



**APPENDIX A – UGA STANDARD DETAILS**  
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*(listed by section number)*

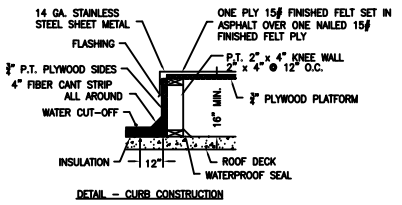
Revised July  
30, 2024

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Revised July  
30, 2024

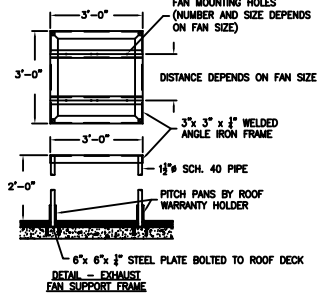
Revised July  
30, 2024

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30, 2024

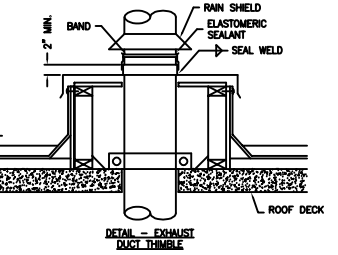
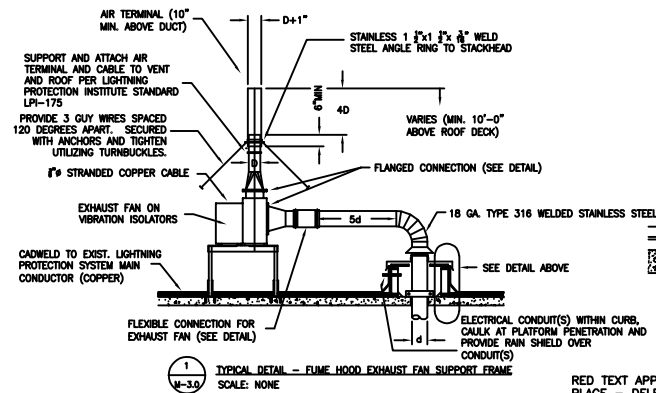


**FUME HOOD FAN**  
 DIAMETER D @ 3000 FPM  
 DISCHARGE DUCT SIZE  
 6" HFFH 575 CFM 6"  
 DIAMETER d @ 1000 FPM  
 SUCTION SIDE DUCT SIZE  
 6" HFFH 575 CFM 10"

AIRFLOWS BASED ON 80 FPM FACE VELOCITY WITH SASH SET AT 18" VERTICAL HEIGHT.



NOTES:  
 1. FEATHER FELTS BACK IN PLACE WHERE APPLICABLE. CHECK ROOF TYPE BEFORE INSTALLING CURB.



RED TEXT APPLIES ONLY WHEN LIGHTNING PROTECTION SYSTEM IS IN PLACE - DELETE IF THERE IS NO LIGHTNING PROTECTION IN PLACE.

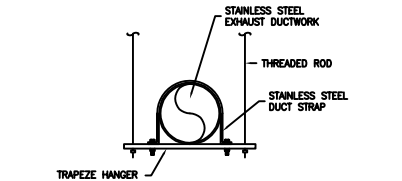
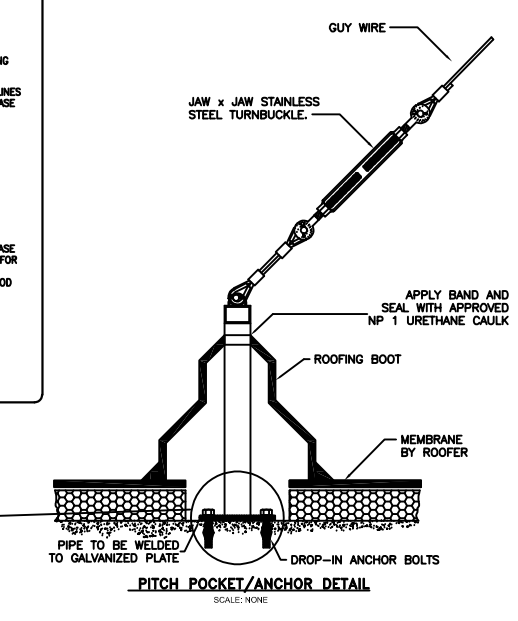
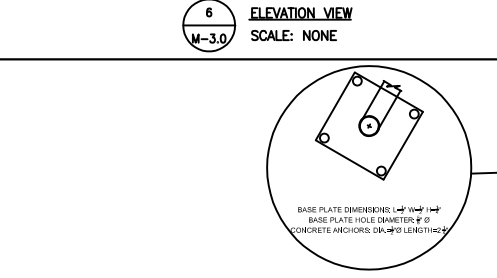
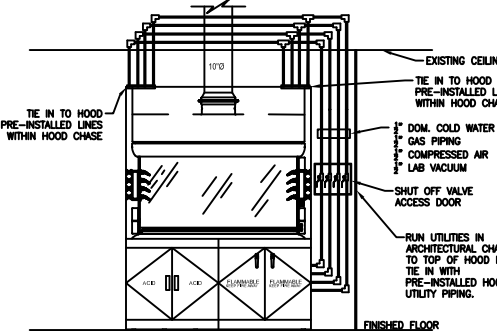
EXHAUST FAN SCHEDULE										
DESG.	BASIS OF DESIGN	80 FPM FV	MOTOR	MAX. RPM	SONE	dBA				
MFGR.	MODEL NO.	CFM	S.P.	WATTS	HP	VOLT/PH				
EF-4204	COOK	120CASD17	965	1.65"	-	3	208/3	1750	-	58

NOTES:  
 FAN OPTIONS SHALL INCLUDE: TEFC 208/3/60 MOTOR, SHAFT GROUNDING, PHENOLIC EPOXY COATING WITH UV, DRAIN, FLANGED INLET, FLANGED OUTLET, RUB RING, AND ALUMINUM WHEEL.  
 FAN TO BE SUPPLIED WITH ABB ACS150 VARIABLE FREQUENCY DRIVE

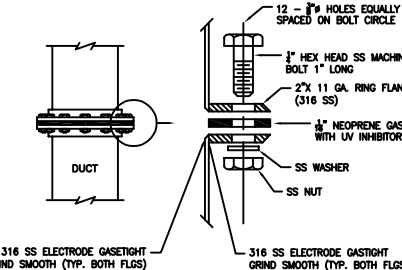
FUME HOOD SCHEDULE										
DESG.	BASIS OF DESIGN	CFM	S.P.	FACE VELOCITY	SASH HEIGHT	UTILITIES				
MFGR.	MODEL NO.	CFM	S.P.	FACE VELOCITY	SASH HEIGHT	UTILITIES	D	G	A	V
FH-4204	SUPREME AIR	LV05-6"	965	.30"	117 FPM	18"	2"	2"	2"	2"

NOTES:  
 FUME HOOD SHALL BE SUPPLIED BY OWNER.  
 ALL NEW FUME HOODS SHALL BE ASHRAE 110 TESTED BY CERTIFIED AND APPROVED FUME HOOD TESTING CONTRACTOR.

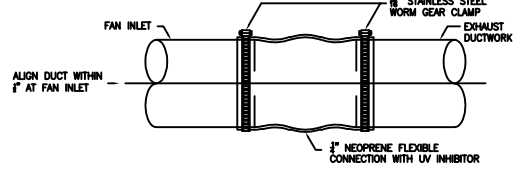
- THE EXISTING HOOD UTILITY CONNECTIONS SHALL BE REMOVED FROM THE EXISTING HOOD WHICH SHALL BE DEMOLISHED BY OTHERS. THE HOOD UTILITY CONNECTIONS SHALL BE RECONNECTED TO THE NEW HOOD AS DETAILED ON 6/M-1.
- THE EXISTING HOOD EXHAUST FAN, LOCATED ON THE ROOF, SHALL BE DEMOLISHED AND REMOVED BY THE CONTRACTOR.
- THE EXISTING AUXILIARY, MAKE UP AIR FAN AND ASSOCIATED DUCT WORK SHALL BE DEMOLISHED AND REMOVED BY THE CONTRACTOR. THE DUCTWORK INTAKE LOUVER SHALL BE CAPPED AND SEALED WATERTIGHT.
- EXHAUST DUCTWORK WITHIN THE BUILDING SHALL REMAIN AND BE REUSED TO THE EXTENT POSSIBLE/ BE REPLACED WITH NEW 316 STAINLESS STEEL DUCT.
- THE NEW FUME HOOD EXHAUST DUCTWORK SHALL BE ROUTED THROUGH A NEW ROOF CURB/THE EXISTING ROOF PENETRATION AND ROOF CURB. THE CURB CAP SHALL BE REPLACED WITH A NEW 14 GA. SS CAP WHICH SHALL BE MADE WEATHER TIGHT. THE EXISTING FAN SUPPORT CURB CAP AND RAILS SHALL BE DEMOLISHED AND REPLACED WITH A NEW 14 GA. SS CAP AND MADE WATER TIGHT.
- THE NEW HOOD EXHAUST UTILITY SET FAN SHALL BE SUPPORTED ON A NEW SUPPORT FRAME AS DETAILED ON 1/M-3.0, WHICH SHALL BE LOCATED TO ALLOW 9 DUCT DIAMETERS OF STRAIGHT DUCT UPSTREAM OF THE FLEXIBLE FAN CONNECTION. THE FAN DISCHARGE STACK SHALL BE LOCATED AT A DISTANCE NO LESS THAN 15' FROM ANY OUTSIDE AIR INTAKE. THE FAN STACK SHALL BE SUPPORTED WITH GUYS WIRES, TURNBUCKLES AND ANCHORS AS INDICATED ON DRAWINGS. COORDINATE FINAL LOCATION WITH FMD-MECHANICAL DESIGN ENGINEER (706-542-6560) PRIOR TO REMOVING EXISTING FAN OR MAKING MODIFICATIONS TO THE ROOF.
- NEW FAN SHALL BE CONNECTED TO EXISTING LIGHTNING PROTECTION SYSTEM AS SHOWN ON 1/M-3.0.
- FUME HOOD EXHAUST FAN VARIABLE FREQUENCY DRIVE SHALL BE INSTALLED IN ENCLOSURE AS DETAILED ON 5/M-3.0. SEE ELECTRICAL SHEETS FOR DRIVE WIRING DETAILS. DRIVE SHALL BE LOCATED IN SPACE ON WALL ADJACENT TO FUME HOOD ALONG WITH ELECTRICAL DISCONNECT. COORDINATE DRIVE LOCATION WITH FMD-ELECTRICAL ENGINEER PRIOR TO INSTALL.
- FAN SHALL OPERATE VIA ITS VARIABLE FREQUENCY DRIVE TO MAINTAIN 80 FEET PER MINUTE FACE VELOCITY AT 18" SASH POSITION. THE DRIVE SHALL BE JUMPED OUT TO PREVENT ON/OFF SWITCHING VIA THE HOOD. THE HOOD FAN CONTROL SWITCH SHALL BE BLANKED/THE HOOD EXHAUST FAN SHALL BE SWITCHED ON/OFF VIA A HOOD MOUNTED SWITCH (FACTORY SUPPLIED) THROUGH ITS VFD.
- ASHRAE STANDARD 110 TESTING FOR SMOKE VISUALIZATION, FACE VELOCITY AND TRACER GAS TESTING SHALL BE COORDINATED WITH DECEK CORP., FMD-08M (706-542-6561) UPON COMPLETION OF INSTALLATION AND TEST & BALANCE.
- THIS BUILDING HAS A WARRANTED ROOF. DEMOLITION, REPAIR, AND NEW WORK UNDER THIS CONTRACT IS REQUIRED TO BE ACCOMPLISHED IN A WAY THAT MAINTAINS THE NEW ROOF WARRANTY. PREVENT DAMAGE TO ROOF. COORDINATE WITH THE NEW ROOF'S MANUFACTURER TO ENSURE MATERIALS, DETAILING, AND LABOR ARE PROVIDED SO AS TO MAINTAIN ROOF WARRANTY. FOR ROOF WARRANTY/MANUFACTURER INFORMATION CONTACT BLAINE PRITCHETT, UGA-FMD CONSTRUCTION DEPARTMENT, (404) 392-4702, BLAINE@UGA.EDU.



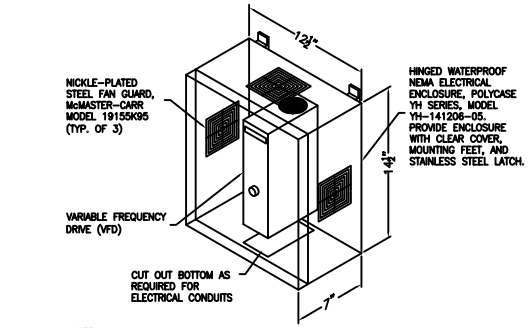
2 FUME HOOD EXHAUST DUCT HANGER DETAIL  
 SCALE: NONE



4 EXPLODED VIEW OF FLANGED CONNECTION  
 SCALE: NONE  
 TYPICAL FOR ALL EXHAUST DUCTS



3 FLEXIBLE CONNECTION FOR EXHAUST FAN  
 SCALE: NONE

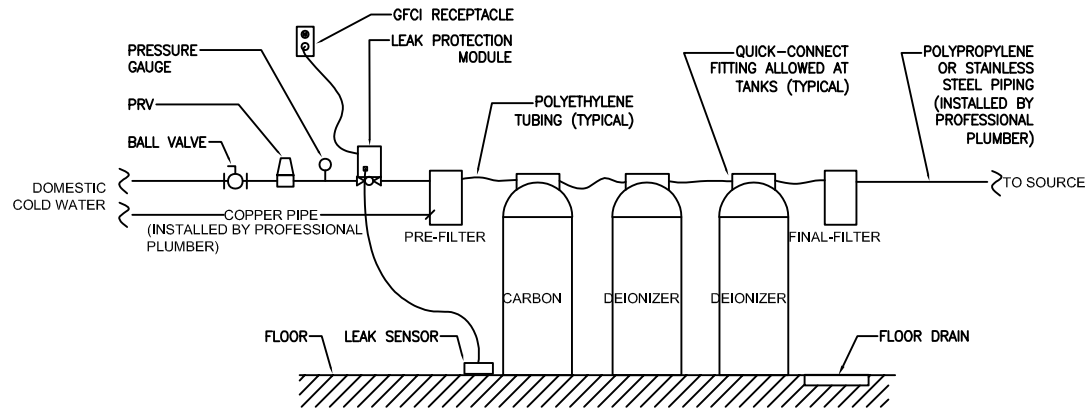


NOTE:  
 SECURE ONE LATCH ON ENCLOSURE WITH BEST MODEL 11872 PADLOCK, PADLOCK CORE TO BE COMBINATION TO USA M-89 KEY.

5 ENCLOSURE FOR EXHAUST FAN VARIABLE FREQUENCY DRIVE  
 SCALE: NONE

Note 1: This sheet intended for small renovation projects

0	INITIAL FOR UGA STANDARDS	05/01/2023
1	Added Note 1	07/30/2024



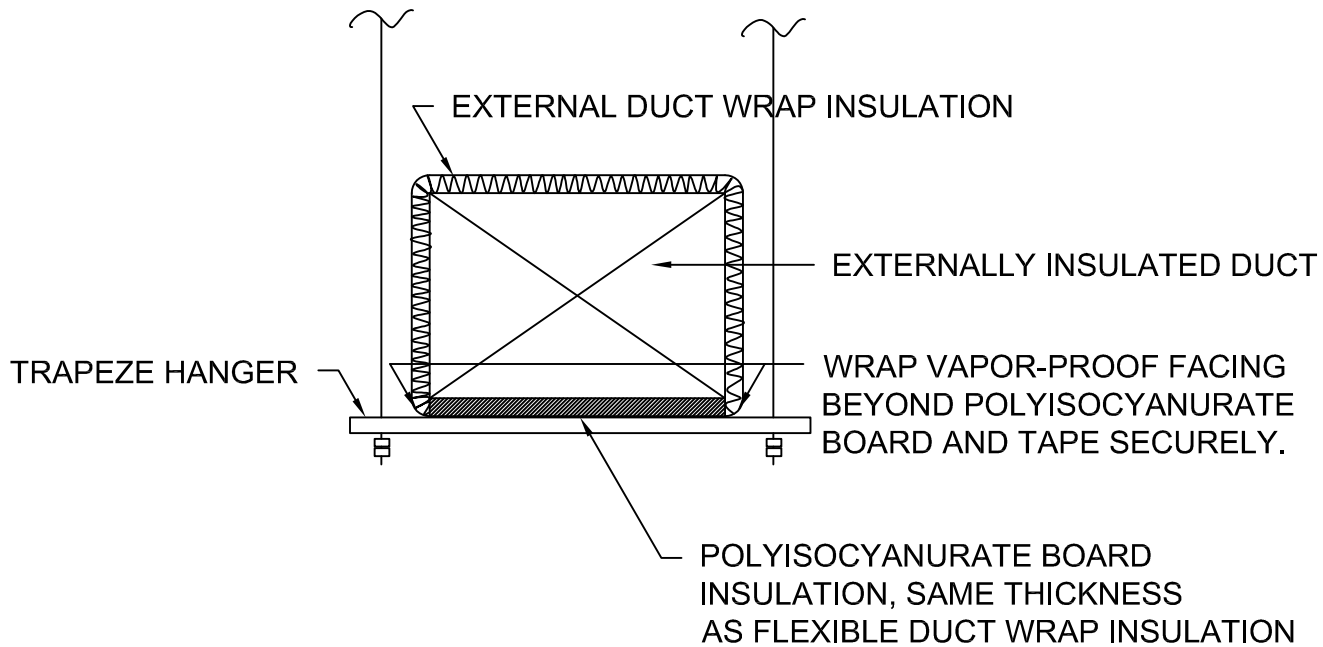
**DE-IONIZED WATER INSTALLATION DETAIL**

(SCHEMATIC ONLY)

**NOTES:**

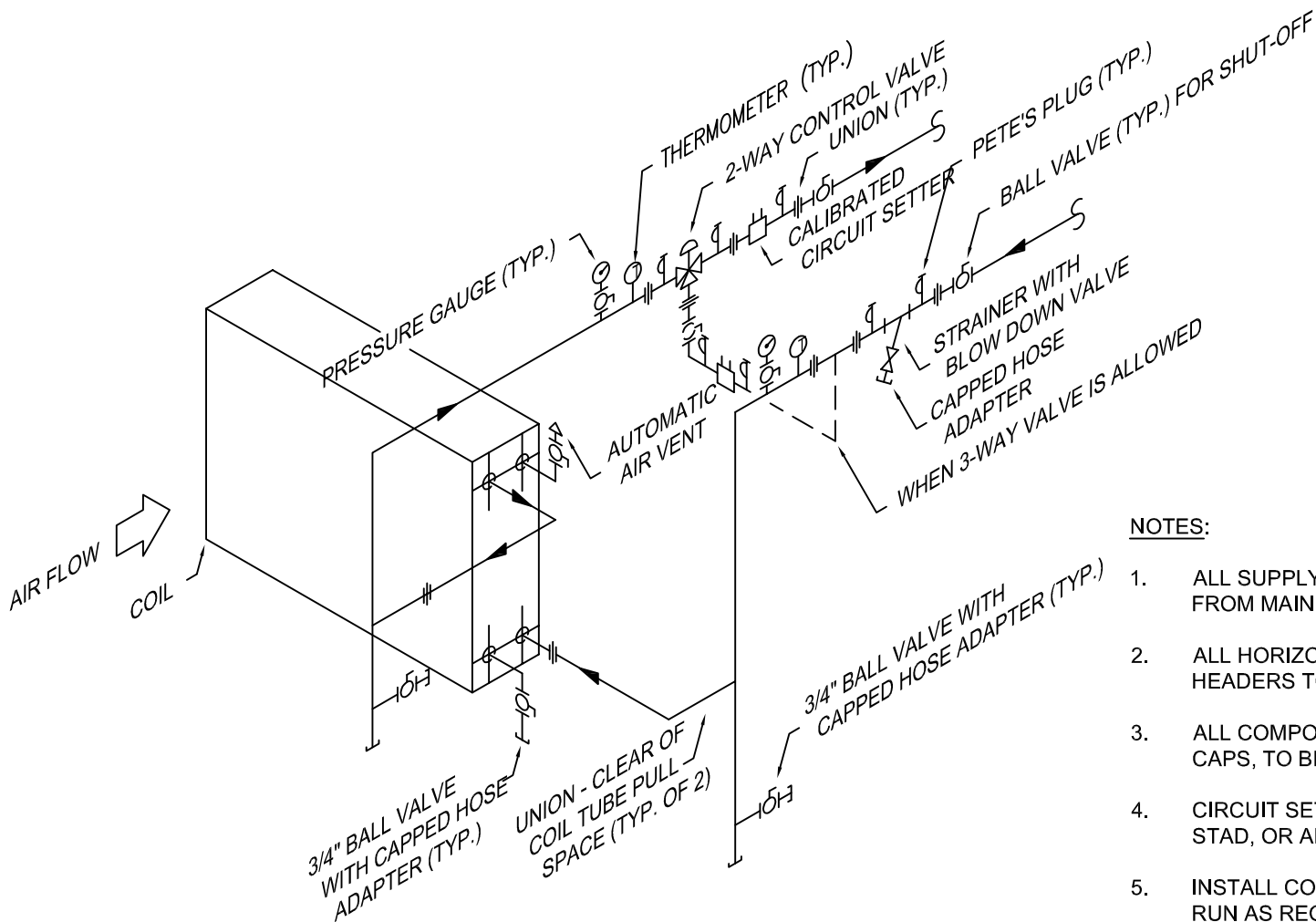
1. ALL CONNECTOR FITTINGS SHALL BE WITH THREADED CONNECTIONS WITH O-RINGS. COMPRESSION FITTINGS ARE NOT ALLOWED.
2. LEAK DETECTION MODEL SHALL BE SERIES 1000 LEAK-GOPHER, OR APPROVED EQUAL. FOR LARGE DISTRIBUTED SYSTEMS, AUTOMATIC FLOW LIMITING DEVICES MAY BE REQUIRED IN PLACE OF LEAK DETECTION. (PROVIDE FLO-LOGIC SYSTEM OR EQUAL)
3. FLOOR DRAINS SHALL BE REQUIRED FOR INSTALLATIONS IN NEW BUILDING, BUT FOR RENOVATIONS SHALL BE CONSIDERED ON A CASE-BY-CASE SCENARIO.
4. PRV SHALL BE BRASS CONSTRUCTION (WATTS OR APPROVED EQUAL)
5. GFCI RECEPTACLE SHALL BE REQUIRED WHEN NECESSARY AS REQUIRED TO MEET CODE.
6. ALL SHOWN RIGID PIPE (COPPER, STAINLESS STEEL, OR POLYPROPYLENE) SHALL BE INSTALLED BY A PROFESSIONAL PLUMBER (FMD OR A PLUMBING CONTRACTOR).
7. ALL INSTALLATIONS MUST BE APPROVED BY FMD. DEPENDING UPON LOCATION RELATIVE TO SENSITIVE EQUIPMENT (ELECTRICAL ROOMS, RESEARCH EQUIPMENT, ETC.) REQUIREMENTS MAY VARY.
8. ANY PIPING DISTRIBUTION BEYOND THE FINAL FILTER SHALL BE STAINLESS STEEL OR HEAT-FUSED POLYPROPYLENE AND SHALL BE PROPERLY SUPPORTED WITH PIPE HANGERS, SADDLES, PIPING CLAMPS, ETC., UNLESS THE END SOURCE IS DIRECTLY ADJACENT TO THE DI TANKS, THEN POLYETHYLENE TUBING IS ACCEPTABLE.

0	INITIAL FOR UGA STANDARDS	05/01/2023



TRAPEZE HANGER INSULATION DETAIL  
NO SCALE

0	INITIAL FOR UGA STANDARDS	05/01/2023

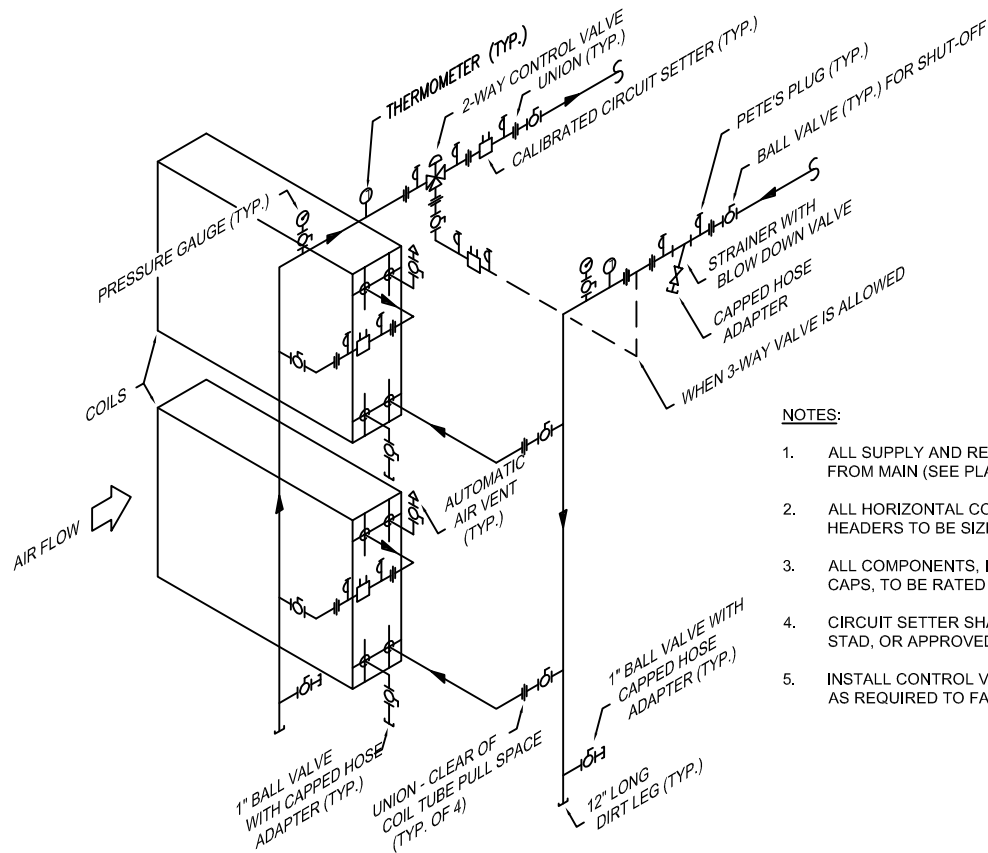


**NOTES:**

1. ALL SUPPLY AND RETURN HEADERS TO BE FULL SIZE FROM MAIN (SEE PLANS FOR PIPE SIZE).
2. ALL HORIZONTAL CONNECTIONS TO COILS FROM VERTICAL HEADERS TO BE SIZE OF COIL CONNECTIONS.
3. ALL COMPONENTS, INCLUDING DRAIN VALVE ADAPTER CAPS, TO BE RATED FOR FULL SYSTEM OPERATING PRESSURE.
4. CIRCUIT SETTER SHALL BE TOUR AND ANDERSON, MODEL STAD, OR APPROVED EQUAL.
5. INSTALL CONTROL VALVE PACKAGE IN HORIZONTAL PIPE RUN AS REQUIRED TO FACILITATE COIL REMOVAL.

**A.H.U. COIL PIPING DETAIL – SINGLE COIL**  
SCHEMATIC ONLY

0	INITIAL FOR UGA STANDARDS	05/01/2023



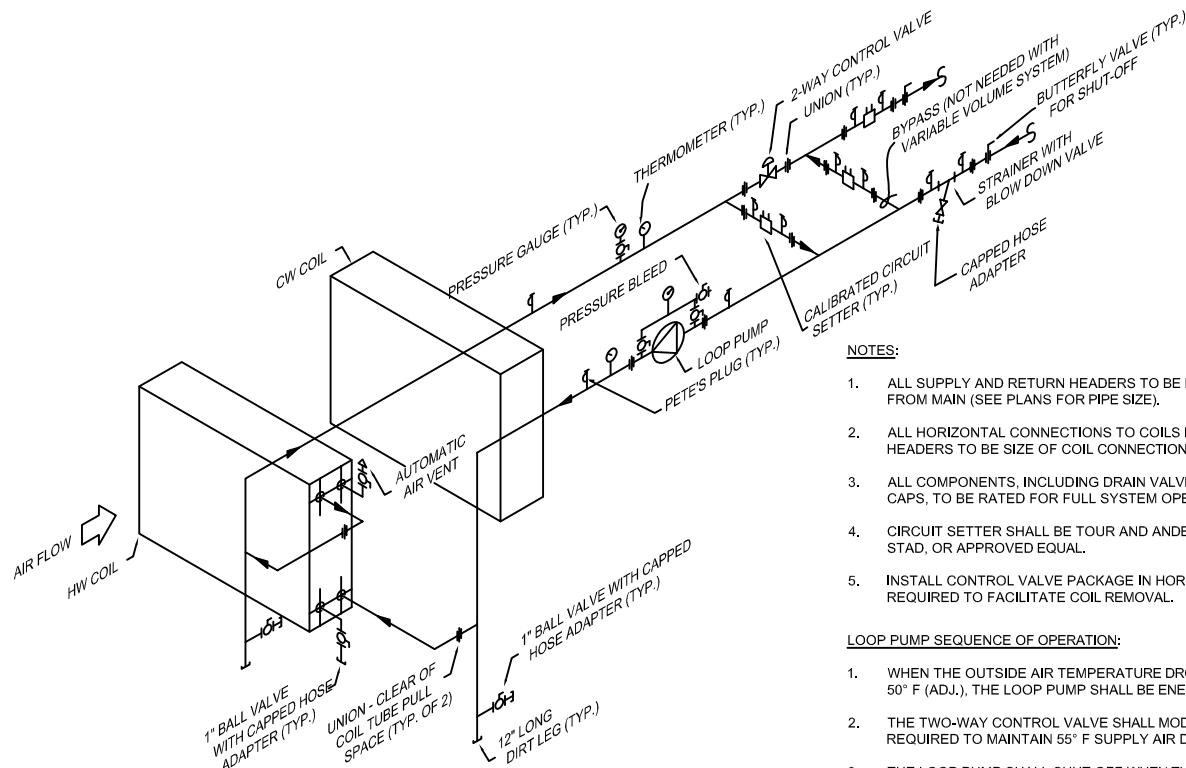
**NOTES:**

1. ALL SUPPLY AND RETURN HEADERS TO BE FULL SIZE FROM MAIN (SEE PLANS FOR PIPE SIZE).
2. ALL HORIZONTAL CONNECTIONS TO COILS FROM VERTICAL HEADERS TO BE SIZE OF COIL CONNECTIONS.
3. ALL COMPONENTS, INCLUDING DRAIN VALVE ADAPTER CAPS, TO BE RATED FOR FULL SYSTEM OPERATING PRESSURE.
4. CIRCUIT SETTER SHALL BE TOUR AND ANDERSON, MODEL STAD, OR APPROVED EQUAL.
5. INSTALL CONTROL VALVE PACKAGE IN HORIZONTAL PIPE RUN AS REQUIRED TO FACILITATE COIL REMOVAL.

**A.H.U. COIL PIPING DETAIL – MULTIPLE COILS**

SCHEMATIC ONLY

0	INITIAL FOR UGA STANDARDS	05/01/2023



**A.H.U. COIL PIPING DETAIL:  
HOT WATER COIL WITH LOOP PUMP & 2-WAY VALVE**

SCHEMATIC ONLY

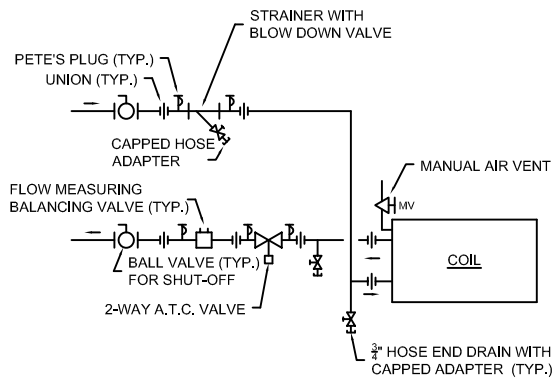
**NOTES:**

1. ALL SUPPLY AND RETURN HEADERS TO BE FULL SIZE FROM MAIN (SEE PLANS FOR PIPE SIZE).
2. ALL HORIZONTAL CONNECTIONS TO COILS FROM VERTICAL HEADERS TO BE SIZE OF COIL CONNECTIONS.
3. ALL COMPONENTS, INCLUDING DRAIN VALVE ADAPTER CAPS, TO BE RATED FOR FULL SYSTEM OPERATING PRESSURE.
4. CIRCUIT SETTER SHALL BE TOUR AND ANDERSON, MODEL STAD, OR APPROVED EQUAL.
5. INSTALL CONTROL VALVE PACKAGE IN HORIZONTAL PIPE RUN AS REQUIRED TO FACILITATE COIL REMOVAL.

**LOOP PUMP SEQUENCE OF OPERATION:**

1. WHEN THE OUTSIDE AIR TEMPERATURE DROPS BELOW 50° F (ADJ.), THE LOOP PUMP SHALL BE ENERGIZED.
2. THE TWO-WAY CONTROL VALVE SHALL MODULATE AS REQUIRED TO MAINTAIN 55° F SUPPLY AIR DISCHARGE TEMPERATURE.
3. THE LOOP PUMP SHALL SHUT OFF WHEN THE OUTSIDE AIR TEMPERATURE RISES ABOVE 52° F (ADJ.).
4. DESIGNER NOTE: LOOP PUMP SEQUENCE OF OPERATION TO BE INCLUDED IN AIR HANDLING UNIT SEQUENCE OF OPERATION.

0	INITIAL FOR UGA STANDARDS	05/01/2023

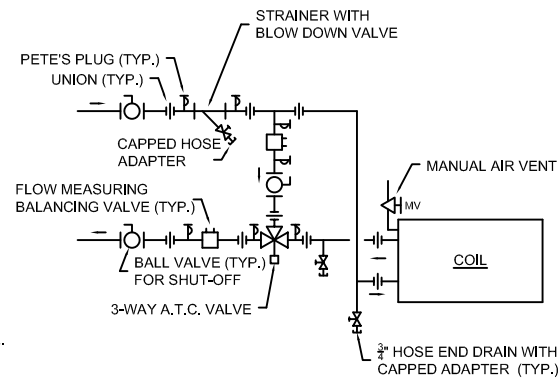


**NOTES:**

1. ARRANGE ALL PIPING TO ALLOW REMOVAL OF COIL.
2. PIPING SHOWN IS DIAGRAMMATIC.
3. ALL COMPONENTS, INCLUDING DRAIN VALVE ADAPTER CAPS, TO BE RATED FOR FULL SYSTEM OPERATING PRESSURE.
4. CIRCUIT SETTERS SHALL BE TOUR AND ANDERSON, MODEL STAD, OR APPROVED EQUAL.

**FAN COIL UNIT & TERMINAL UNIT COIL PIPING DETAIL  
2-WAY VALVE CONFIGURATION**

(SCHEMATIC ONLY)



**NOTES:**

1. ARRANGE ALL PIPING TO ALLOW REMOVAL OF COIL.
2. PIPING SHOWN IS DIAGRAMMATIC.
3. ALL COMPONENTS, INCLUDING DRAIN VALVE ADAPTER CAPS, TO BE RATED FOR FULL SYSTEM OPERATING PRESSURE.
4. CIRCUIT SETTERS SHALL BE TOUR AND ANDERSON, MODEL STAD, OR APPROVED EQUAL.

**FAN COIL UNIT & TERMINAL UNIT COIL PIPING DETAIL  
3-WAY VALVE CONFIGURATION**

(SCHEMATIC ONLY)

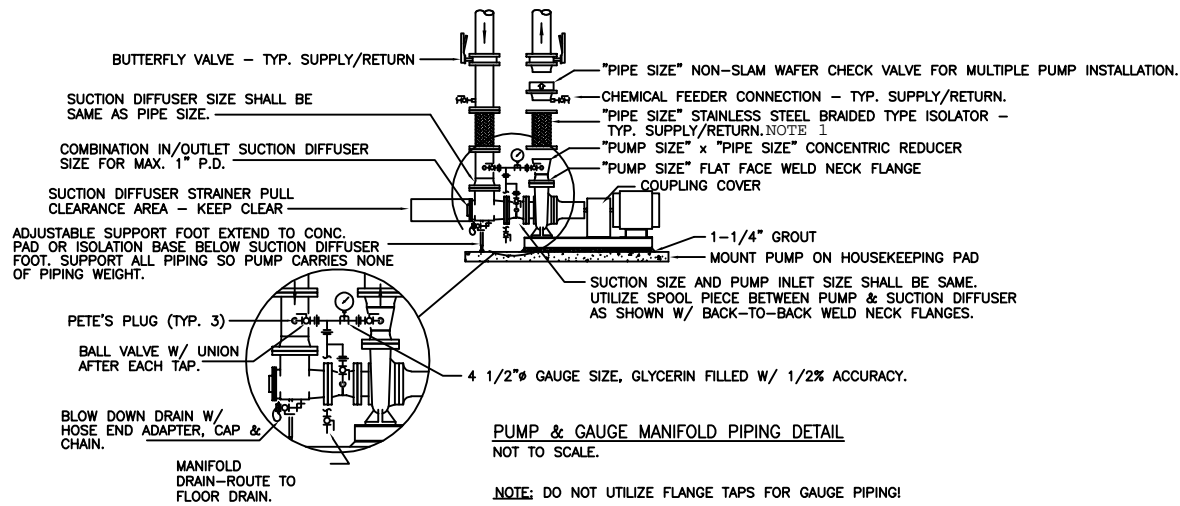
0	INITIAL FOR UGA STANDARDS	05/01/2023



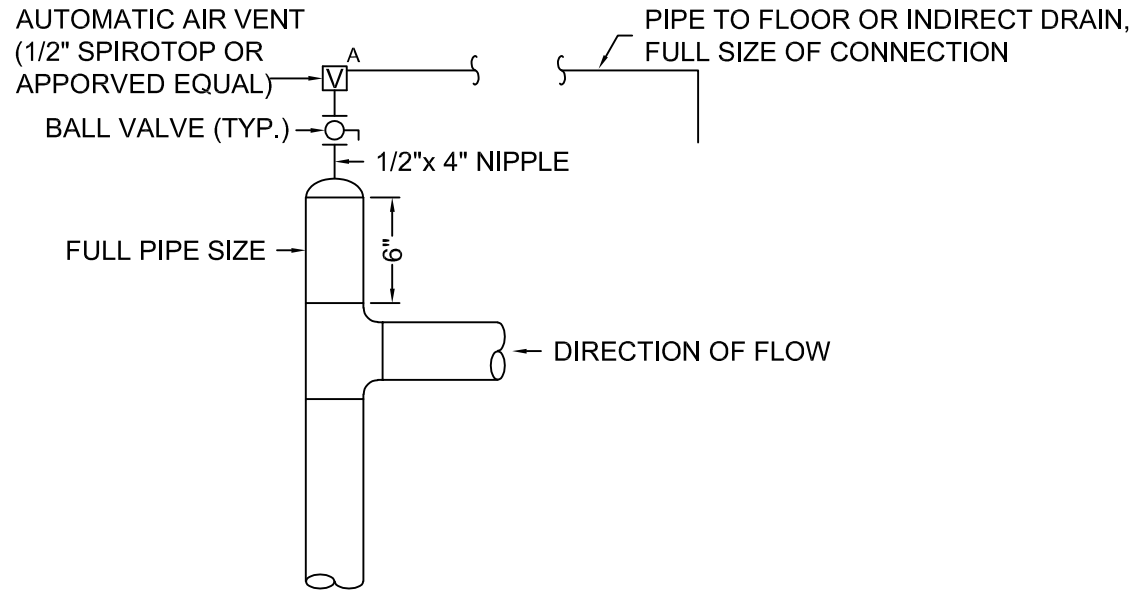
FAN COIL UNIT & TERMINAL UNIT PIPING

**23 20 00-D**





0	INITIAL FOR UGA STANDARDS	05/01/2023
1	Added Note 1. Removed pump and compressed air details.	07/30/2024



NOTES:

1. VENT ALL HIGH POINTS AS INDICATED ABOVE.

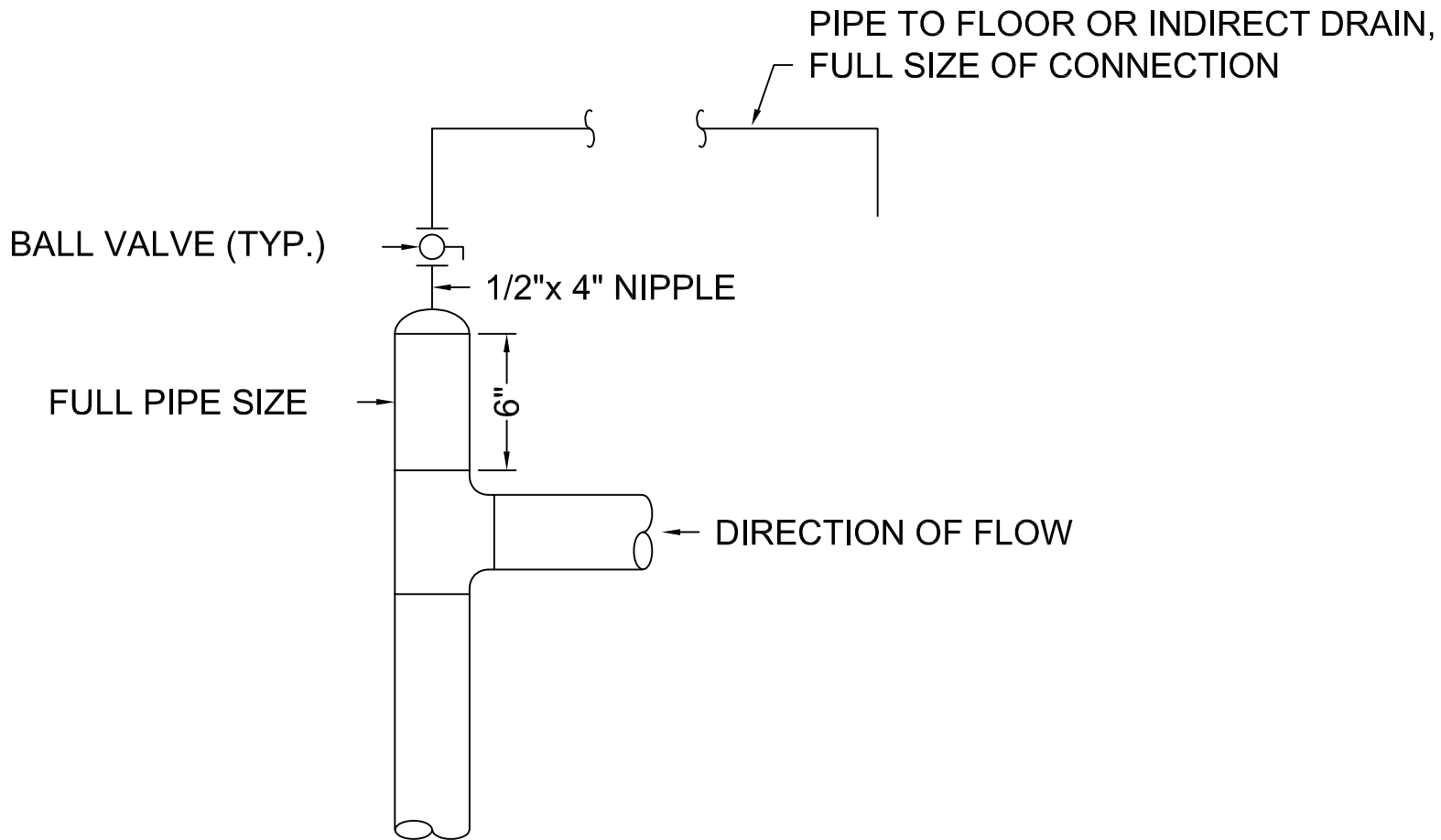
AUTOMATIC AIR VENT DETAIL

SCALE: NONE

0	INITIAL FOR UGA STANDARDS	05/01/2023
1	Removed Note 2	07/30/2024

  
**The University of Georgia**  
 Engineering Department      Facilities Management Division

AUTOMATIC AIR VENT
<b>23 21 13-A</b>



## MANUAL AIR VENT DETAIL

SCALE: NONE

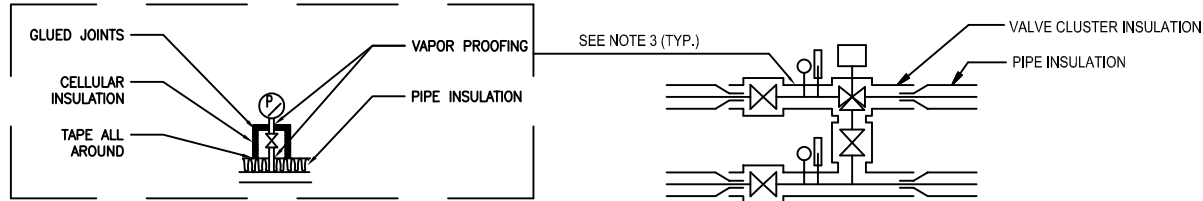
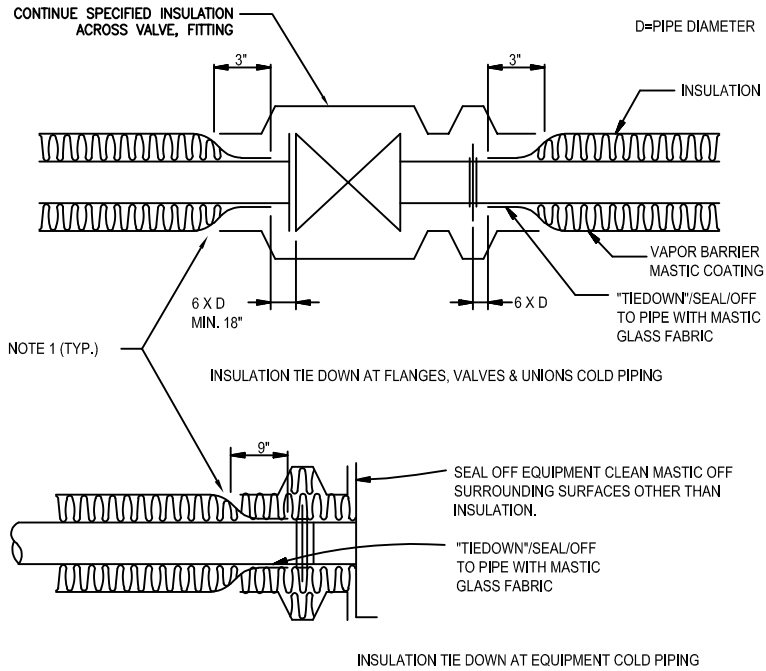
### NOTES:

1. VENT ALL HIGH POINTS AS INDICATED ABOVE.

0	INITIAL FOR UGA STANDARDS	05/01/2023
1	Removed Note 2	07/30/2024

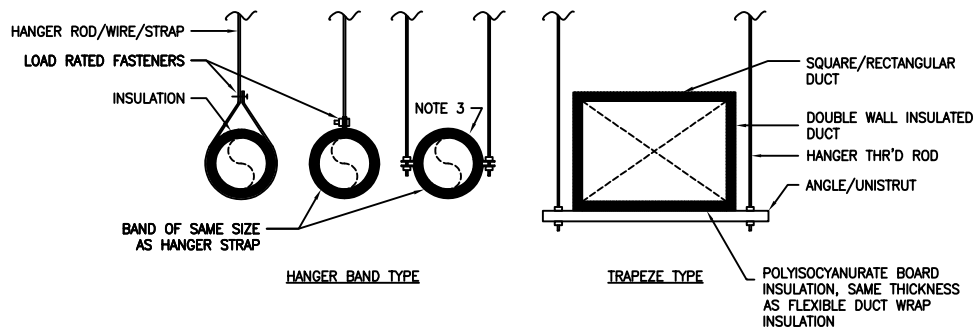
**NOTES:**

1. IDENTIFY ALL "TIE DOWNS" INCLUDING ON STRAIGHT RUNS OF PIPE WITH 4" WIDE PLASTIC ADHESIVE BANDS TAPED ALL AROUND AND MARKED "VAPOR PROOFED TO PIPE". PROVIDE TIE-DOWNS EVERY 21 FEET ON STRAIGHT RUNS OF PIPE.
2. DO NOT DAMAGE VAPOR BARRIER/TIE DOWNS ON EXISTING WORK WHEN ADDING NEW WORK. REPAIR ANY DAMAGE DONE.
3. PROVIDE INSULATION ON ALL INSTRUMENTS, VALVES, PROBES, PETE'S PLUGS, TO PREVENT CONDENSATION/DIPPING. INSULATION MAY BE "ARMAFLEX" OR OTHER APPROVED FLEXIBLE CELLULAR INSULATION FIXED WITH MANUFACTURER'S APPROVED ADHESIVE OR "NO DRIP" TAPE NEATLY APPLIED. THE CELLULAR INSULATION SHALL BE FORMED INTO A "CUP" OF SUITABLE DIAMETER TO FIT OVER THE VALVE, PROBE, ETC. AND TAPED TO THE SURFACE OF THE PIPE INSULATION.



**INSULATION TIE DOWN/SEAL OFF POINTS FOR CHILLED WATER PIPE DETAIL**  
SCALE: NONE

0	INITIAL FOR UGA STANDARDS	05/01/2023



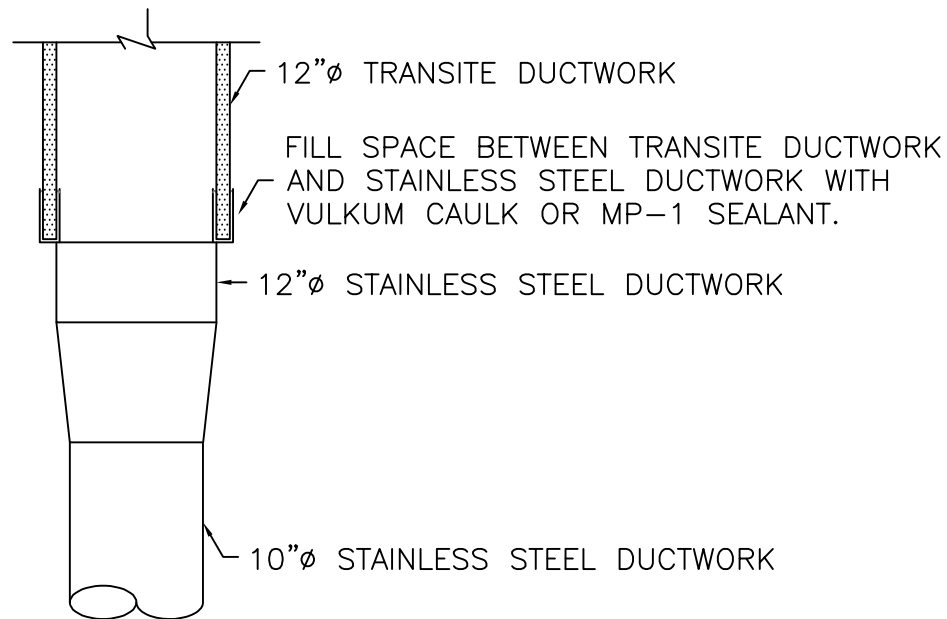
NOTE:

1. WHERE EXTERNAL DUCT WRAP INSULATION IS UTILIZED, POLYISOCYANURATE BOARD INSULATION WILL BE USED AT BETWEEN SUPPORT AND DUCT WITH SAME THICKNESS AS EXTERNAL DUCT WRAP INSULATION.
2. WRAP VAPOR-PROOF FACING BEYOND POLYISOCYANURATE BOARD INSULATION AND TAPE SECURELY.
3. ONE HALF-ROUND MAY BE USED IF DUCT RETAINS IT'S SHAPE.

**DUCT HANGER SUPPORT DETAIL**

NO SCALE

0	INITIAL FOR UGA STANDARDS	05/01/2023
1	Removed "Detail for Ductwork Supported from Floor"	07/30/2024

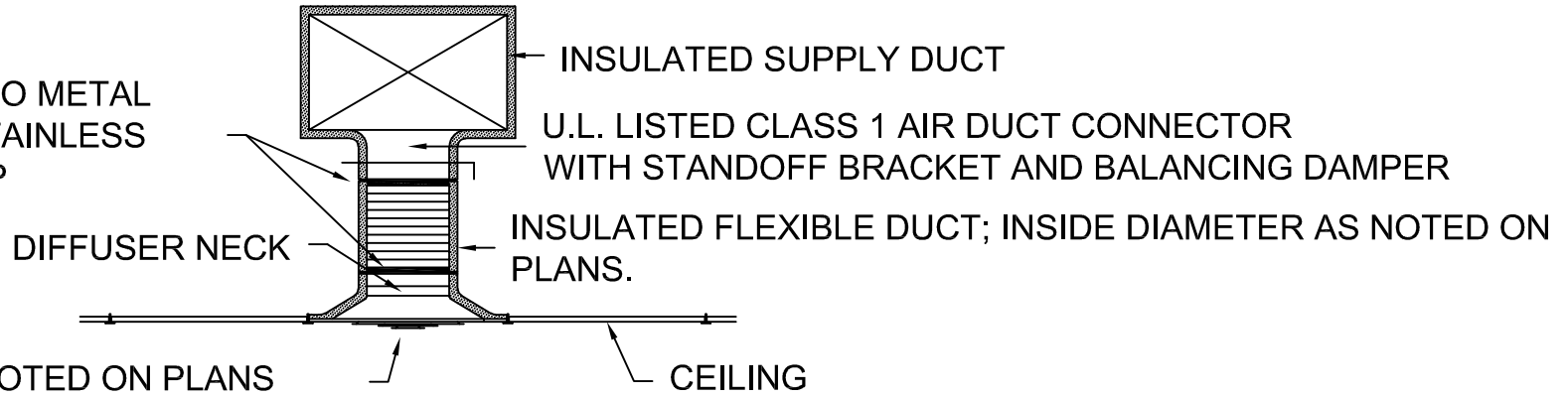


DETAIL OF CONNECTION OF TRANSITE DUCTWORK AND STAINLESS STEEL DUCTWORK

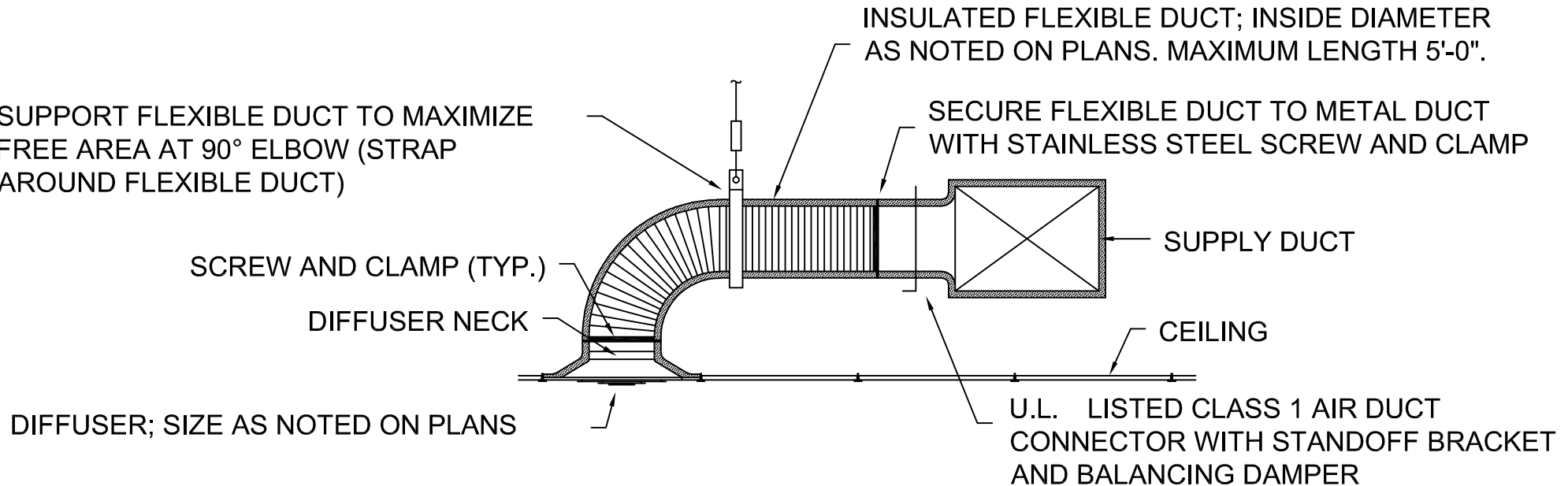
SCALE: NONE

0	INITIAL FOR UGA STANDARDS	05/01/2023

SECURE FLEXIBLE DUCT TO METAL DUCT & DIFFUSER WITH STAINLESS STEEL SCREW AND CLAMP

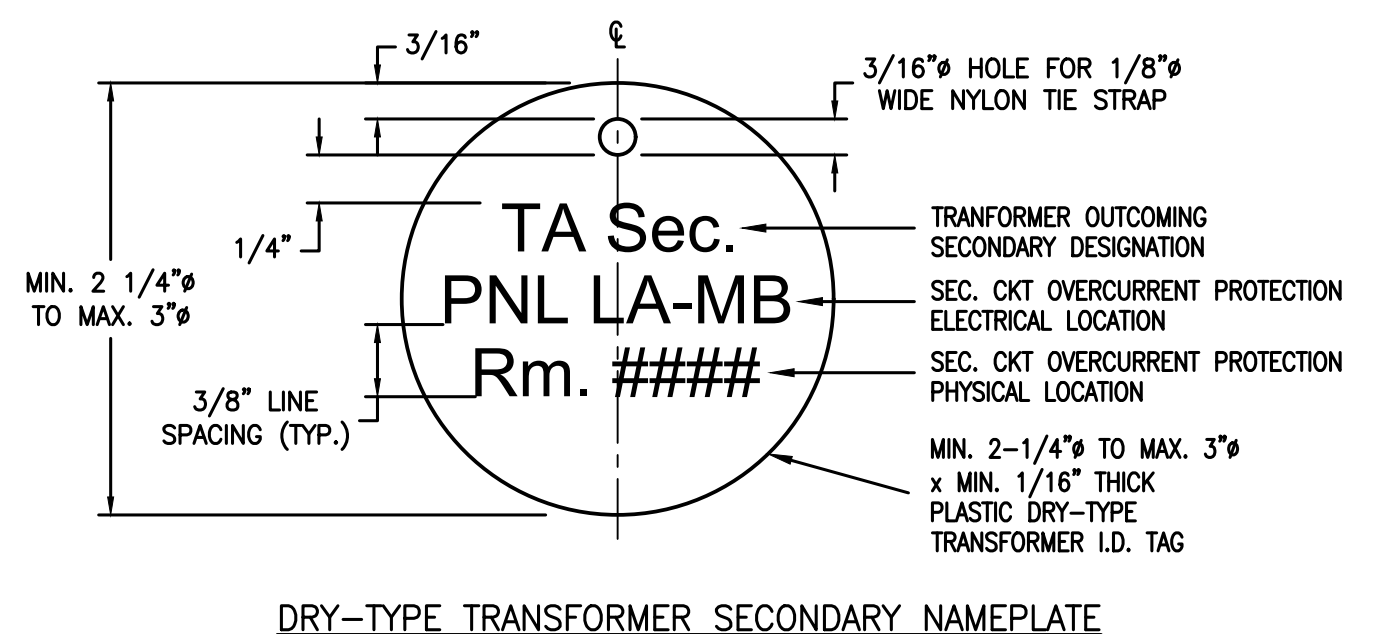
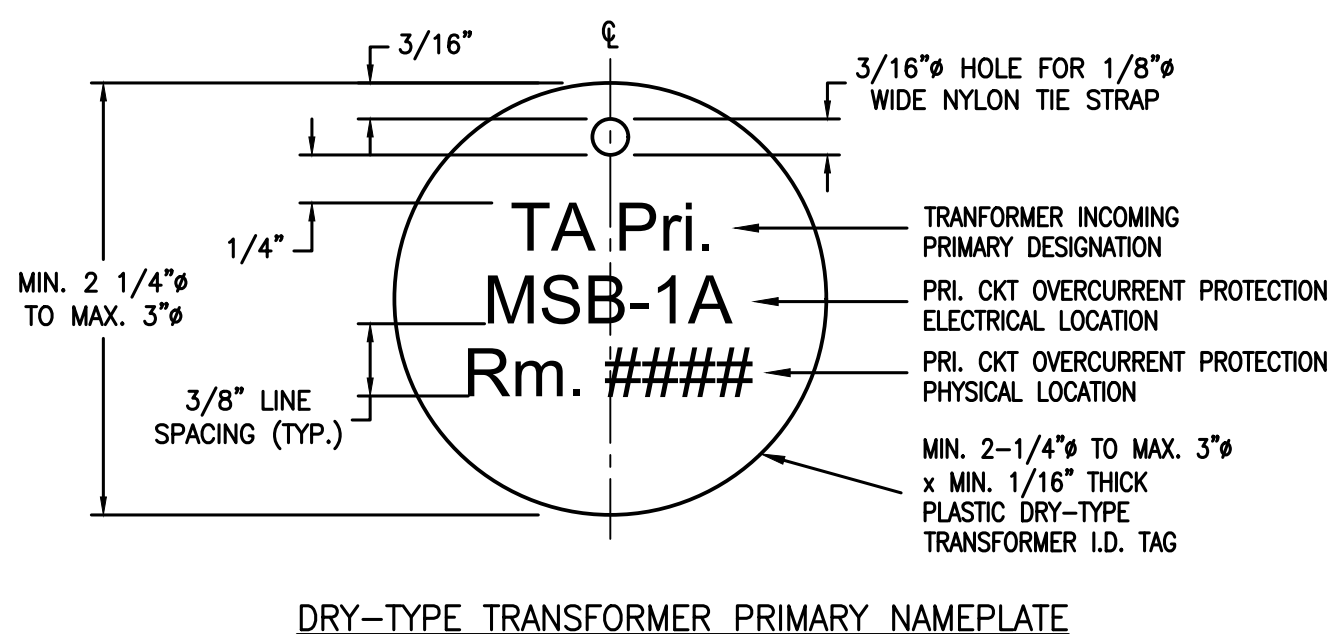
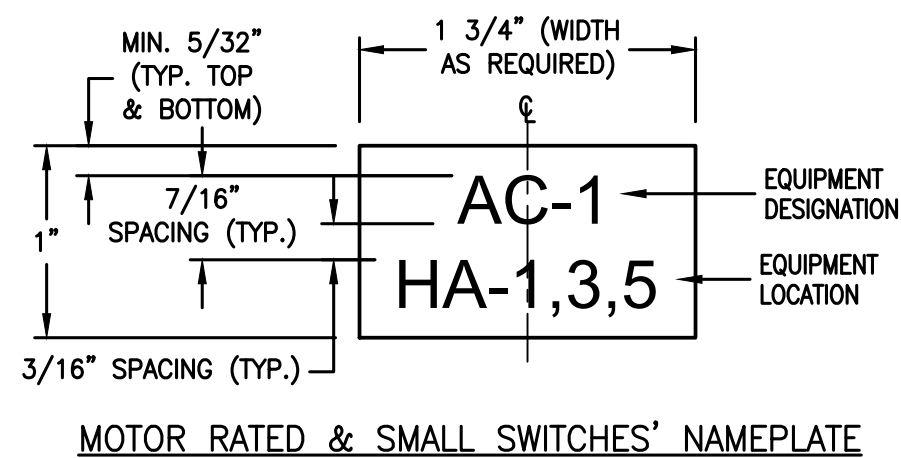
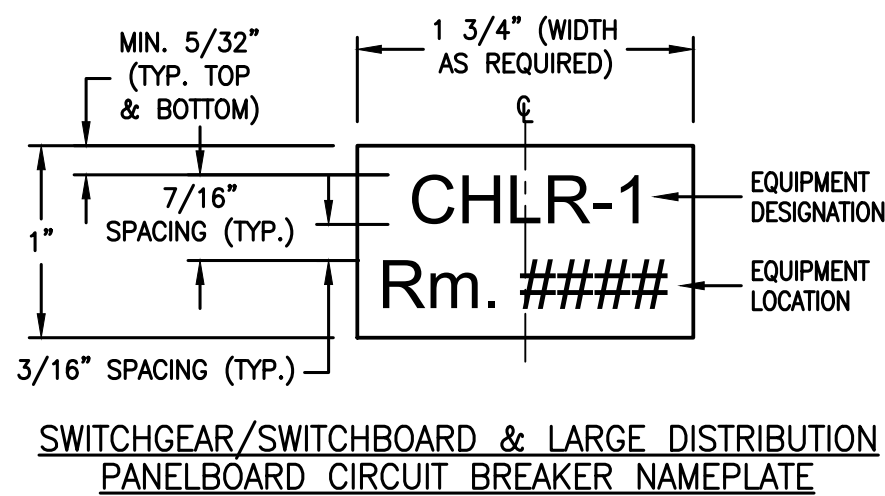
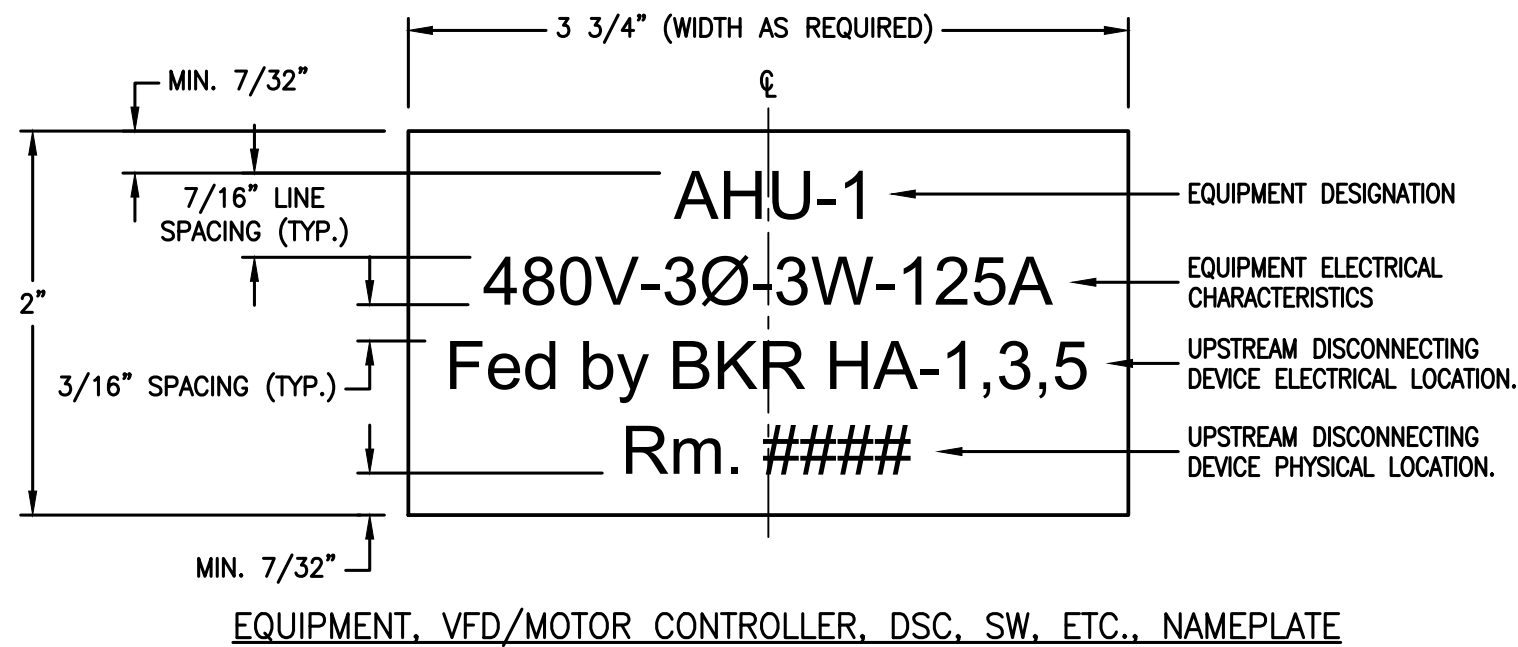
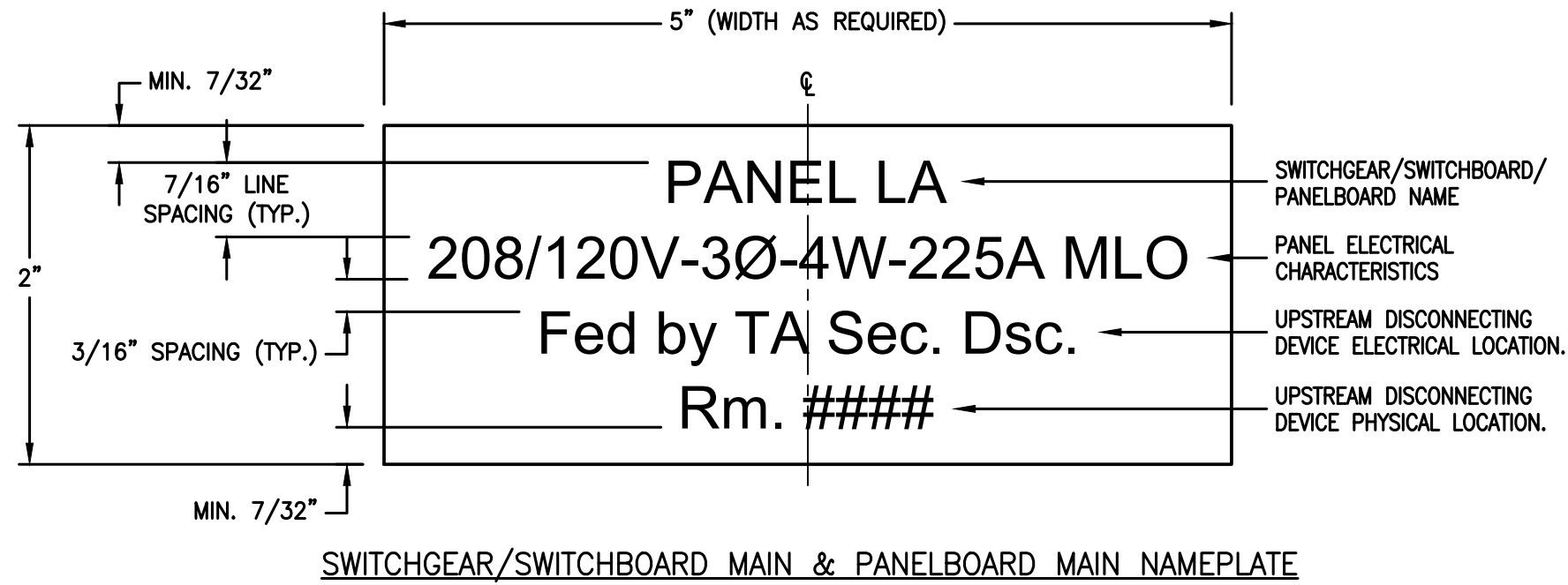


SUPPORT FLEXIBLE DUCT TO MAXIMIZE FREE AREA AT 90° ELBOW (STRAP AROUND FLEXIBLE DUCT)



**DIFFUSER CONNECTION DETAIL**  
SCALE: NONE

0	INITIAL FOR UGA STANDARDS	05/01/2023



**GENERAL NOTES (THIS DETAIL ONLY):**

1. ATTACH I.D. NAMEPLATE PERMANENTLY TO ELECTRICAL PANELBOARD DOOR, EQUIPMENT (DISCONNECT, ENCLOSED CB, MOTOR CONTROLLER/STARTER, PANEL, TRANSFORMER, VFD, ETC.) OUTER FACE WITH PERMANENT, WATERPROOF MASTIC OR EPOXY.
2. I.D. NAMEPLATES SHALL BE BLACK BACKGROUND FOR NORMAL POWER, RED BACKGROUND FOR EMERGENCY POWER, & HAVE WHITE 1/4" HIGH BLOCK LETTERING.
3. SIZE WIDTH AS REQUIRED TO SHOW ALL REQUIRED INFORMATION.
4. SEE ELECTRICAL SPECIFICATION SECTION '26120' FOR ADDITIONAL ELECTRICAL IDENTIFICATION INFORMATION.
5. UPPER PLATE APPLIES TO SWGR/SWBD MAINS & PANELBOARDS, MIDDLE PLATE APPLIES TO EQUIPMENT (DSC, ENCLOSED CB, MOTOR CONTROLLER/STARTER, CONTROL PANEL, TRANSFORMER, VFD, WIREWAY/GUTTER, ETC.), & LOWER PLATES APPLY TO SWGR, SWBD, OR LARGE DISTRIBUTION PANELS' (>= 800A) INDIVIDUAL CIRCUIT BREAKERS, & MOTOR RATED SWITCHES.
6. BLDG. INTERIOR I.D. PLATE SHALL BE MADE FROM HIGH-IMPACT RESISTANT ABS (ACRYLONITRILE BUTADIENE STYRENE) OR PHENOLIC PLASTIC MIN. 1/16" THICK.
7. BLDG. EXTERIOR I.D. PLATE SHALL BE MADE FROM UV RESISTANT HIGH-IMPACT RESISTANT ABS (ACRYLONITRILE BUTADIENE STYRENE) PLASTIC OR PHENOLIC MIN. 1/16" THICK, OR MIN. 1/16" THICK S.S. w/ ETCHED BLOCK LETTERING.
8. INDOOR DRY-TYPE TRANSFORMER NAMEPLATES SHALL HUNG FROM BOTH INCOMING PRI. & OUTGOING SEC. SIDE CONDUITS WITH MIN. 1/8" NYLON TIE STRAPS. INSTALL MIN. 6" AWAY FROM TRANSFORMER ENCLOSURE TO AVOID MELTING OF PLASTIC OR PHENOLIC PLATE.

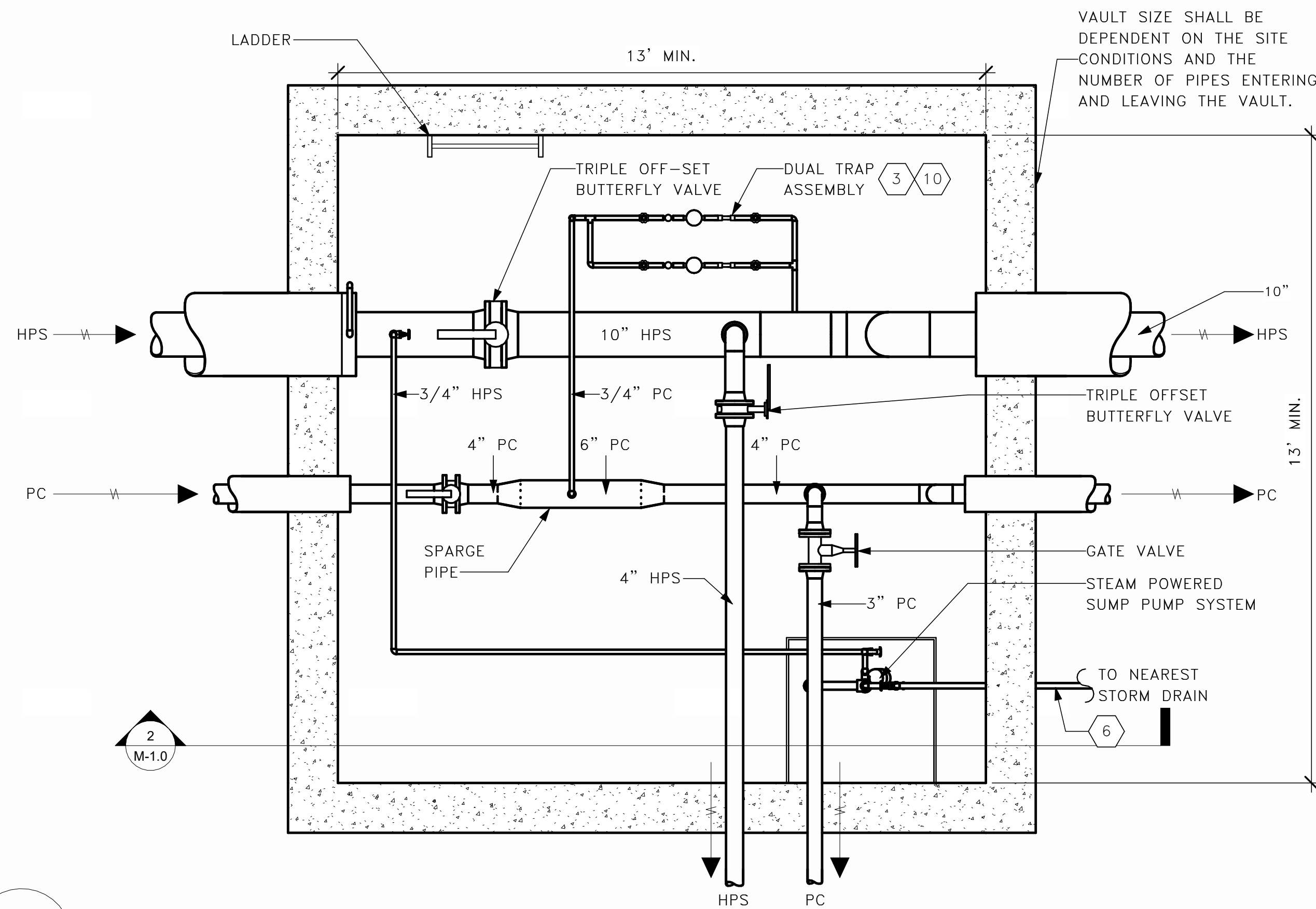
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Electrical Equipment ID Tags

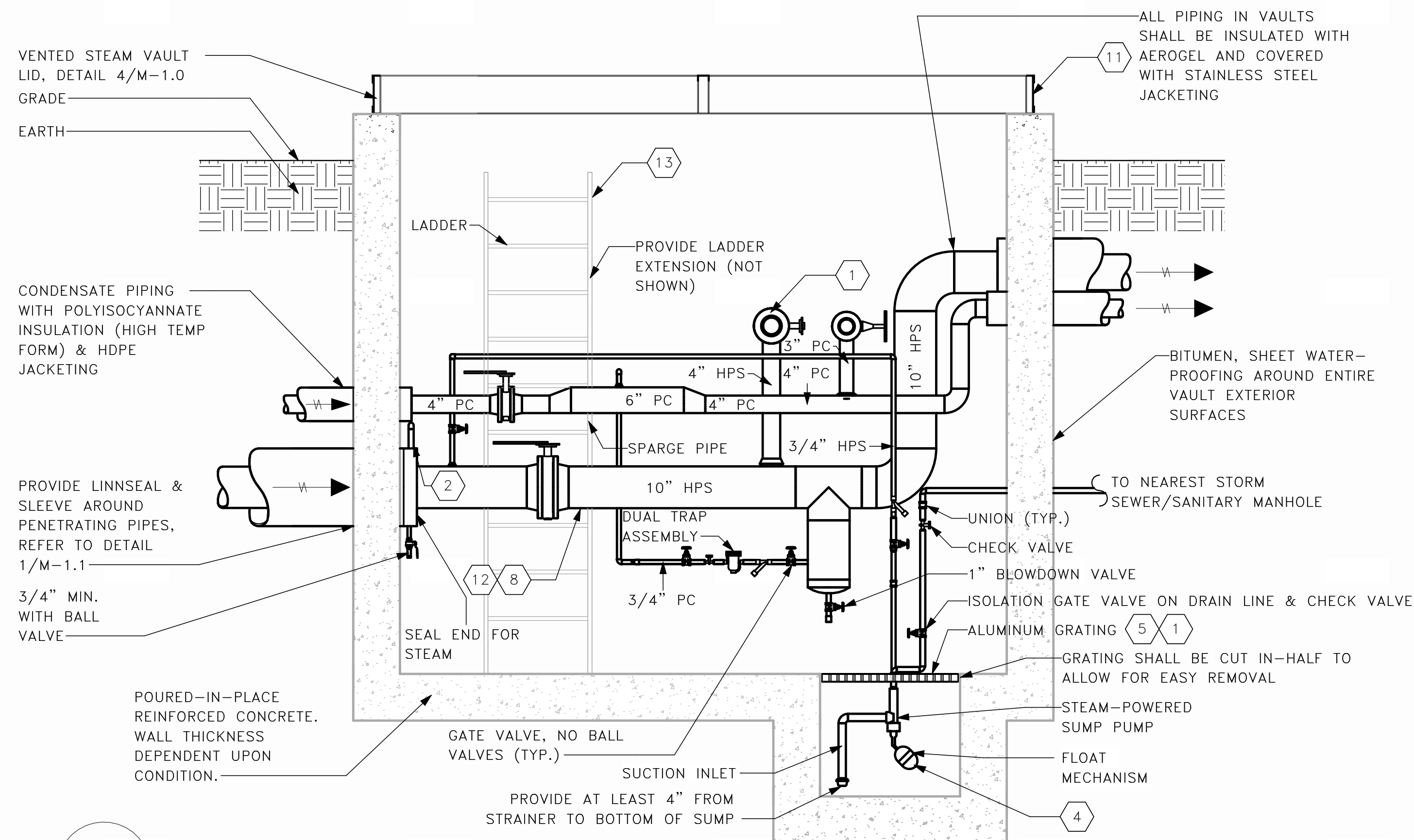
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1 EXAMPLE STEAM VAULT PLAN VIEW

M-1.0 1/2" = 1'-0"



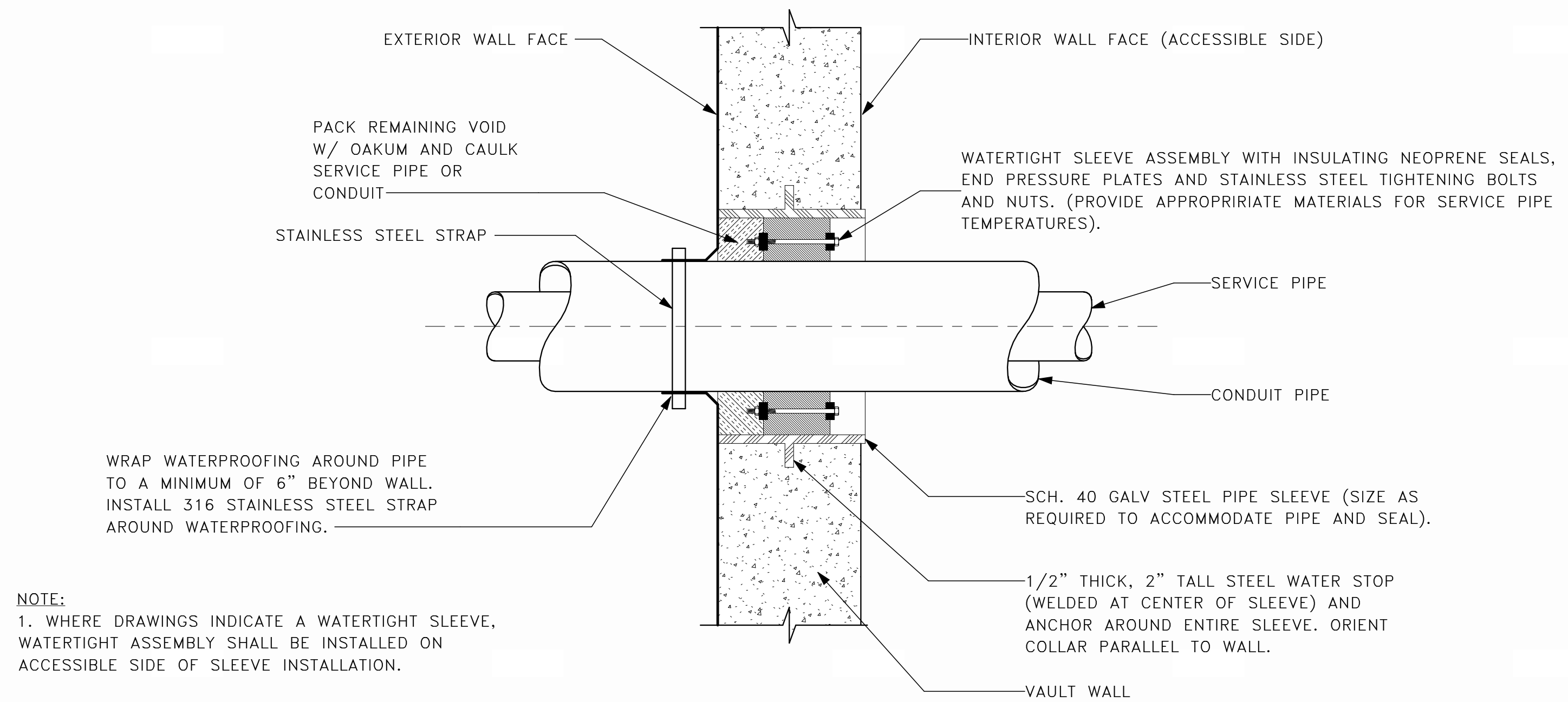
2 EXAMPLE STEAM VAULT SECTION VIEW (WITH VENTED COVER)

M-1.0 1/2" = 1'-0"

GENERAL NOTES:

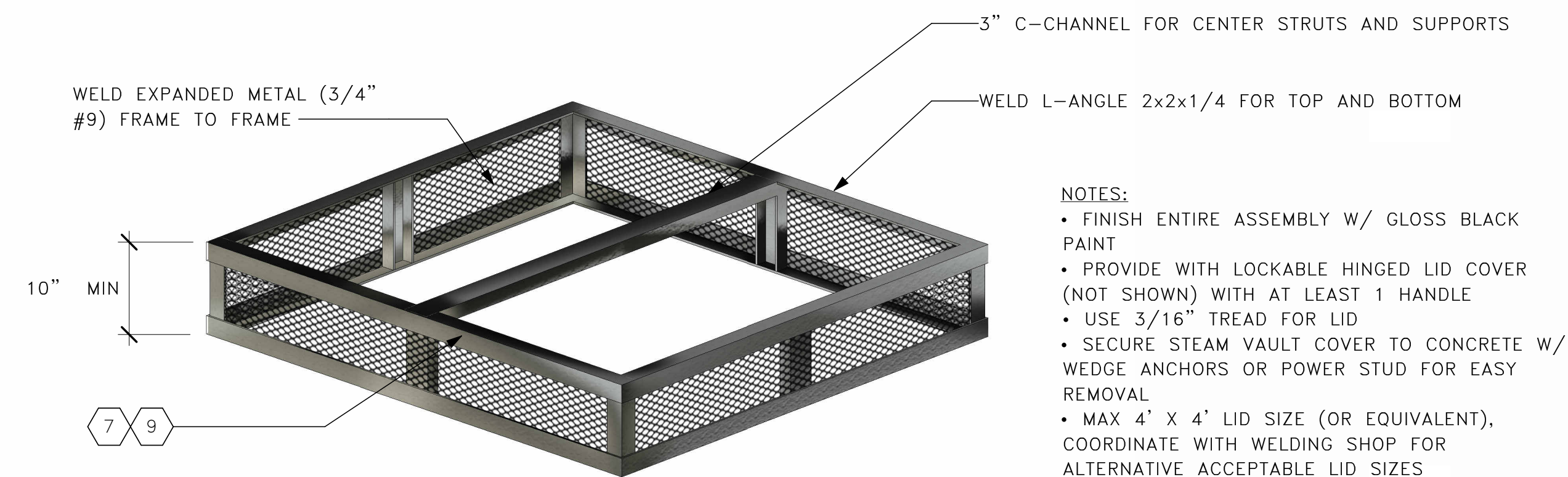
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2. IN ADDITION NOT THESE DRAWINGS, THE DESIGN CONSULTANT SHOULD REFER TO UGA'S POSTED, ONLINE SPECIFICATIONS, SPECIFICALLY: 23 22 13 STEAM AND CONDENSATE HEATING PIPING; 23 22 16 STEAM AND CONDENSATE HEATING PIPING SPECIALTIES; 33 00 00 GENERAL UTILITIES REQUIREMENTS; 33 60 00 HYDRONIC AND STEAM ENERGY UTILITIES.



3 STEAM VAULT WALL PENETRATION-BELOW GRADE

M-1.0 SCALE: NONE



4 STEAM VAULT COVER WITH VENTED OPENING - ISOMETRIC

M-1.0 SCALE: NONE

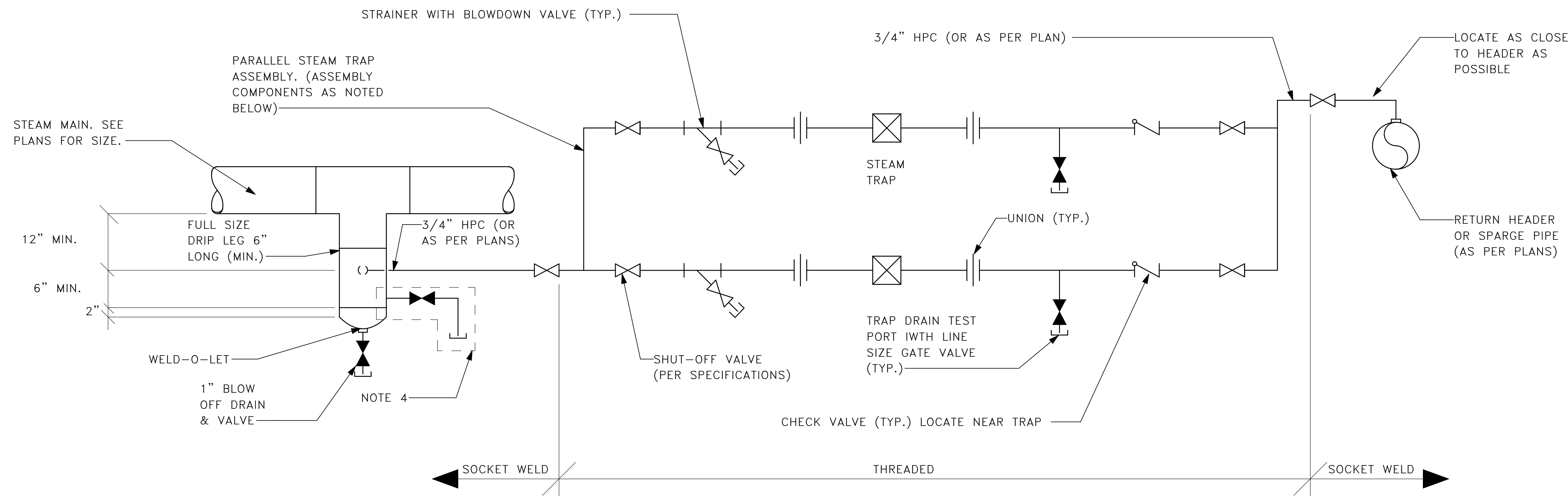
1-2/M-1.0 NOTES		#
1	ALL VALVES SHALL BE ACCESSIBLE. VALVES MAY BE ON RISER (TYP.).	
2	INSTALL 3/4" VENT TO DISCHARGE DOWNWARD AS SHOWN FOR GLAND SEAL.	
3	REFER TO DETAIL 1/M-1.1 FOR DUAL TRAP ASSEMBLY LAYOUT.	
4	FOLLOW MANUFACTURER RECOMMENDED INSTALLATION FOR SUMP DIMENSIONS. INTAKE & DISCHARGE ON SUMP SHALL HAVE A COUPLING FOR REMOVAL OF SUMP PUMP.	
5	DO NOT PLACE ANY PERMANENT SUPPORTS ON GRATING OVER STEAM SUMP PUMP THAT WOULD PREVENT REMOVAL OF GRATING.	
6	PROVIDE SCHEDULE 80 COPPER PIPE (NOT PVC) PIPING FOR DRAIN CONDENSATE ENTIRE RUN TO STORM DRAIN.	
7	CONSULTANT/CONTRACTOR SHALL CONTACT GREGORY BOOTHE (UGA FMD WELDING SHOP 706-542-7593) FOR MORE DETAILS REGARDING FABRICATION OF VENTED OPENING. DESIGN/FABRICATION OF VAULT OPENING & LID SHALL STRIVE FOR EASE OF USE (MINIMIZATION OF FORCE REQUIRED TO OPEN WEIGHT).	
8	ALL MAIN CONDENSATE AND STEAM PIPES SHALL BE AT LEAST 3' FROM BOTTOM OF THE PIPE TO FLOOR OF THE PIT.	
9	FINISH LIDS WITH HEAT REFLECTIVE PAINT.	
10	PIPE SIZES ARE INCLUDED ONLY FOR ILLUSTRATIVE PURPOSES.	
11	REFER TO DETAIL 4/M-1.0 FOR VENTED STEAM VAULT LID CONSTRUCTION. NON-VENTED VAULTS SHALL BE APPROVED ON AN INDIVIDUAL BASIS. VENTED STEAM VAULT LID IS UGA PREFERENCE.	
12	REFER TO DETAIL 5/M-1.1 FOR CLEVIS AND SADDLE SUPPORT FOR STEAM & STEAM CONDENSATE PIPING.	
13	NO PIPES SHALL IMPEDE ACCESS TO LADDER.	

LEGEND:

- PC = PRESSURIZED CONDENSATE
- HPS = HIGH PRESSURE STEAM
- DC = DRAIN CONDENSATE

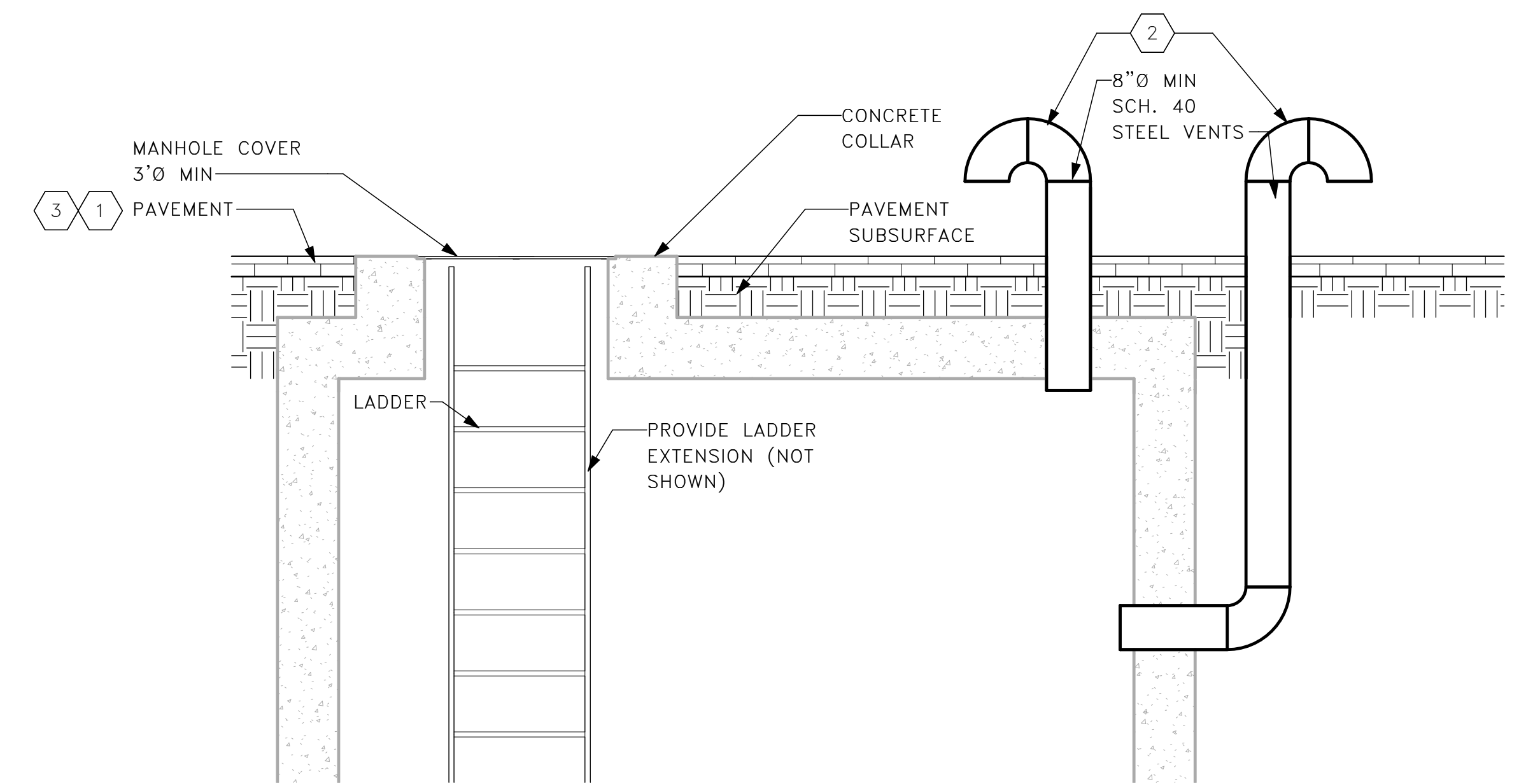
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<p>The University of Georgia Engineering Department Facilities Management Division</p>					
REVISIONS					
#	Note	INI	Date		
0	STANDARD	IVG	12/12/2022		
1	STANDARD	IVG	09/01/2023		
2	STANDARD	IVG	10/20/2023		
DETAIL DRAWING					
THE UNIVERSITY OF GEORGIA				DESIGNED	JOB NO.
				IVG/ATC	-
				CHECKED	SHEET
				EJS	33 60 00-A
				DATE	1
STEAM VAULT EXAMPLE				12/12/2022	

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- NOTES:**
1. FOR STEAM PIPING 6" AND BELOW, USE SAME DIAMETER DRIP LEG AND USE TEE CONNECTION FOR DRIP LEG. FOR STEAM PIPING GREATER THAN 6", PROVIDE DRIP LEG WITH DIAMETER OF 2 PIPE SIZES LESS THAN STEAM PIPE BUT NOT LESS THAN 6" DIAMETER AND CONNECT WITH WELD-O-LET DOWNSTREAM OF ELBOW.
  2. INSULATE STEAM TRAP STATION WITH REMOVABLE BLANKET PER SPECIFICATIONS SECTION 23 22 16.
  3. BOTTOM OF DRIP LEG SHALL BE MINIMUM OF 12" A.F.F.
  4. WHERE SPACE DOES NOT ALLOW DRAIN INSTALLATION ON BOTTOM OF DRIP LEG, DRAIN MAY BE INSTALLED ALTERNATIVELY ON SIDE OF DRIP LEG.
  5. ISOLATION VALVES ON TRAPS' ASSEMBLY SHALL BE GATE VALVES. BALL VALVES ARE NOT PERMITTED.

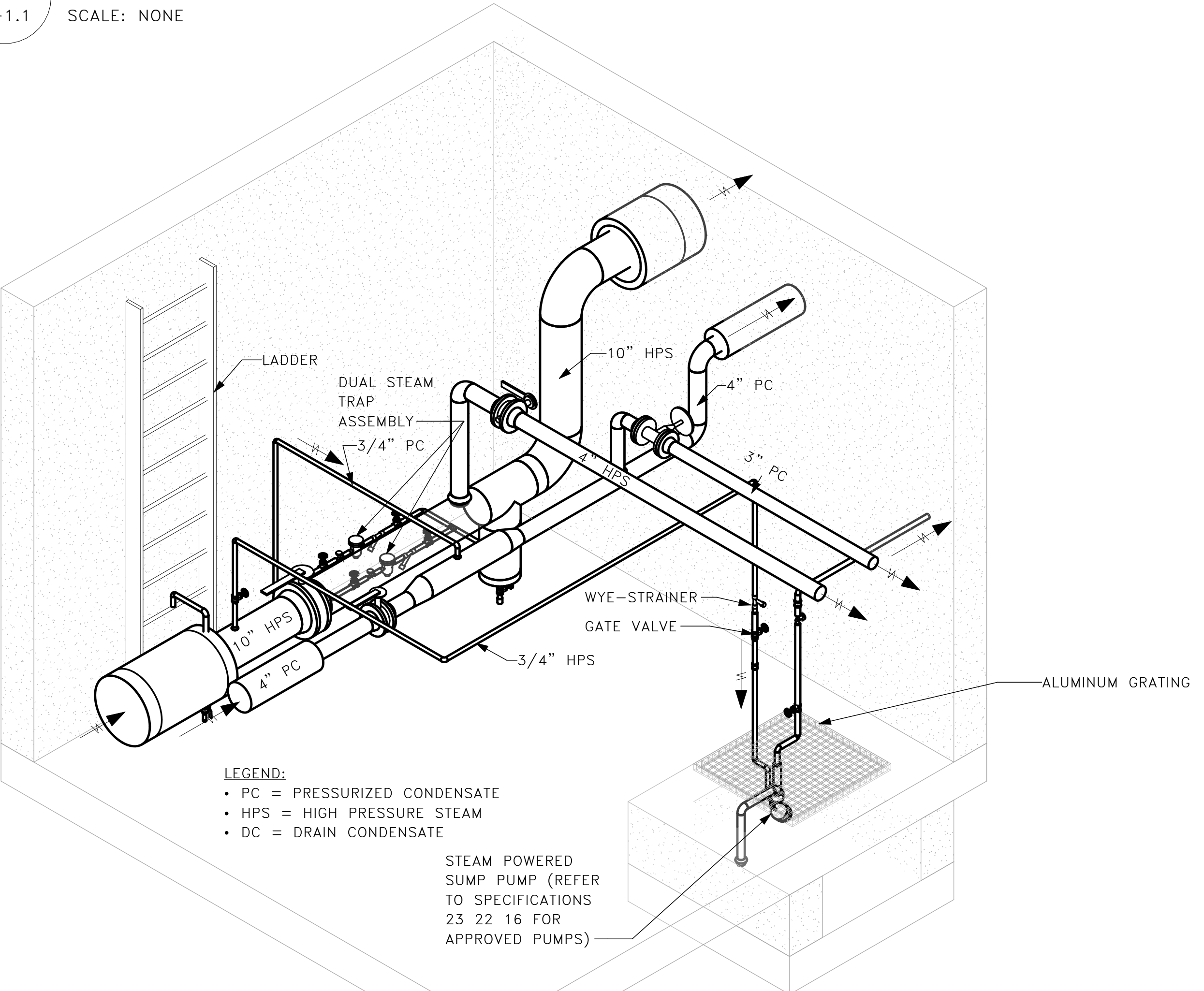
1 STEAM TRAP STATION FOR DRIP LEGS  
M-1.1 SCALE: NONE



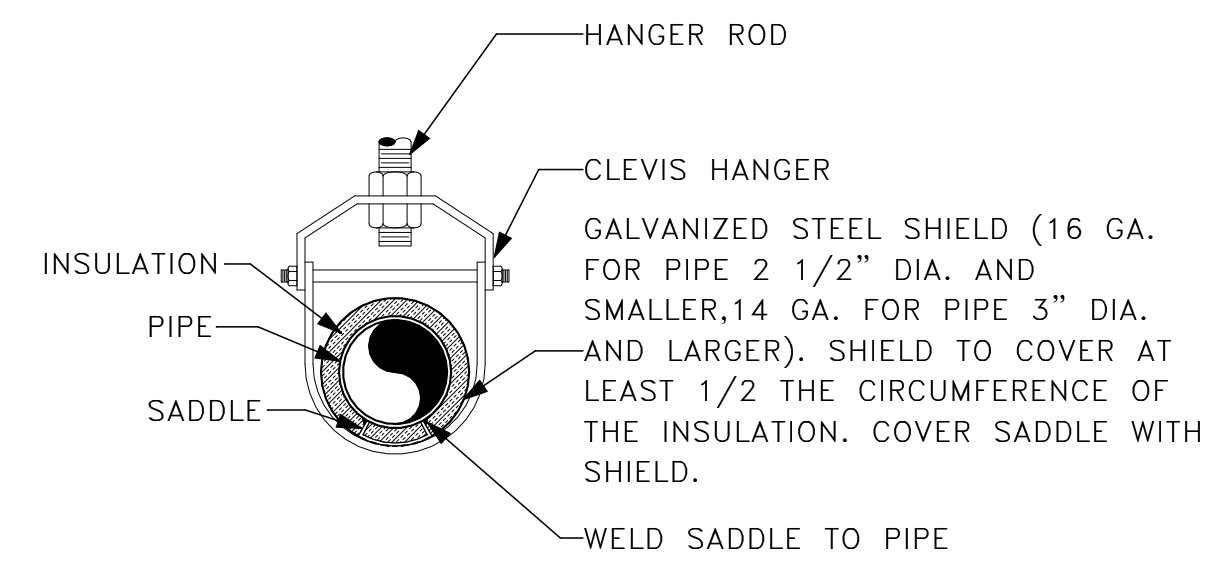
3 STEAM VAULT SECTION VIEW PAVEMENT DETAIL  
M-1.1 SCALE: NONE

3/M-1.1 NOTES

#	NOTES
1	REFER TO UGA STANDARDS SECTION 32 12 16 FOR ASPHALT PAVING STANDARDS INCLUDING MINIMUM CONCRETE COLLAR DIMENSIONS.
2	8" SCH. 40 STEEL VENTS REQUIRED ONLY FOR STEAM VAULTS WITHOUT VENTED LIDS (TYP.). END OF PIPE TO INCLUDE STAINLESS STEEL SCREEN TO PREVENT ANIMAL AND INSECT ACCESS.
3	FOR VAULTS WITH ACCESS IN SIDEWALK AREA, PROVIDE RATED VAULT LID IN SIDEWALK IN ACCORDANCE WITH UGA GUIDE SPECIFICATION SECTION 32 16 23.



2 EXAMPLE STEAM VAULT - ISOMETRIC  
M-1.1 SCALE: NONE



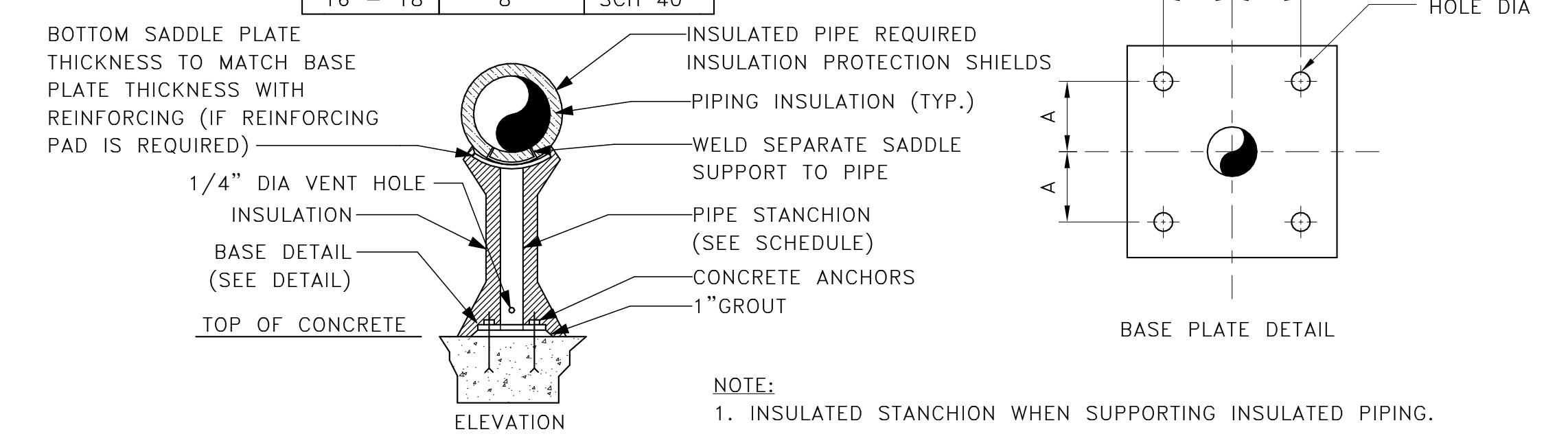
4 STEAM PIPE CLEVIS HANGER DETAIL  
M-1.1 SCALE: NONE

STANCHION SCHEDULE MINIMUM

PIPE SIZE	MIN STANCHION PIPE SIZE	STANCHION SCHEDULE
2 1/2"	2"	SCH 40
3"	2 1/2"	SCH 40
4"	3"	SCH 40
6" - 8"	4"	SCH 40
10"	5"	SCH 40
12 - 14"	6"	SCH 40
16 - 18"	8"	SCH 40

BASE PLATE SCHEDULE

PIPE SIZE	MINIMUM BASE PLATE	BOLT SPACING (A)	BASE PLATE HOLE DIA	CONCRETE ANCHORS
2 1/2"	8"x8"x1/2"	2 3/4"	5/8" DIA	(4) 1/2" DIA
4"	8"x8"x1/2"	2 3/4"	5/8" DIA	(4) 1/2" DIA
6" - 8"	10"x10"x1/2"	3 1/2"	5/8" DIA	(4) 1/2" DIA
10" - 14"	12"x12"x3/4"	4 1/2"	7/8" DIA	(4) 3/4" DIA
16" - 18"	14"x14"x3/4"	5 1/2"	7/8" DIA	(4) 3/4" DIA



5 PIPE STANCHION ANCHOR SADDLE SUPPORT  
M-1.1 SCALE: NONE

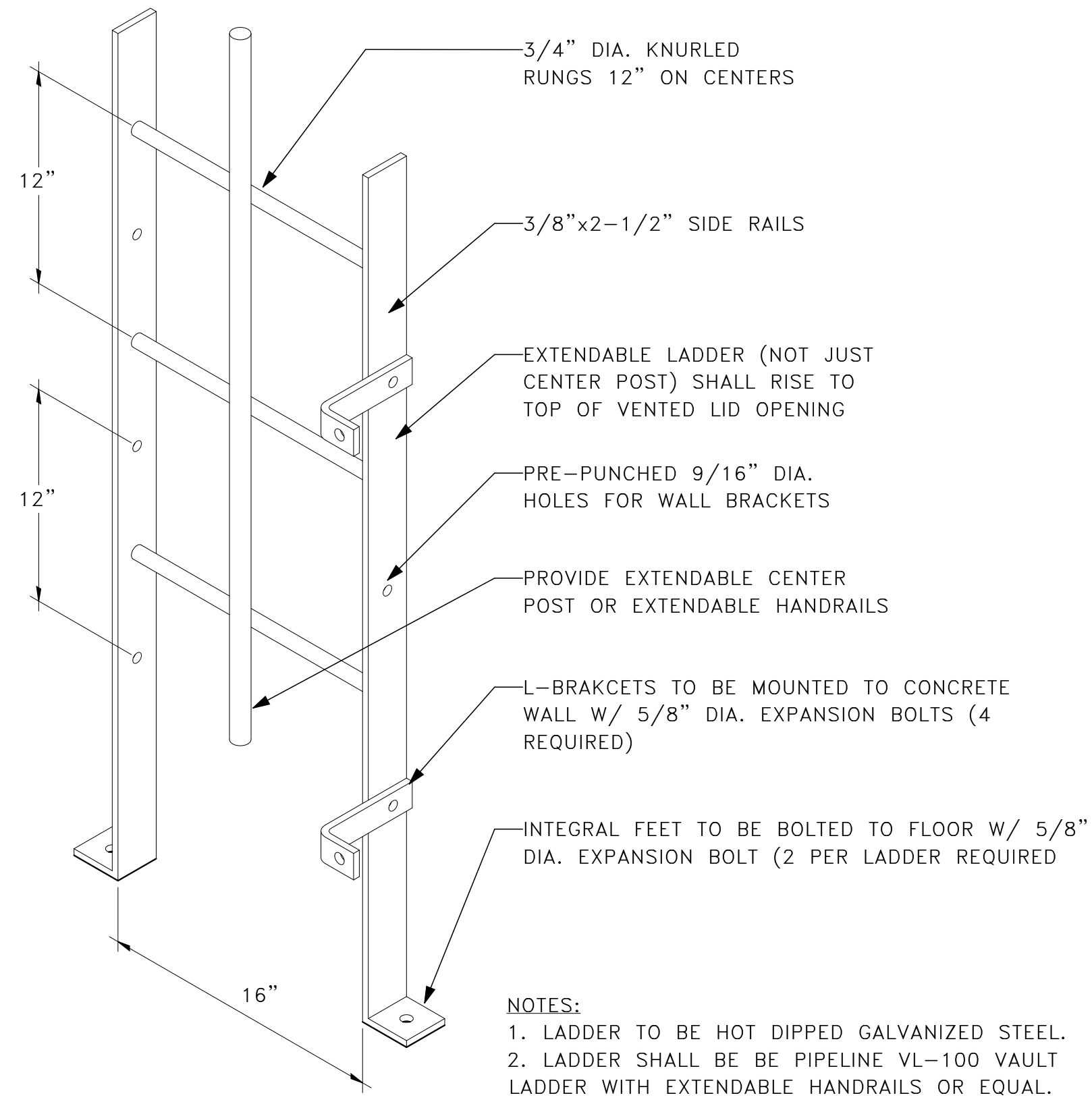
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<p>The University of Georgia Engineering Department    Facilities Management Division</p>		<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>#</th> <th>Note</th> <th>INI</th> <th>Date</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>STANDARD</td> <td>IVG</td> <td>12/12/2022</td> </tr> <tr> <td>1</td> <td>STANDARD</td> <td>IVG</td> <td>09/01/2023</td> </tr> <tr> <td>2</td> <td>STANDARD</td> <td>IVG</td> <td>10/20/2023</td> </tr> </tbody> </table>		#	Note	INI	Date	0	STANDARD	IVG	12/12/2022	1	STANDARD	IVG	09/01/2023	2	STANDARD	IVG	10/20/2023	<p>DETAIL DRAWING</p> <p>THE UNIVERSITY OF GEORGIA</p> <p>STEAM VAULT EXAMPLE</p>		<p>DRAWN</p> <p>IVG/ATC</p> <p>DESIGNED</p> <p>IVG/ATC</p> <p>CHECKED</p> <p>EJS</p> <p>DATE</p> <p>12/12/2022</p>	<p>JOB NO.</p> <p>-</p> <p>SHEET</p> <p>33 60 00-A</p> <p>2</p>
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- NOTES:
1. LADDER TO BE HOT DIPPED GALVANIZED STEEL.
  2. LADDER SHALL BE BE PIPELINE VL-100 VAULT LADDER WITH EXTENDABLE HANDRAILS OR EQUAL.

1 STEAM VAULT EXTENDABLE LADDER  
 M-1.2 SCALE: NONE

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