



BUC-EE'S

A DEVELOPMENT OF

Buc-ee's Benton, LLC
Saline County, AR

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BUC-EE'S TRAVEL CENTER
BENTON, ARKANSAS
74K - L - 2024 - Q2
INTERSTATE 30 & STATE HIGHWAY 229
BENTON, ARKANSAS 72019

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AR CORPORATE NO. 484
EXPIRES 12/31/2025

ISSUE/REVISION LOG:		
No.	DESCRIPTION	DATE
3	Revision 3 - Owner Changes	04/23/2025



ISSUED FOR REVIEW:	05/14/2024
ISSUED FOR BID:	05/14/2024
ISSUED FOR PERMIT:	05/14/2024

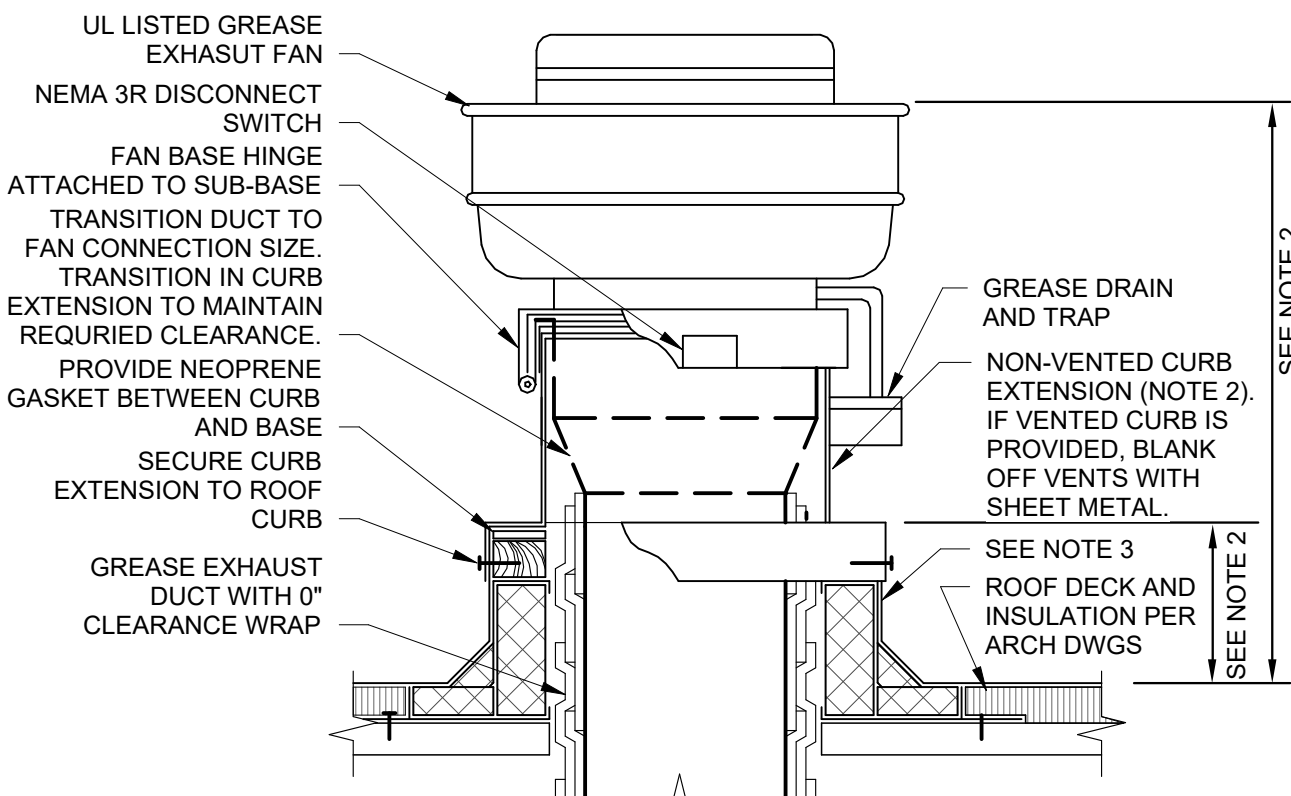
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M5.01

MECHANICAL DETAILS

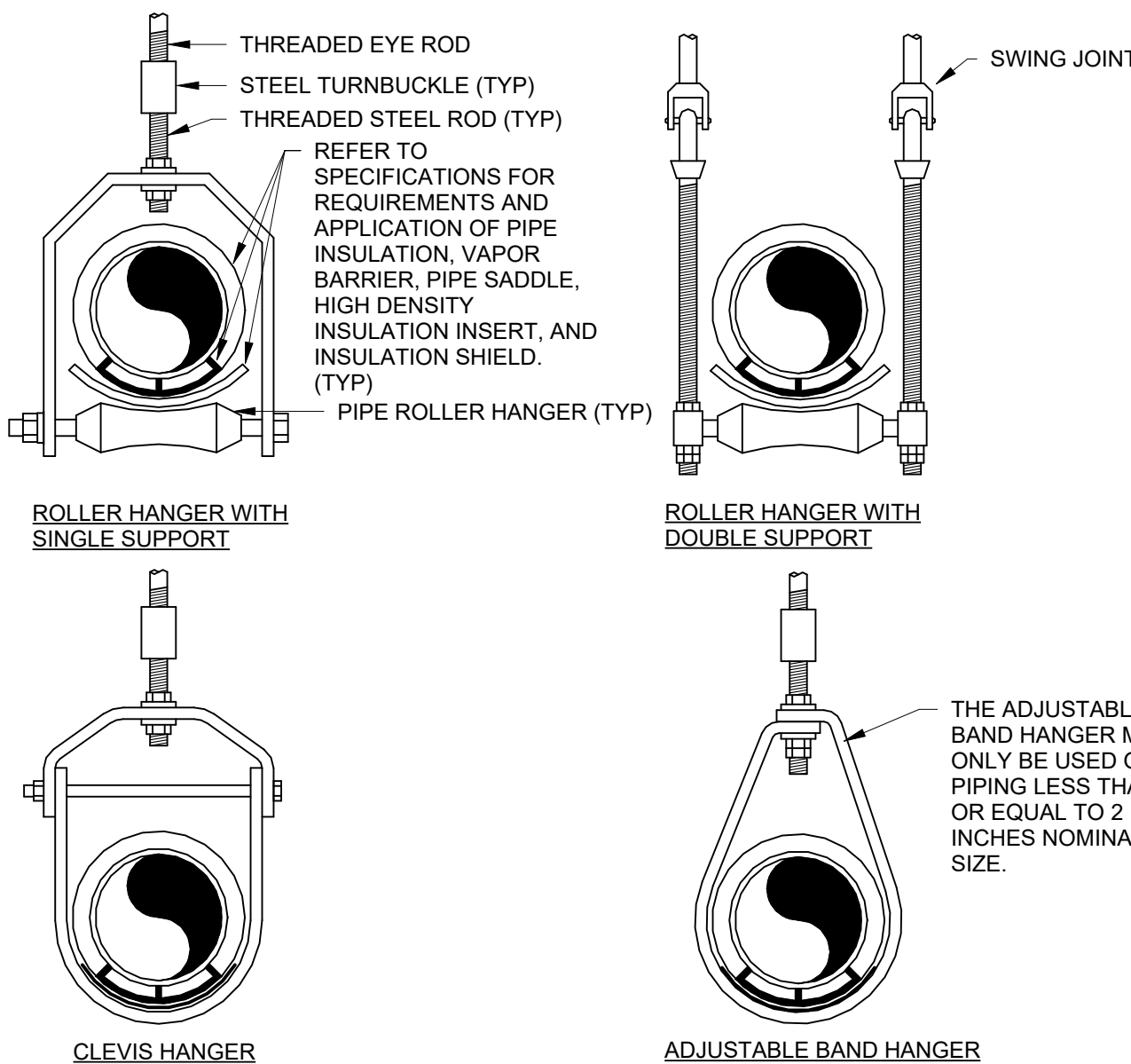
LSL PROJECT NUMBER: 2024-107.000

BENTON, ARKANSAS

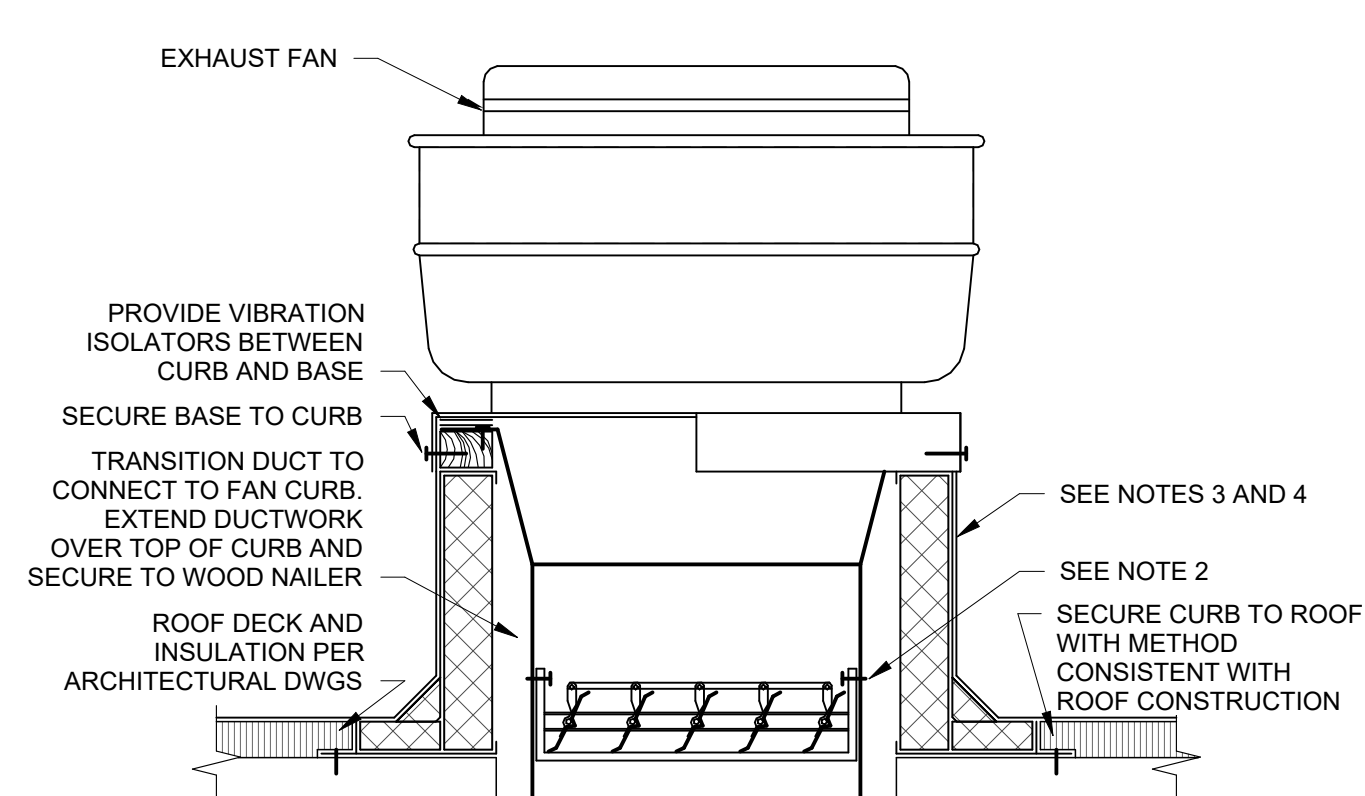


- NOTES:
1. ARRANGEMENT SHOWN IS SCHEMATIC, ADJUST TO SUIT FIELD CONDITIONS AND MEET LOCAL CODE.
 2. PROVIDE CURB EXTENSION MADE FROM NON-COMBUSTIBLE MATERIAL OF HEIGHT REQUIRED TO MOUNT FAN BASE A MINIMUM 18 INCHES ABOVE COMBUSTIBLE CURB MATERIAL AND DISCHARGE GREASE OUTLET A MINIMUM OF 40 INCHES ABOVE ROOF SURFACE OR ANY ADJACENT BUILDING STRUCTURE WITHIN 10 FEET OF OUTLET, WHICHEVER IS HIGHER.
 3. PREFABRICATED INSULATED ROOF CURB WITH TREATED WOOD NAILER, CANT, AND STEP AS REQUIRED TO ACCOMMODATE ROOF INSULATION, FRAME AND SECURE CURB TO ROOF WITH METHOD CONSISTENT WITH ROOF CONSTRUCTION. ROOF CURB SHALL BEAR ON ROOF STRUCTURE. FOR SLOPED ROOFS, PROVIDE CURB WITH DIMENSIONS CAPABLE OF COMPENSATING ROOF SLOPE TO ENSURE FAN IS INSTALLED LEVEL. REFER TO ARCHITECTURAL DRAWINGS AND CURB MANUFACTURER'S DETAILS FOR MORE INFORMATION.
- HIGH WIND STRAPPING: PROVIDE STAINLESS STEEL STRAPS OF LENGTH, WIDTH, THICKNESS, AND SPACING SUFFICIENT TO SECURE FAN TO CURB TO WITHSTAND WIND SPEED REQUIREMENTS PER LOCAL CODE. WRAP STRAPS OVER FAN AND SECURELY ATTACH TO OPPOSITE SIDE OF THE CURB.

17 UPBLAST GREASE EXHAUST FAN DETAIL
NTS

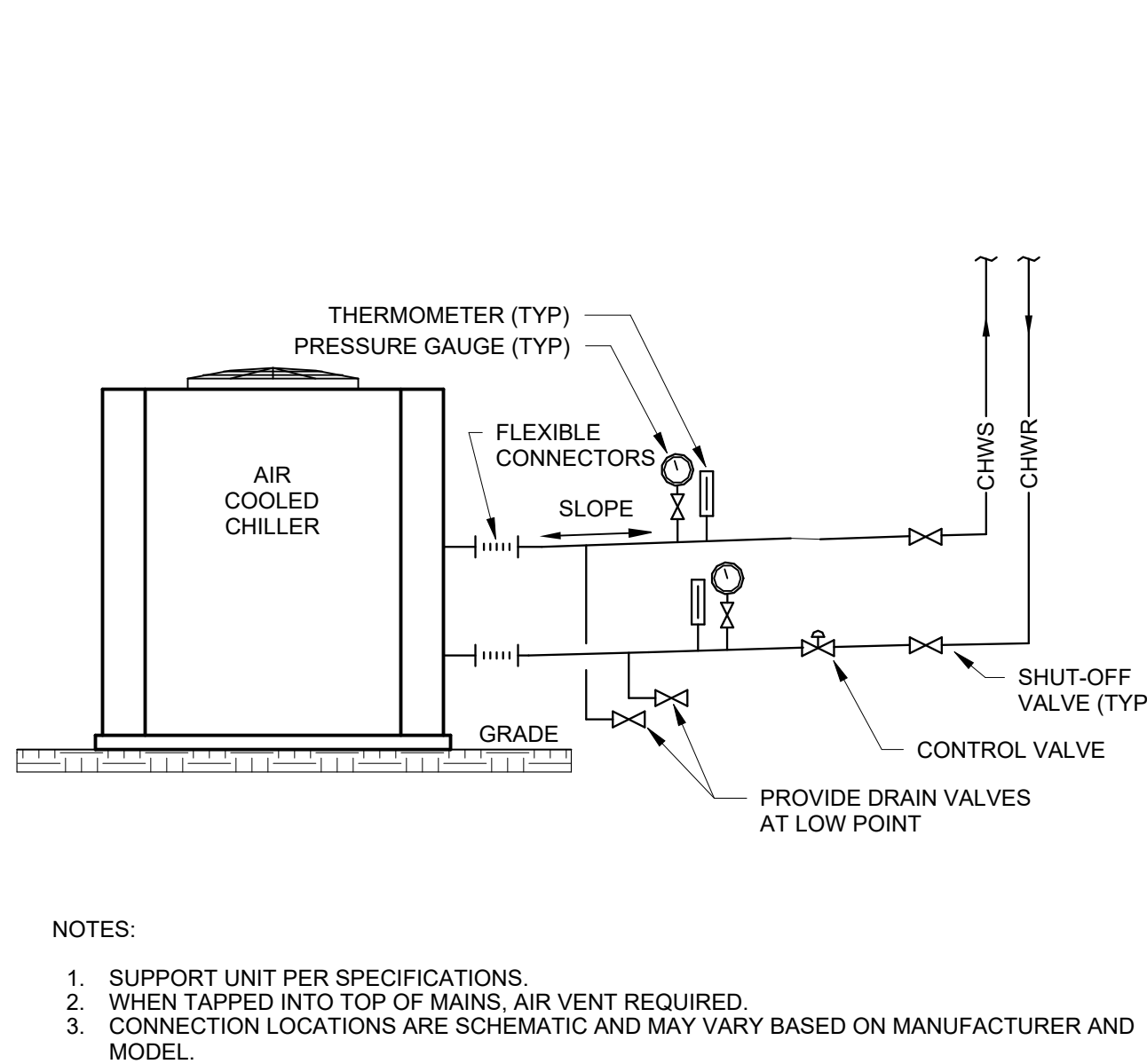


19 PIPE HANGERS DETAILS
NTS

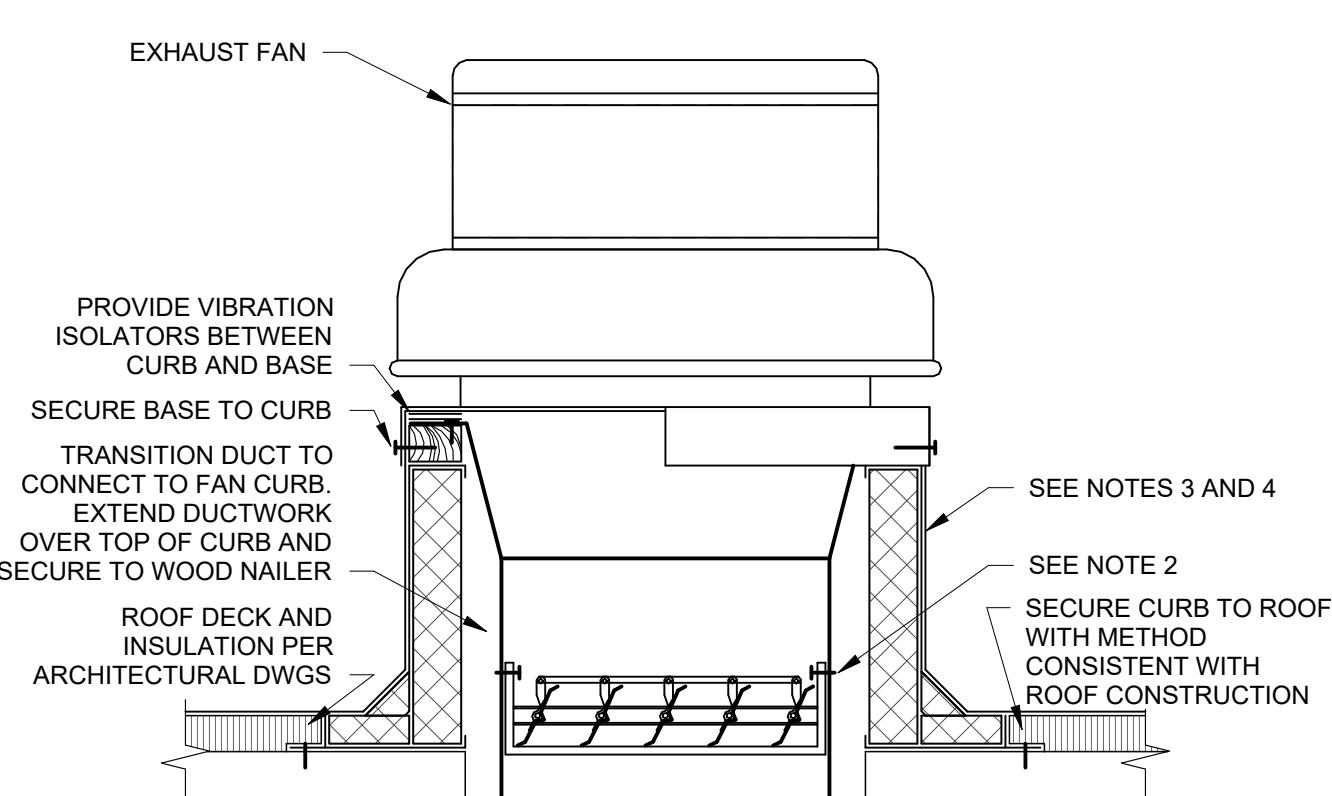


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 2. IF DAMPER IS SPECIFIED IN EQUIPMENT SCHEDULE, INSTALL DAMPER AT BASE OF CURB AND SECURE FROM ABOVE TO ALLOW SERVICE THROUGH TOP OF CURB.
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16 ROOF MOUNTED UPBLAST FAN DETAIL
NTS

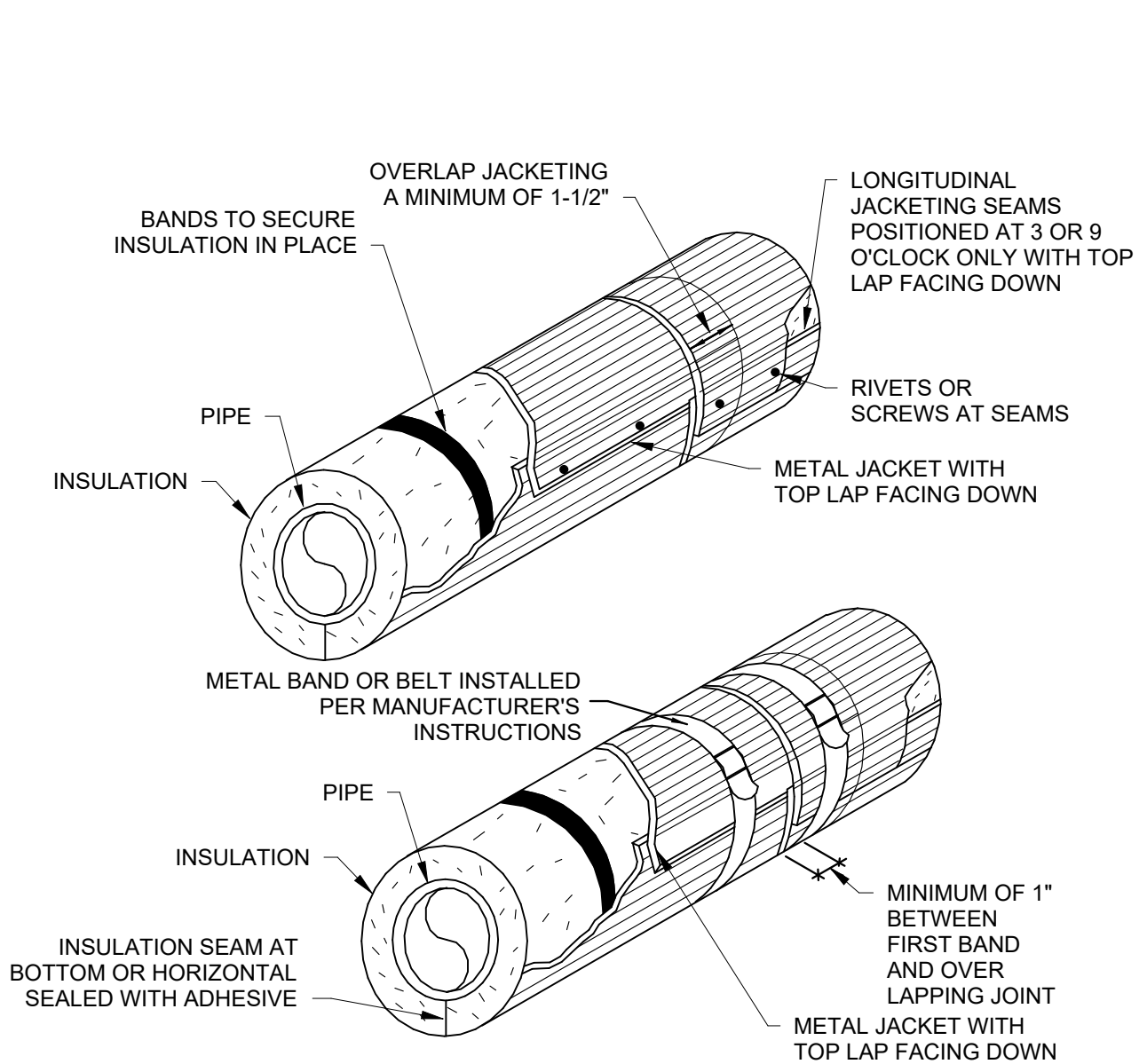


18 AIR-COOLED CHILLER PIPING DETAIL
NTS

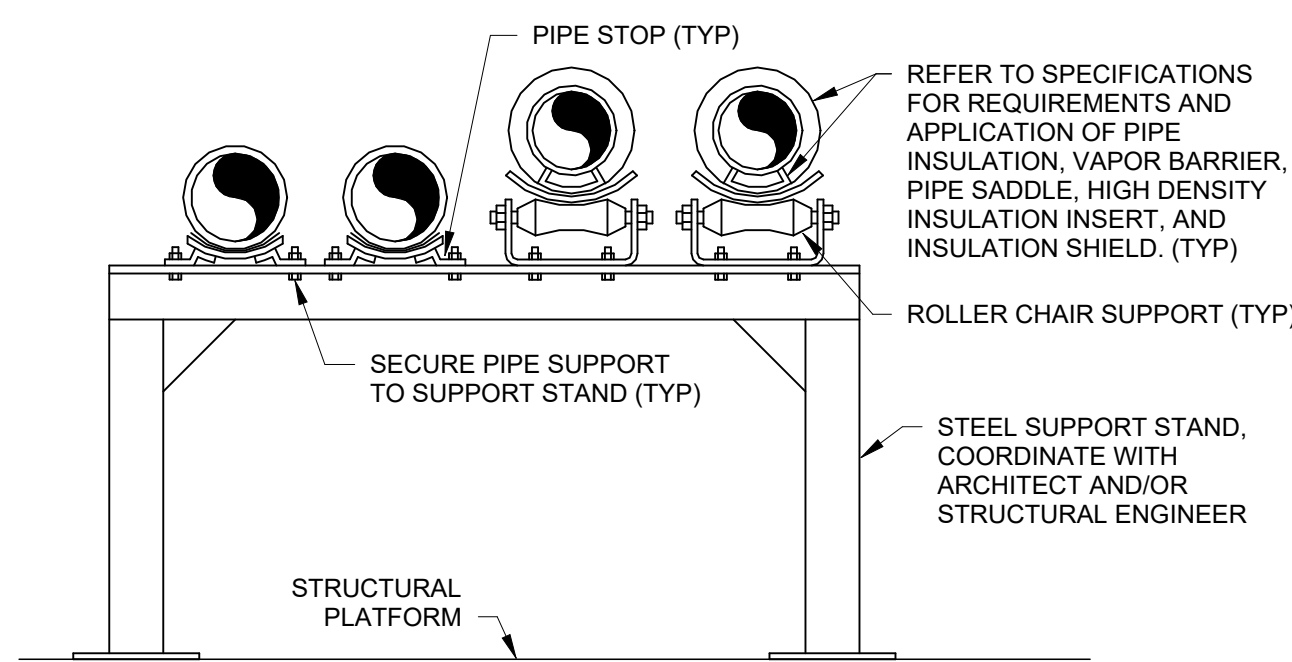


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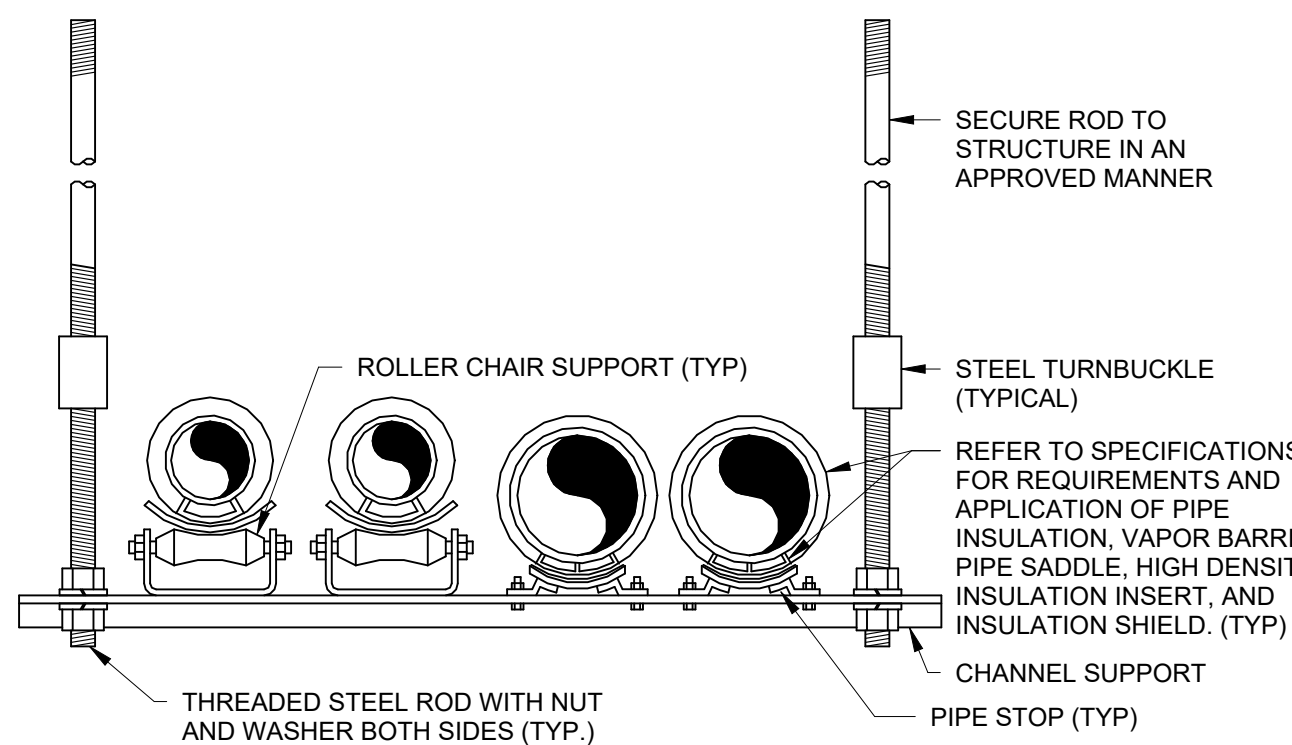
15 ROOF MOUNTED DOWNBLAST FAN DETAIL
NTS



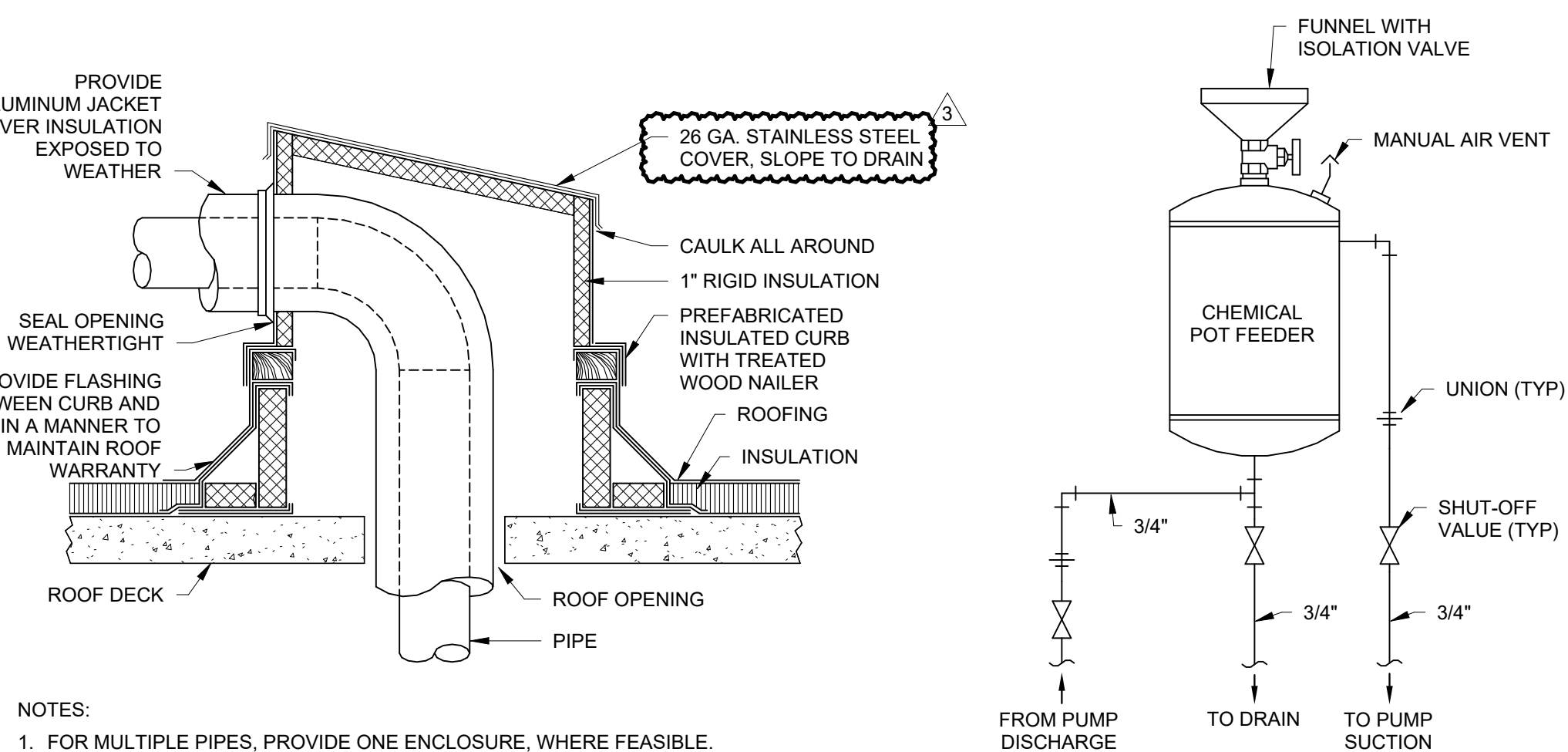
11 EXTERIOR PIPING WITH FIELD APPLIED METAL JACKET OVER INSULATION DETAIL
NTS



8 MULTIPLE PIPE FLOOR SUPPORT DETAIL
NTS

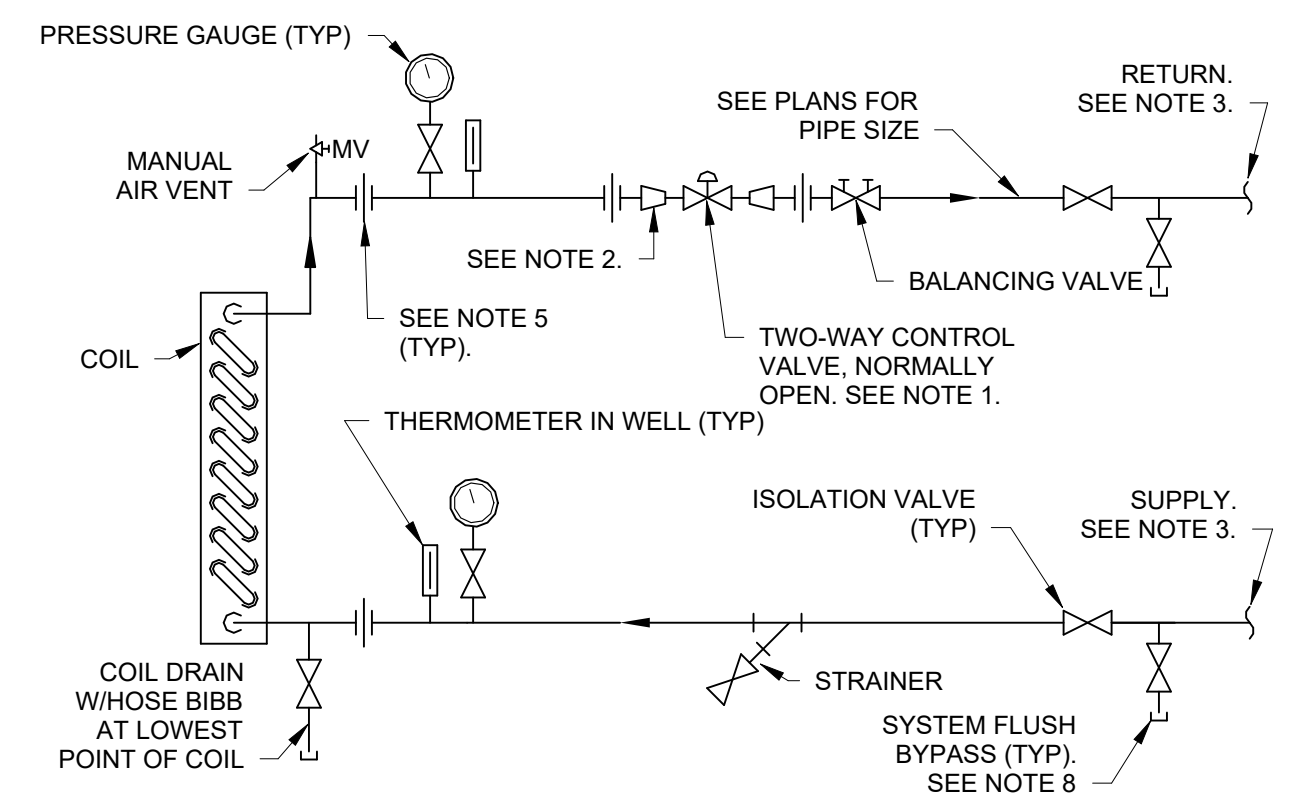


7 MULTIPLE PIPE TRAPEZE HANGER DETAIL
NTS

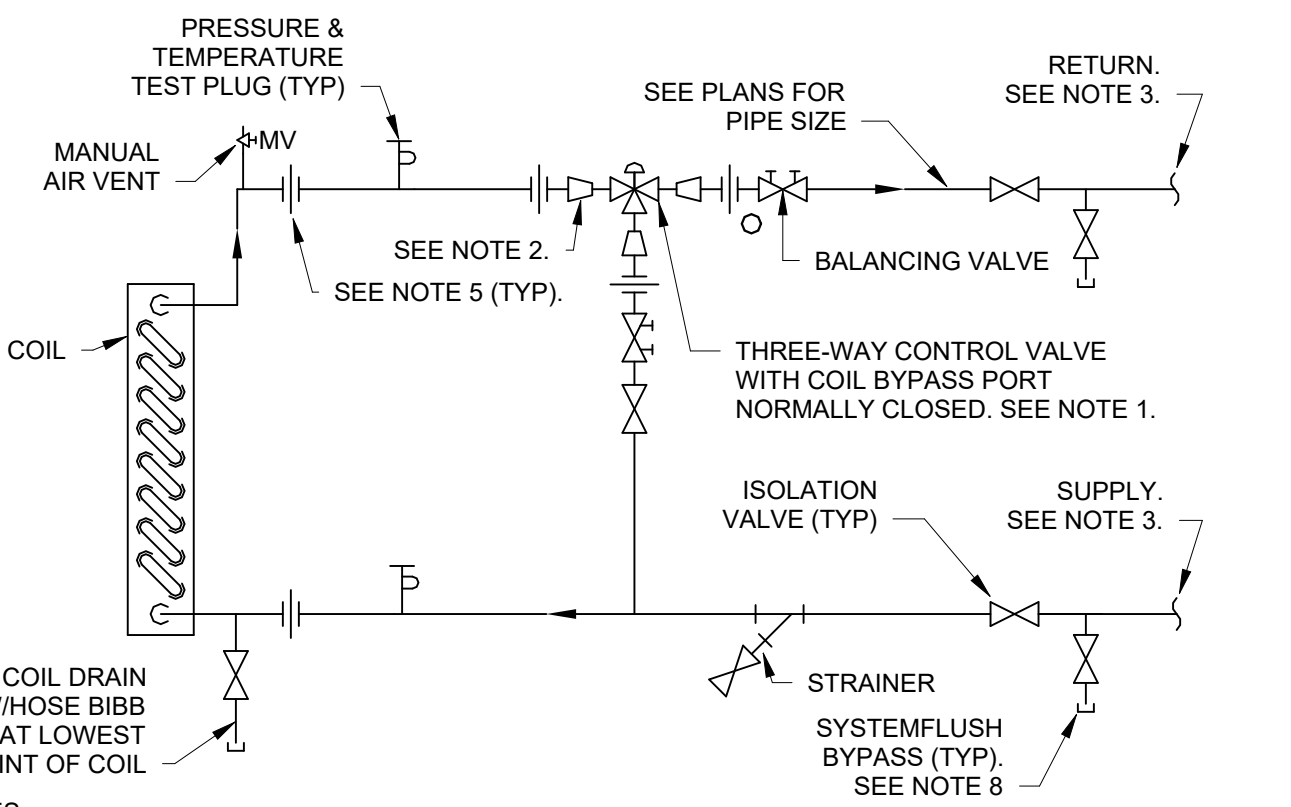


6 NOT USED NTS

5 2-WAY HYDRONIC COIL PIPING DETAIL
NTS



4 3-WAY HYDRONIC COIL PIPING DETAIL
NTS

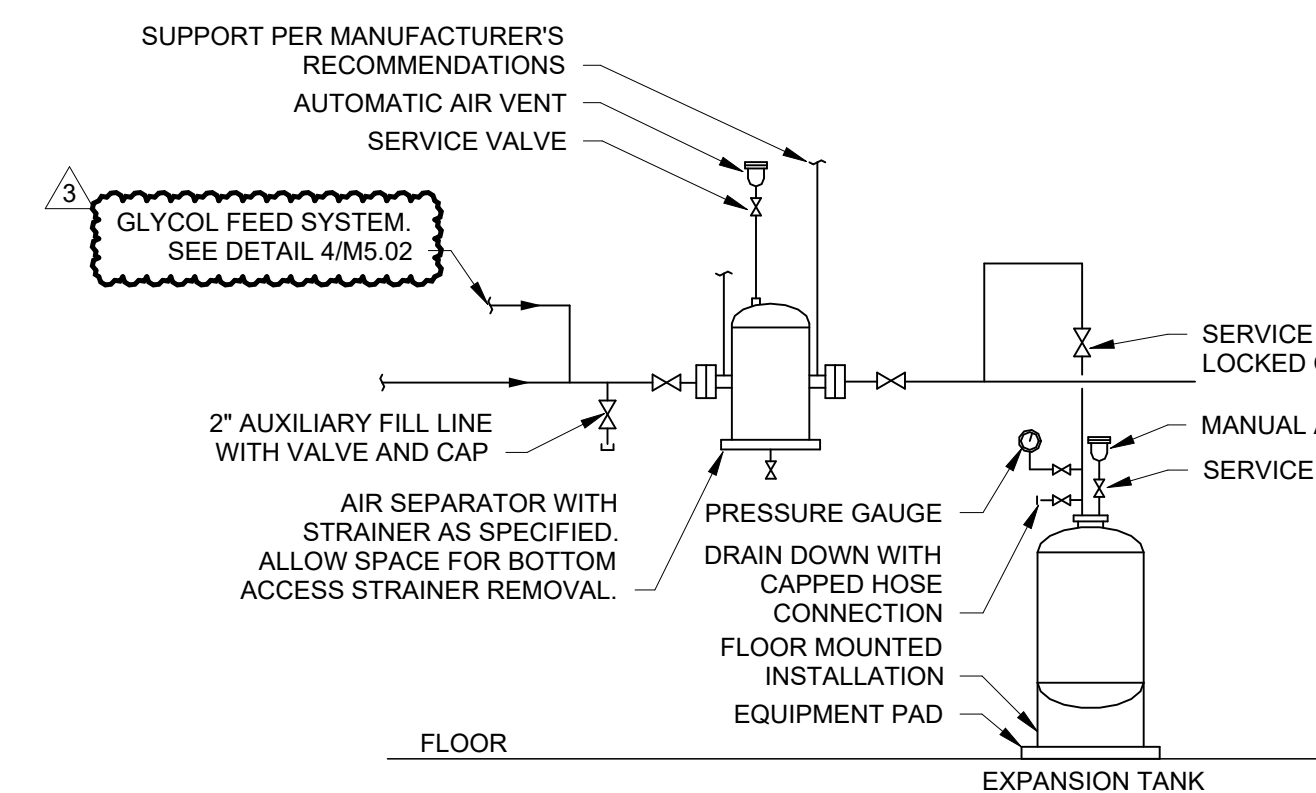


- NOTES:
1. FOR MULTIPLE PIPES, PROVIDE ONE ENCLOSURE, WHERE FEASIBLE.

- NOTES:
1. ROUTE VENTS FROM GAS TRAIN DEVICE(S) TO OUTDOORS IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS AND LOCAL CODE.
 2. FUEL TRANS SHALL BE PROVIDED BY ROLLER MANUFACTURER AND SHALL INCLUDE ALL OPERATING AND SAFETY DEVICES REQUIRED BY LOCAL CODE.
 3. EXHAUST VENT FLUE: SLOPE HORIZONTAL RUNS BACK TOWARD BOILER PER MANUFACTURER'S REQUIREMENTS.
 4. RELIEF LINE TO FLOOR DRAIN FULL SIZE OF RELIEF VALVE OUTLET.
 5. CONNECTION LOCATIONS SHOWN IN DETAIL ARE REPRESENTED SCHEMATICALLY AND MAY VARY BASED ON BOILER MANUFACTURER AND MODEL.

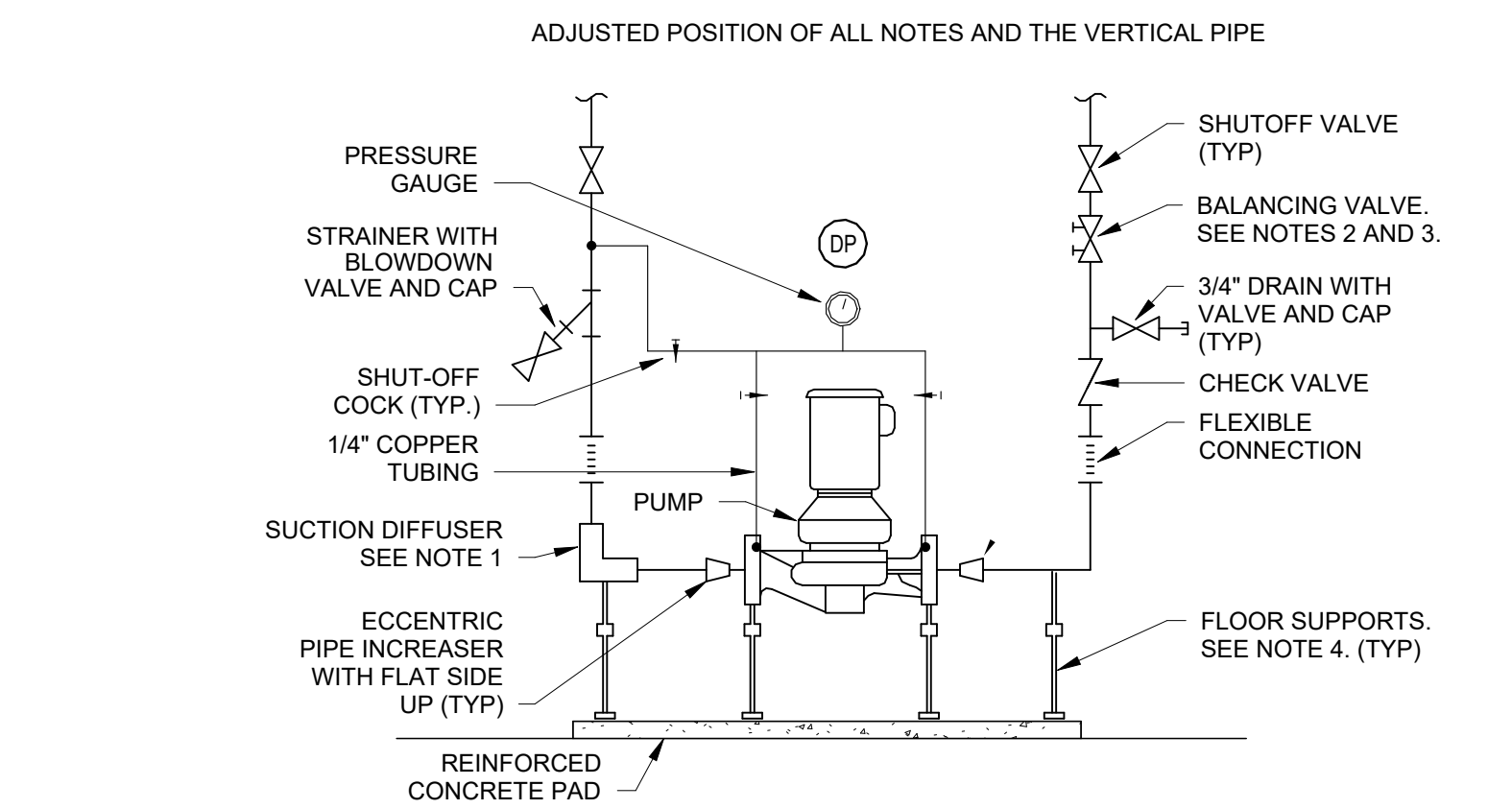
3 HOT WATER CONDENSING BOILER PIPING DETAIL
NTS

19 EXPANSION TANK AIR SEPARATOR PIPING DETAIL
NTS



14 LINT TRAP DETAIL
NTS

10 FLOOR MOUNTED IN-LINE PUMP DETAIL
NTS



- NOTES:
1. MAINTAIN MINIMUM 18" CLEARANCE IN FRONT OF SUCTION DIFFUSER FOR REMOVAL OF STRAINER. IF STRAINER IS PROVIDED WITH SUCTION DIFFUSER.
 2. INSTALL BALANCING VALVE WITH UNRESTRICTED UPSTREAM AND DOWNSTREAM PIPING LENGTHS IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 3. BALANCING VALVE SHALL BE LINE-SIZE AND VALVE SHALL REMAIN FULLY OPEN ON VARIABLE FLOW SYSTEMS.
 4. SUPPORT PUMP, SUCTION DIFFUSER AND ELBOW FROM FLOOR. PROVIDE VIBRATION ISOLATION PER SPECIFICATIONS.
 5. CONTRACTOR HAS OPTION OF PROVIDING A TRIPLE DUTY VALVE IN THE PUMP DISCHARGE LINE IN LIEU OF THE CHECK AND BALANCE VALVES. SHUTOFF VALVE IS STILL REQUIRED EVEN IF TRIPLE DUTY VALVE IS USED.

- NOTES:
1. INSTALL CONTROL VALVE BETWEEN UNIONS OR FLANGES.
 2. PROVIDE CONCENTRIC REDUCERS BOTH SIDES OF CONTROL VALVE AS REQUIRED.
 3. WHEN TAPPED INTO TOP OF MAINS, AIR VENT REQUIRED.
 4. ARRANGEMENT SHOWN FOR FULL FLOW THROUGH COIL ON FAILURE.
 5. REPLACE UNION/FLANGE SET WITH FLEXIBLE PIPE CONNECTOR WHERE EQUIPMENT IS SUPPORTED OR SUSPENDED BY SPRING ISOLATORS.
 6. PROVIDE WIDE-OPEN BALANCING VALVE ON THE RETURN SIDE OF HYDRONIC PIPING FOR FLOW VERIFICATION ONLY. DO NOT BALANCE.
 7. PRE-ASSEMBLED HOSE KITS ARE ACCEPTABLE. ALL COMPONENTS SHALL BE INCLUDED AND ARRANGED AS SHOWN. ALL SIZES SHALL BE LINE SIZE EXCEPT CONTROL VALVE MAY BE REDUCED SIZE AS SELECTED BY MANUFACTURER. FLEXIBLE PIPE CONNECTORS SHALL NOT EXCEED 24 INCHES.
 8. PROVIDE MEANS TO BYPASS COIL CIRCUIT FOR FLUSHING. PROVIDE DEDICATED BYPASS VALVES, FLEXIBLE HOSE, OR PERMANENT BYPASS LINE WITH SHUTOFF VALVE.

5 2-WAY HYDRONIC COIL PIPING DETAIL
NTS