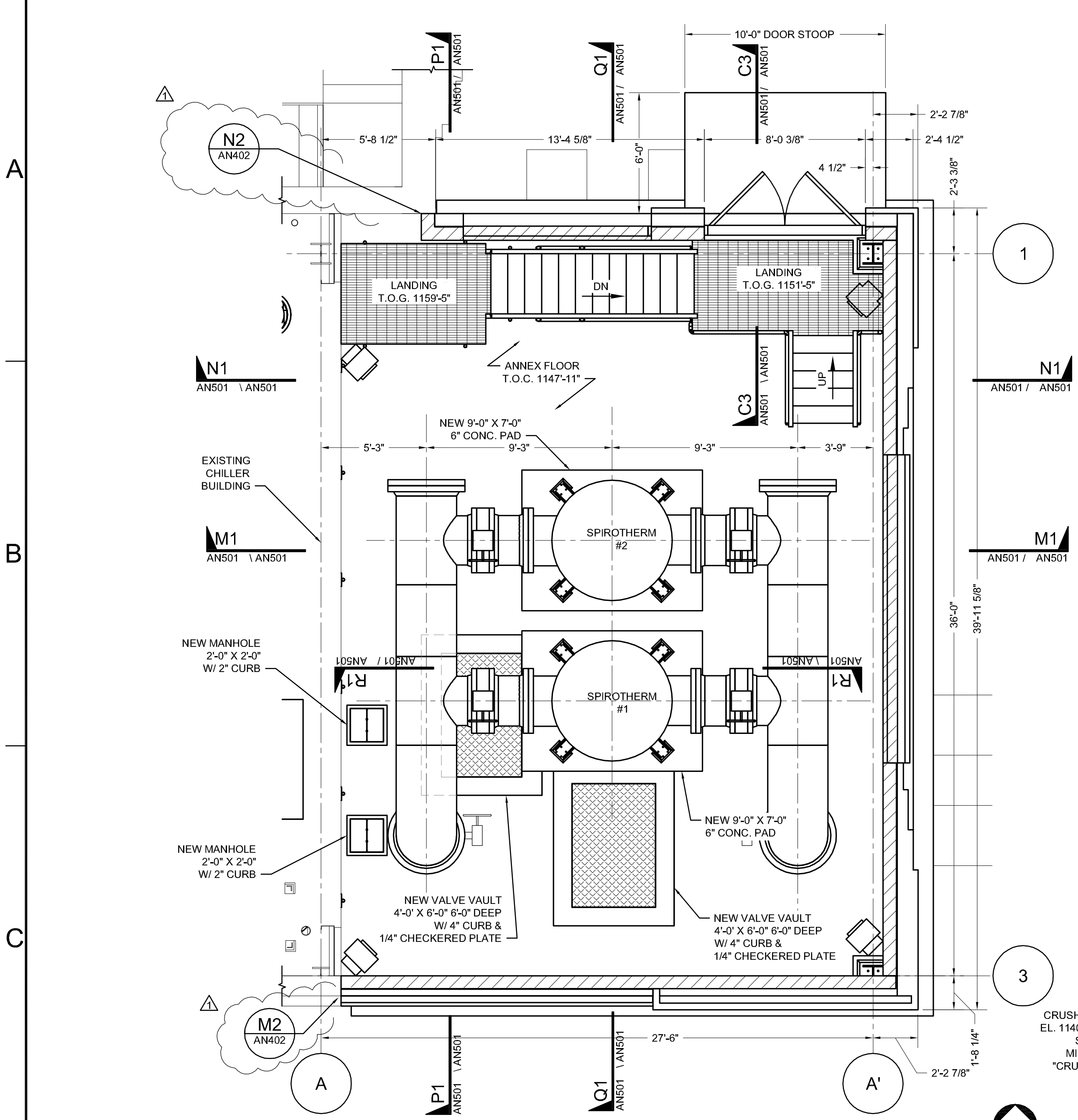
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DRAWN BY	HAD	APPROVED BY	CVH



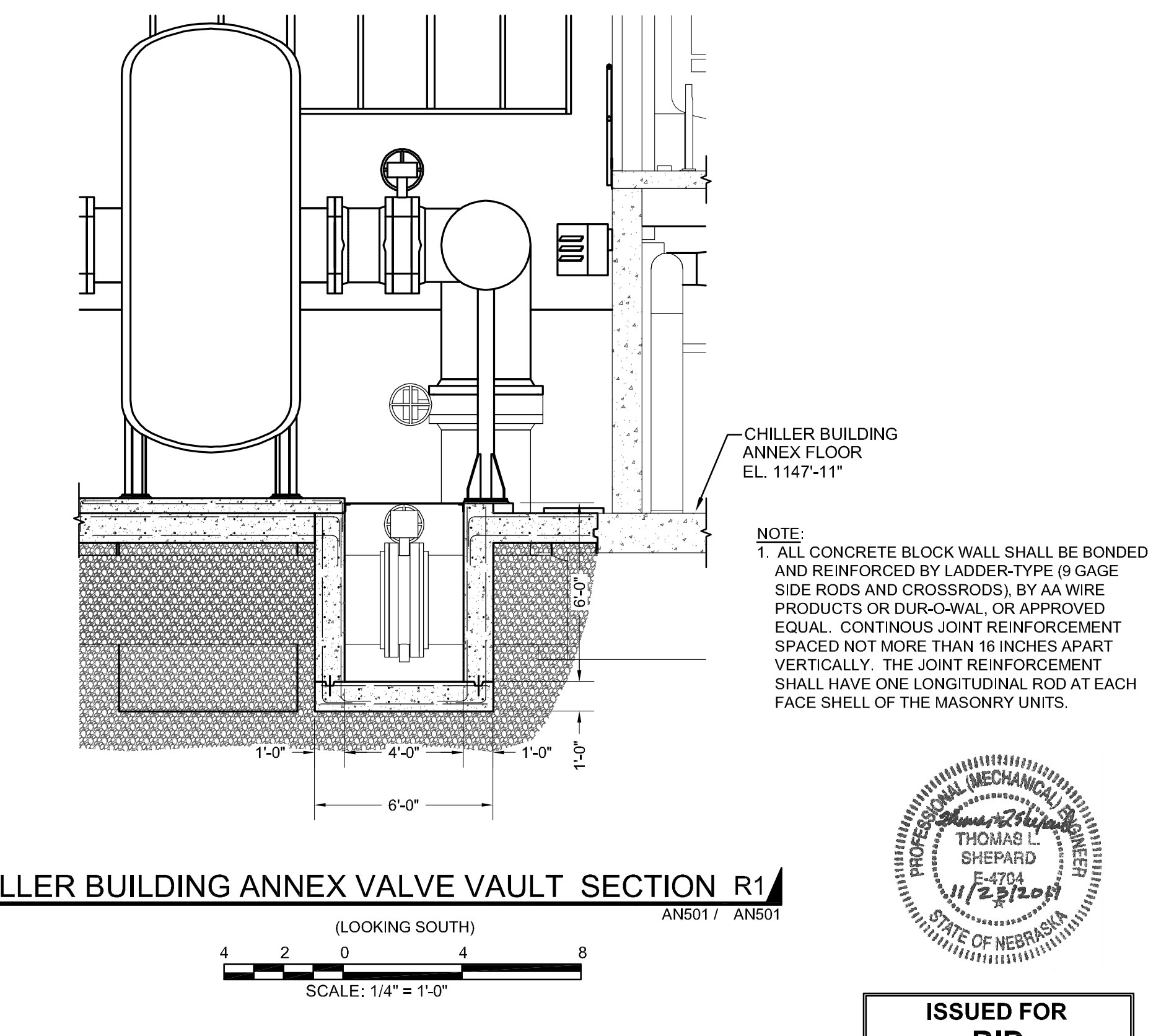
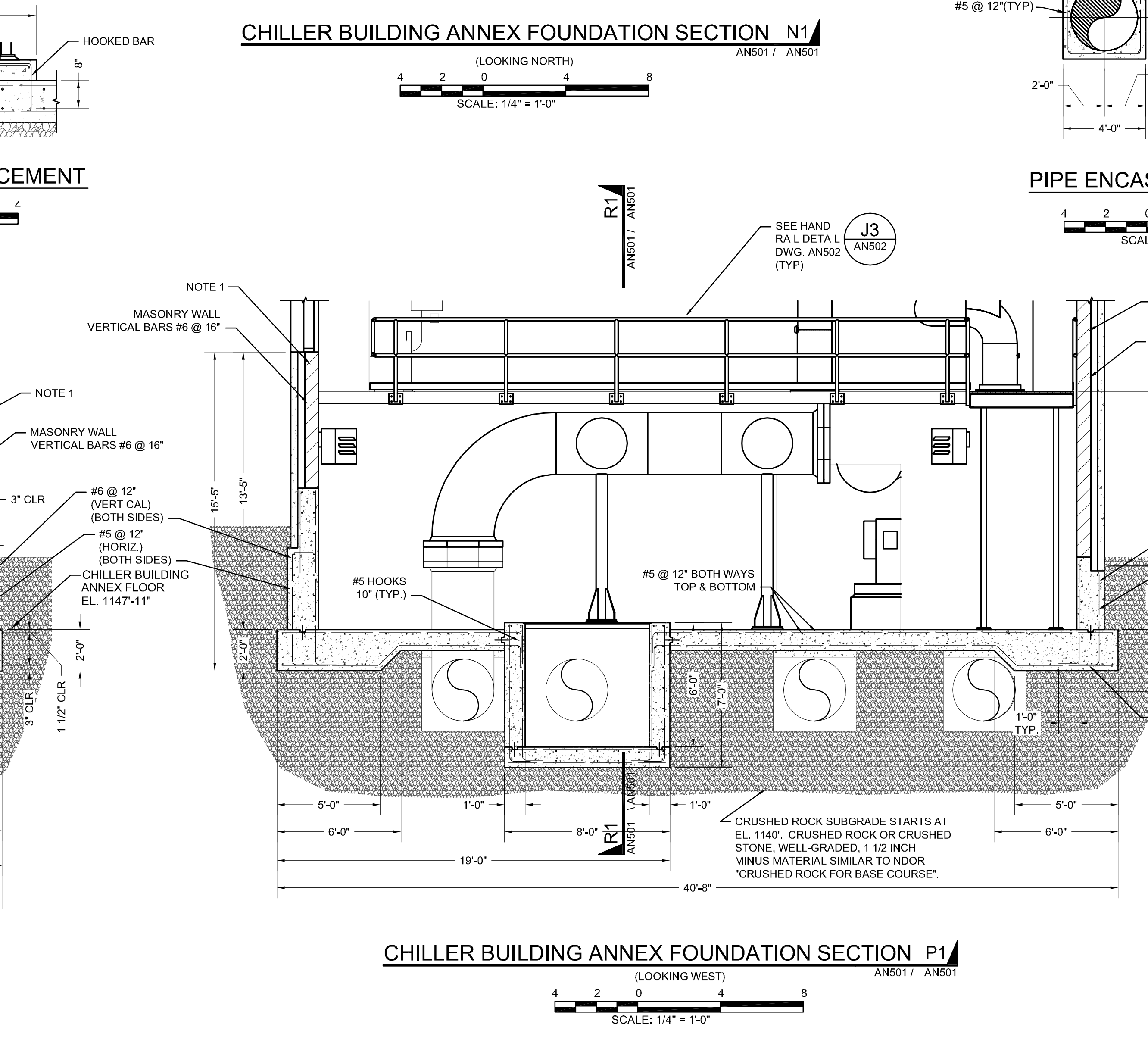
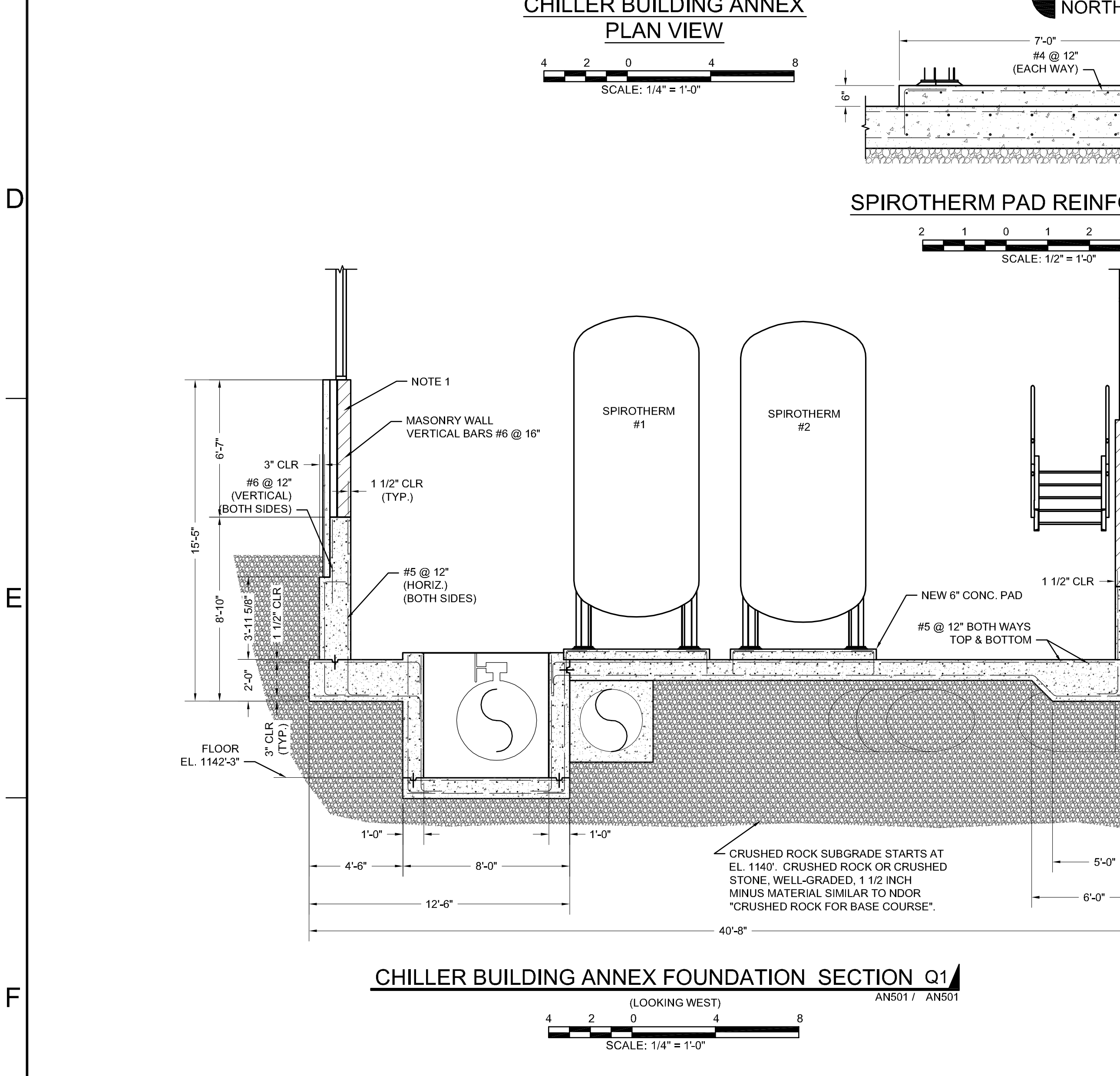
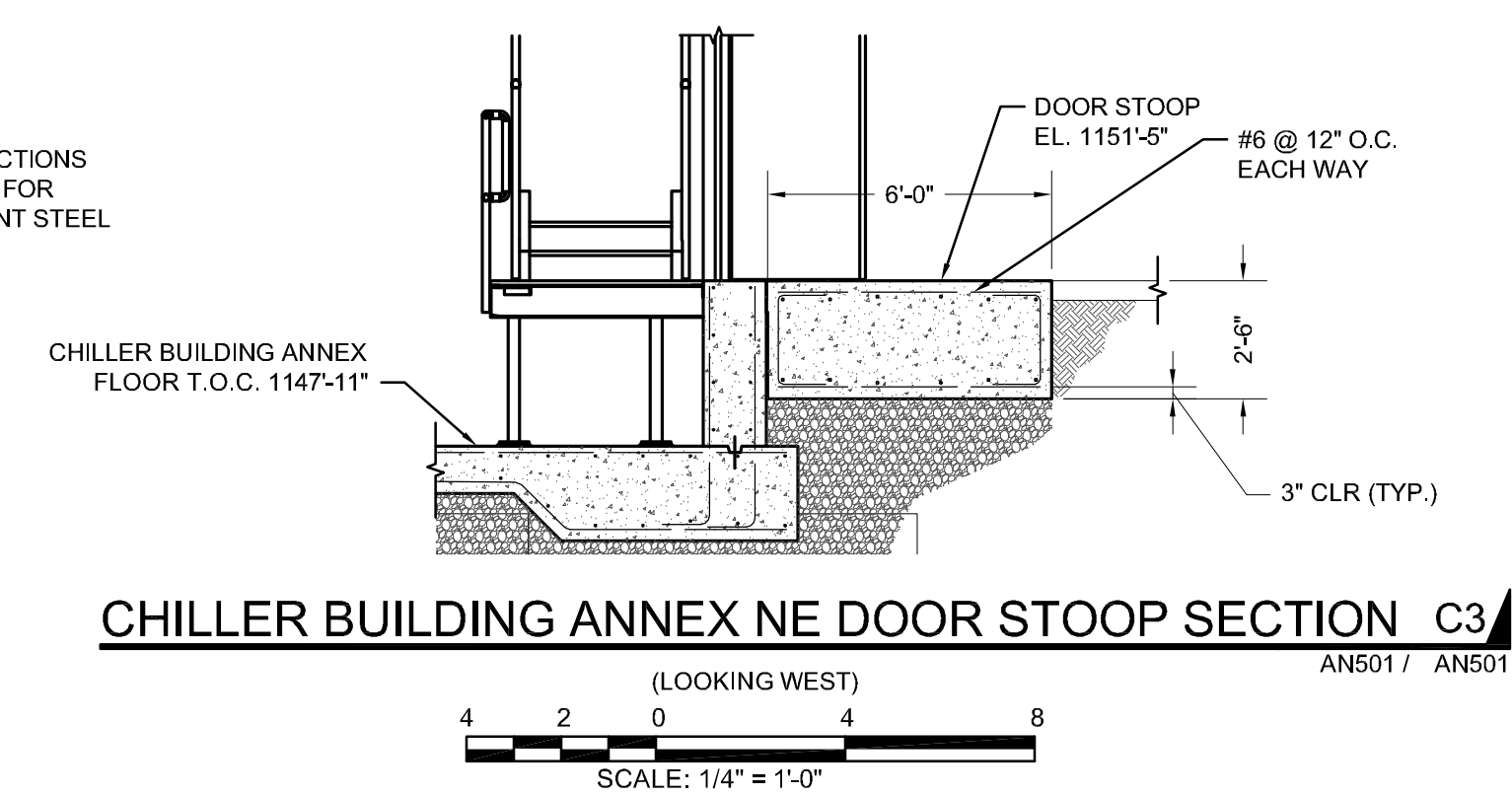
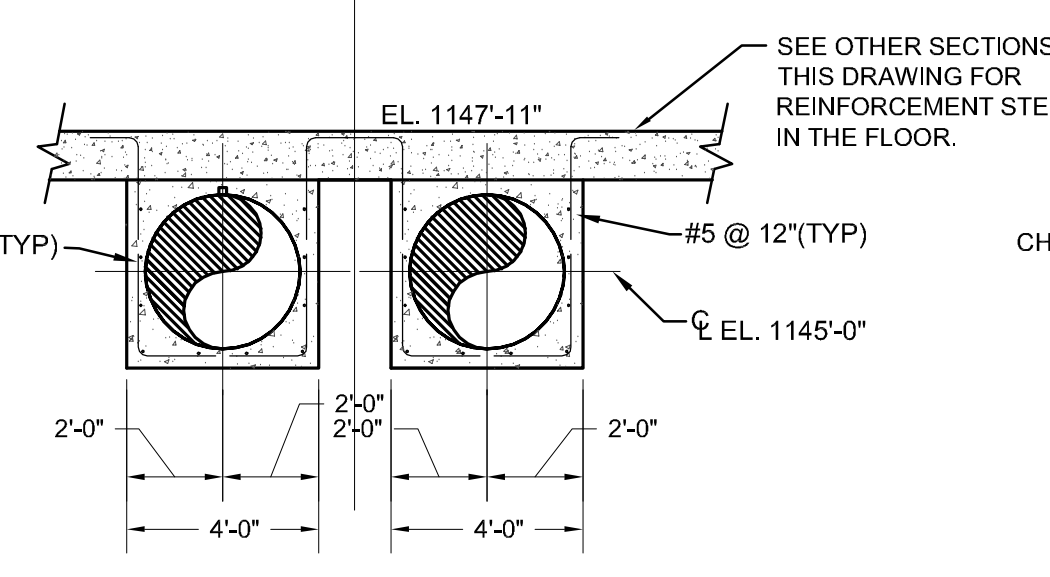
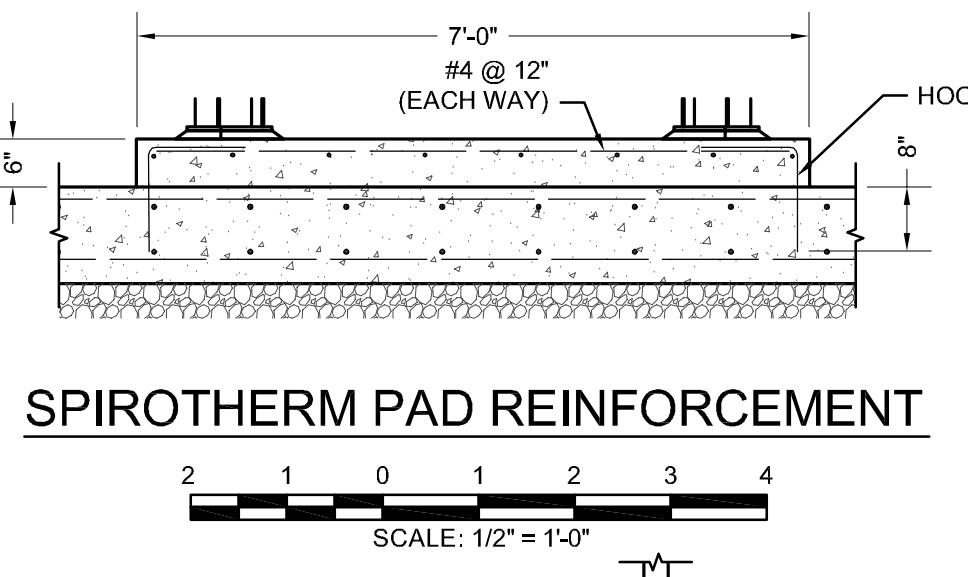
**CITY CAMPUS UTILITY PLANT**  
CHILLERS 1 & 2 REPLACEMENT PROJECT ID: C028P232  
GENERAL INSTALLATION CONTRACT PACKAGE

**ARCHITECTURAL PLAN**  
CHILLED WATER PUMP & TOWER WATER PUMP  
FOUNDATIONS SECTIONS P2 - S2

DRAWING NUMBER	AN403
PAGE	20 OF 51



**CHILLER BUILDING ANNEX ISOMETRIC VIEW  
 LOOKING NORTHWEST**



**ISSUED FOR  
 BID**  
 11-23-2011

