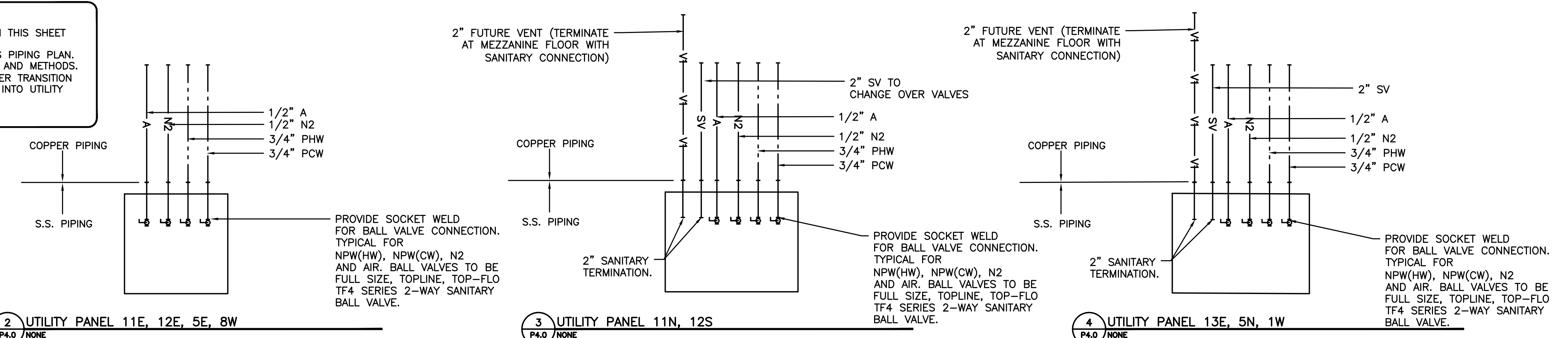


- KEYED NOTES:**
- 3/4" PCW & PHW  
1/2" N2  
1/2" A  
2" SV (TO SCRUBBER)
  - 3/4" PCW & PHW  
1/2" N2  
1/2" A  
2" SV (TO CHANGE OVER VALVES)
  - 3/4" PCW & PHW  
1-1/2" CW & HW  
1/2" N2  
1/2" A  
2" SV  
2" SV (TO ATM VIA CHANGE OVER VALVE)  
STUB-OUT WITH SHUT-OFF VALVES  
FOR FUTURE CONNECTION. CHANGE OVER VALVES  
TO BE PROVIDED IN THE FUTURE. SEE 9/P4.0
  - 4" FUTURE VENT UP THRU MEZZANINE  
AND TERMINATE 3" ABOVE MEZZANINE FLOOR  
WITH SANITARY FITTING. CONTRACTOR TO  
COORDINATE TERMINATION LOCATION AT MEZZANINE  
WITH OTHER TRADES. AVOID TRIP HAZARD LOCATIONS.  
SEE 8/P6.0.

**1 PROCESS SUITES UTILITY PIPING**  
 P4.0 NONE

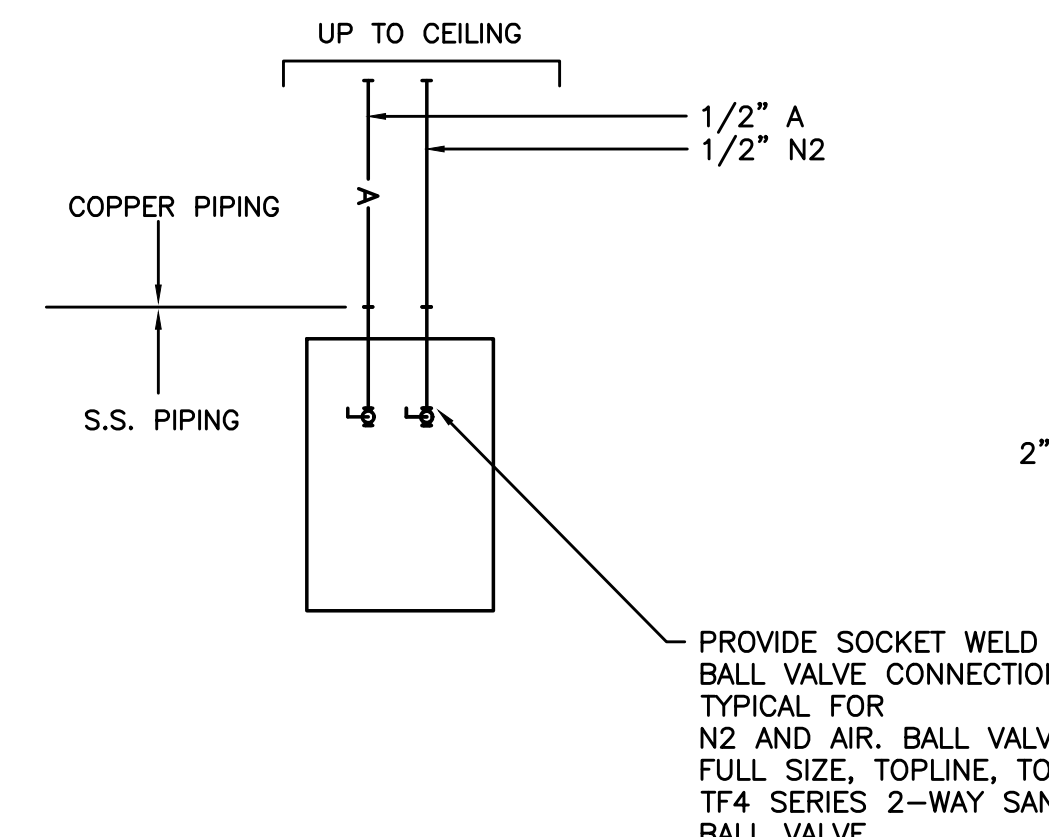
- UTILITY PANEL GENERAL NOTE:**
- SEE UTILITY PANEL SCHEDULE ON THIS SHEET FOR DIMENSIONS.
  - SEE P2.1 FOR OVERALL PROCESS PIPING PLAN.
  - SEE P1.0 FOR PIPING MATERIALS AND METHODS.
  - SEE 10/P4.0 FOR S.S. TO COPPER TRANSITION DETAIL TYPICAL FOR ALL PIPING INTO UTILITY PANELS.



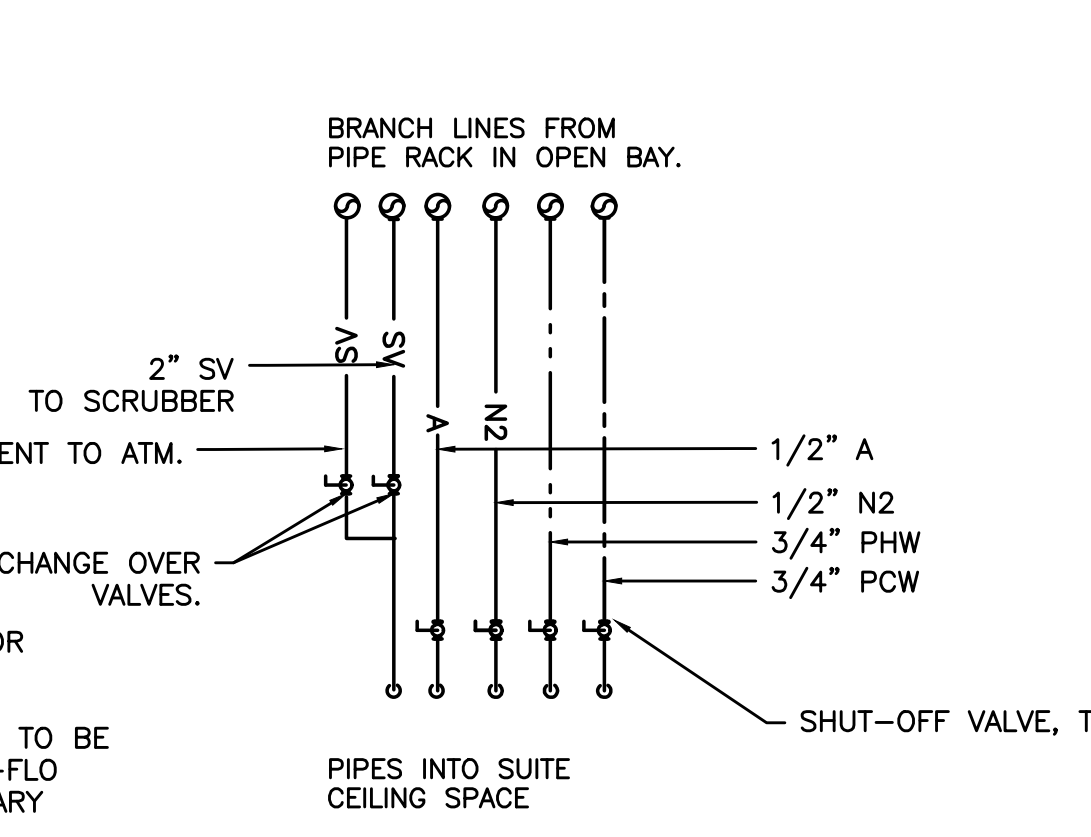
**2 UTILITY PANEL 11E, 12E, 5E, 8W**  
 P4.0 NONE

**3 UTILITY PANEL 11N, 12S**  
 P4.0 NONE

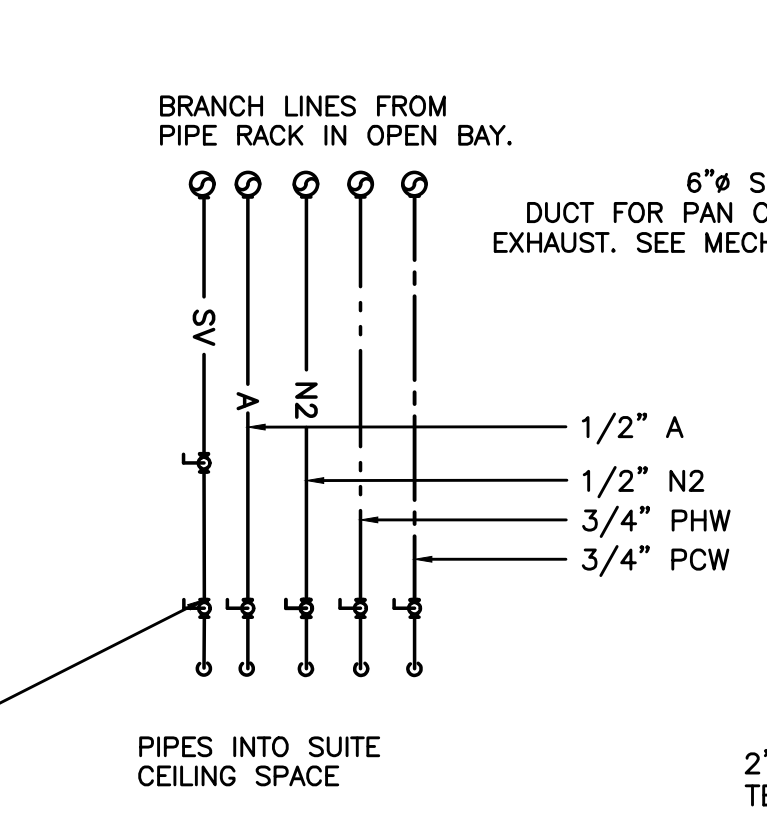
**4 UTILITY PANEL 13E, 5N, 1W**  
 P4.0 NONE



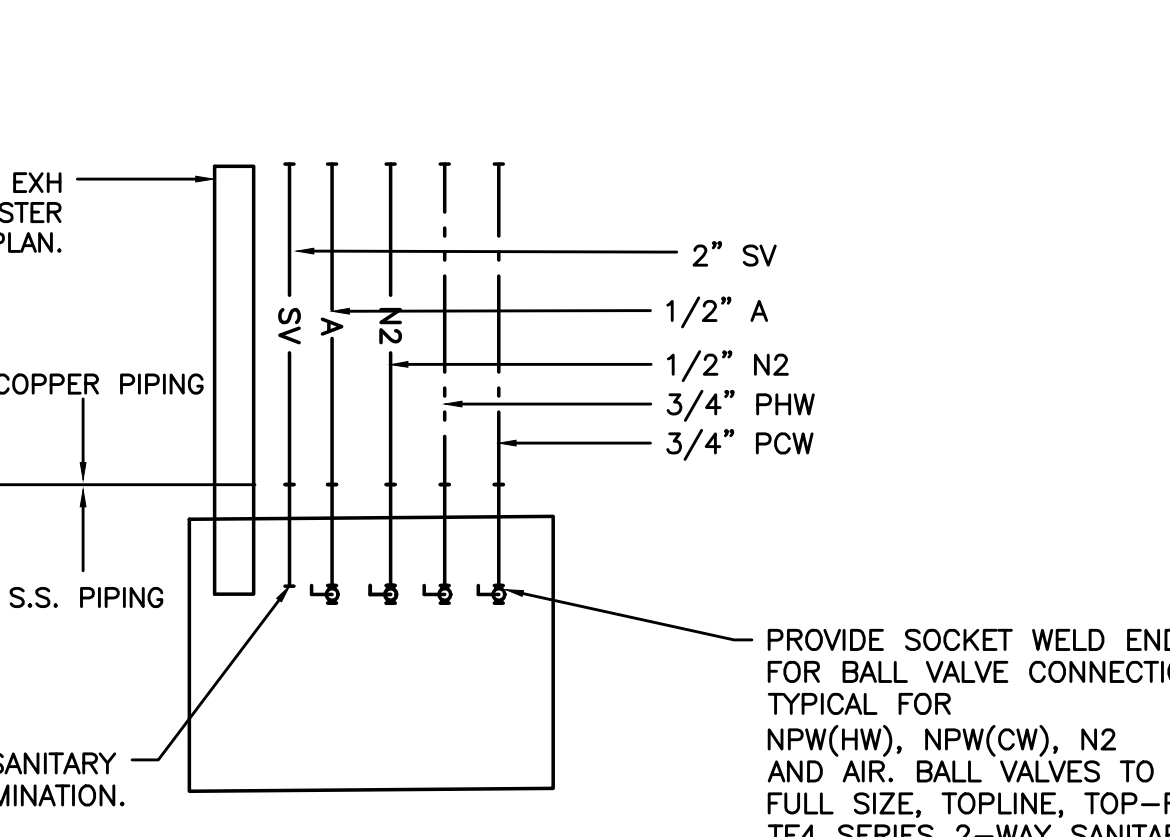
**5 UTILITY PANEL 13N**  
 P4.0 NONE



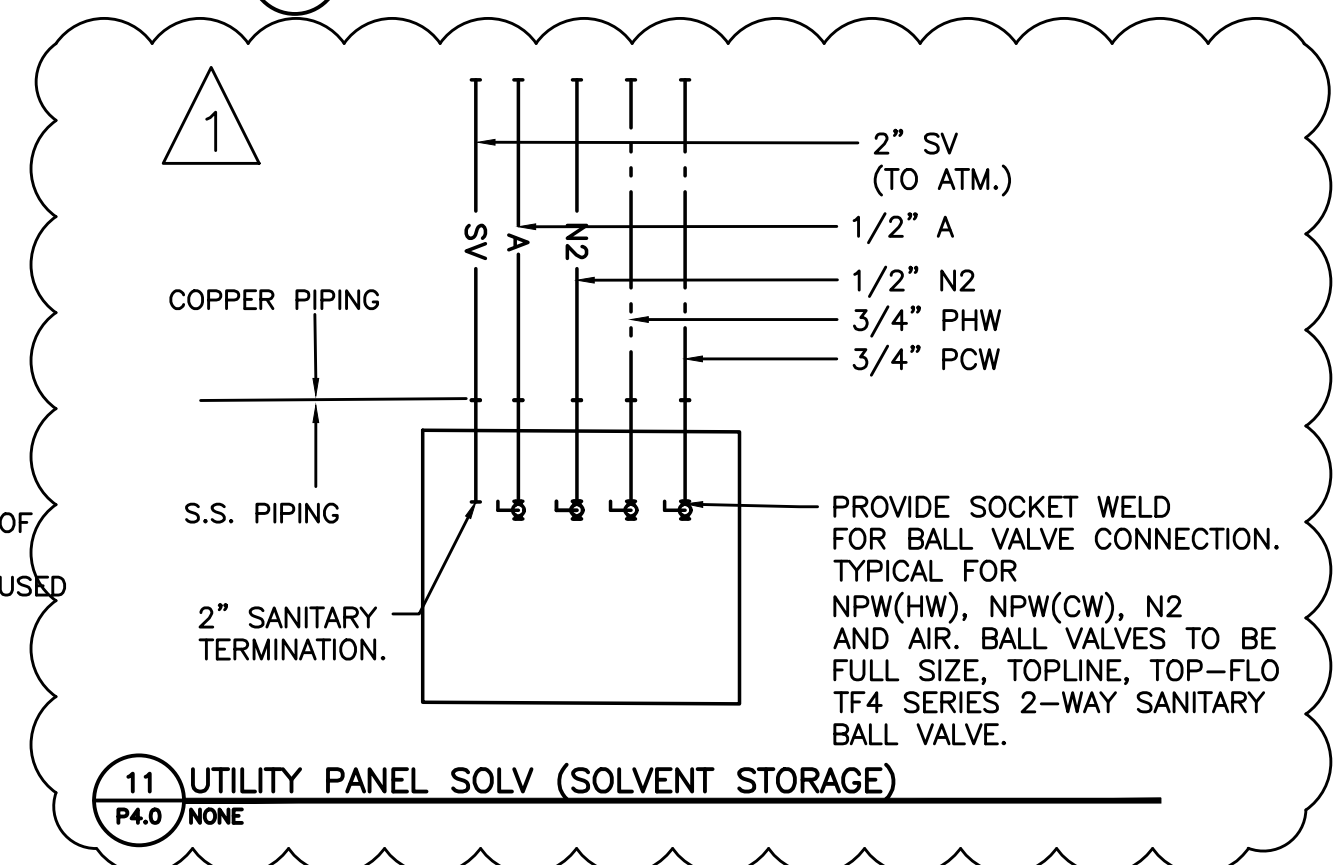
**6 SUITE #11 & #12 BRANCH PIPING DETAIL**  
 P4.0 NONE



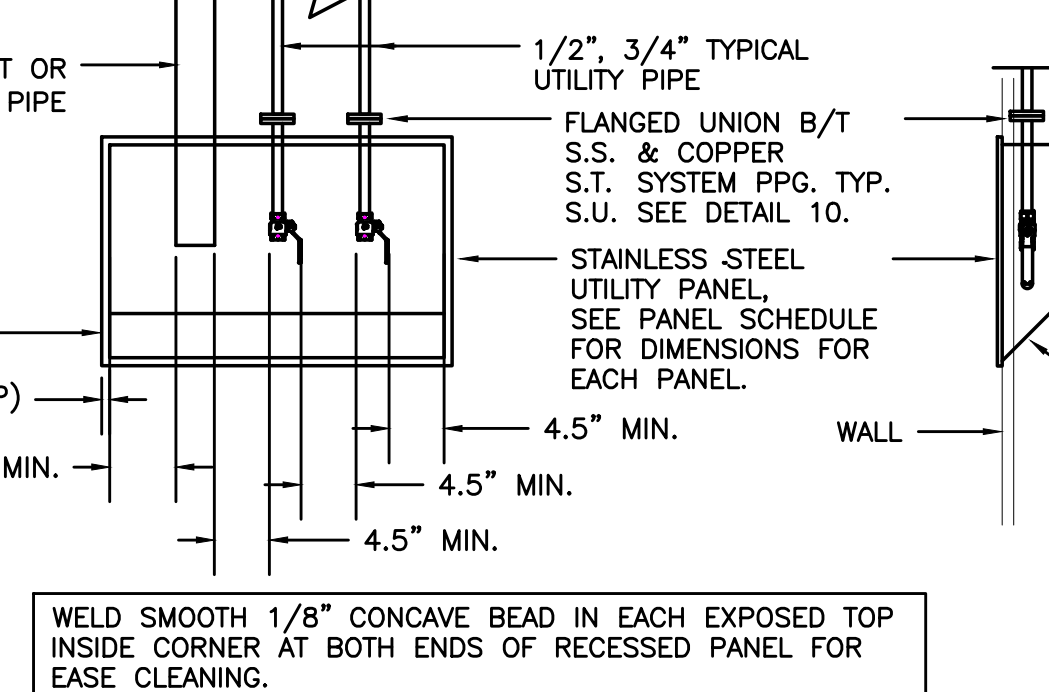
**7 SUITE #11 BRANCH PIPING DETAIL**  
 P4.0 NONE



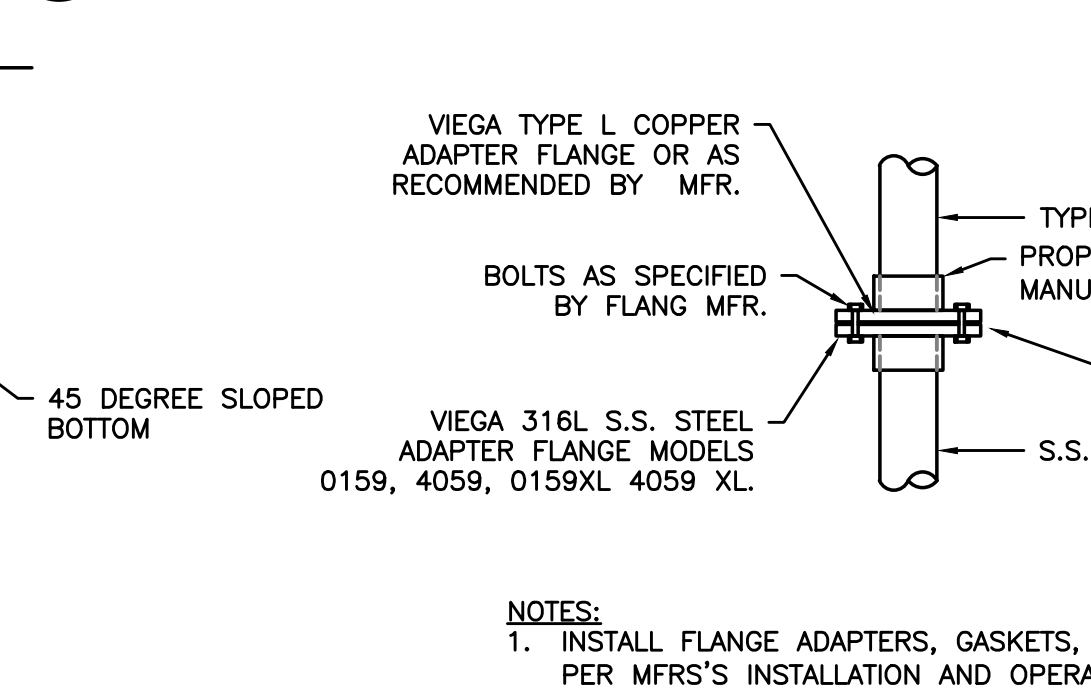
**8 UTILITY PANEL 1E**  
 P4.0 NONE



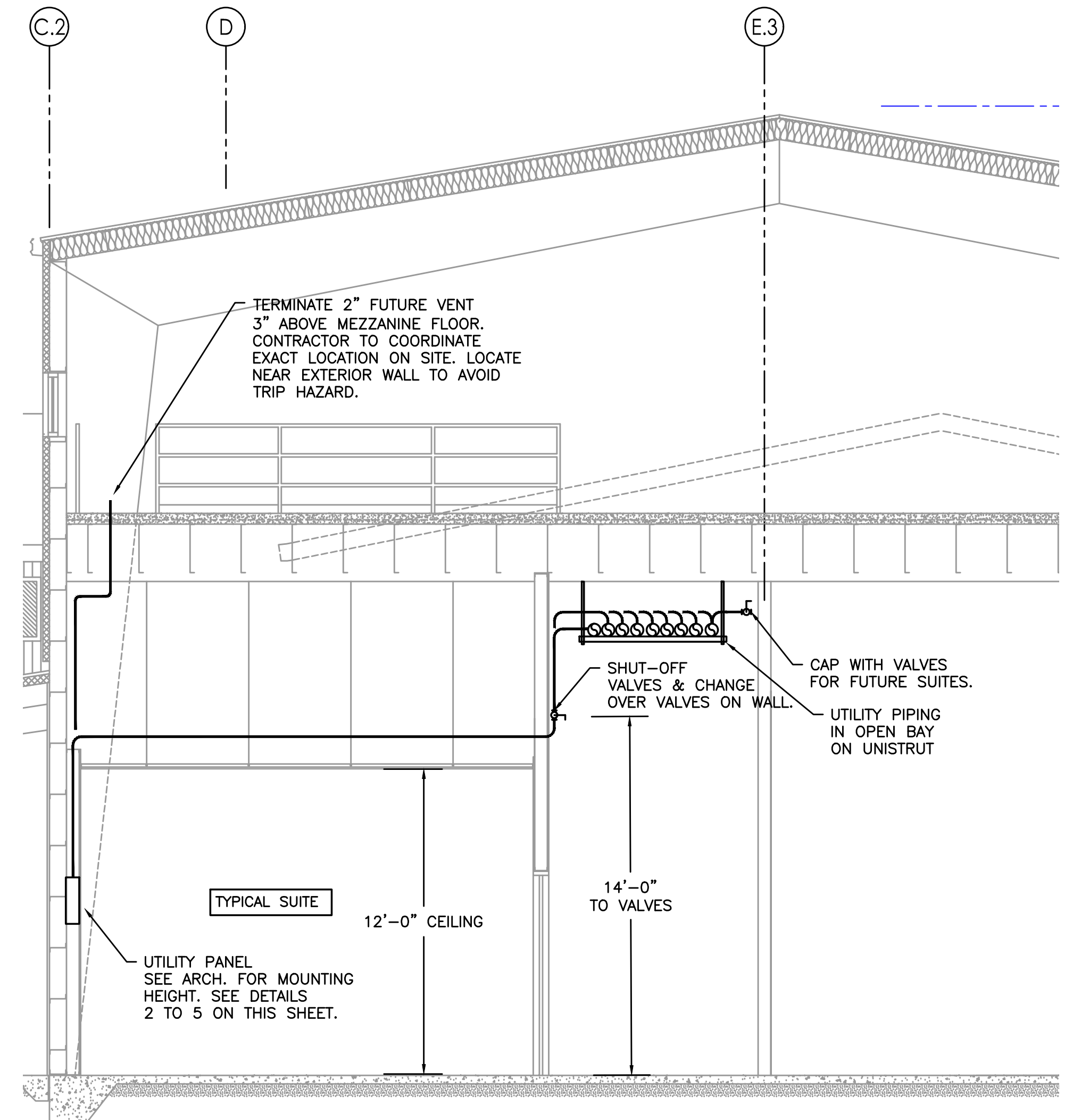
**11 UTILITY PANEL SOLV (SOLVENT STORAGE)**  
 P4.0 NONE



**9 TYPICAL RECESSED UTILITY PANEL CONSTRUCTION AND INSTALLATION DETAIL**  
 P4.0 NONE

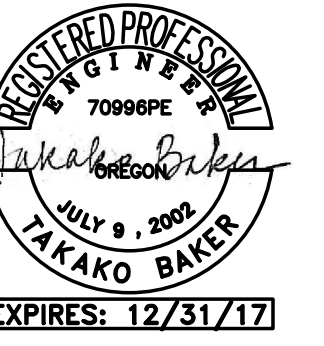


**10 S.S./COPPER FLANGED TRANSITION DETAIL**  
 P4.0 NONE



**9 UTILITY PIPE RACK SECTION**  
 P4.0 1/4\"/>

PANEL ID#	PCW		PHW		N2		A		S.V.		FUTURE VENT DIA (")	DUCT DIA (")	DIMENSION (L" X H" X W")	NOTES:
	DIA (")	DIA (")	DIA (")	DIA (")	DIA (")	DIA (")	DIA (")	DIA (")	DIA (")	DIA (")				
UP 13E	3/4"	3/4"	1/2"	1/2"	2"	2"							38"X24"X6"	
UP 13N			1/2"	1/2"	2"	2"							16"X24"X6"	
UP 12S	3/4"	3/4"	1/2"	1/2"	2"	2"							38"X24"X6"	S.V. TO SWITCH OVER VALVE TO VENT OUTSIDE
UP 12E	3/4"	3/4"	1/2"	1/2"	2"	2"							26"X24"X6"	
UP 11E	3/4"	3/4"	1/2"	1/2"	2"	2"							26"X24"X6"	
UP 11N	3/4"	3/4"	1/2"	1/2"	2"	2"							38"X24"X6"	S.V. TO SWITCH OVER VALVE TO VENT OUTSIDE
UP 11W	3/4"	3/4"	1/2"	1/2"	2"	2"							38"X24"X6"	
UP 1E	3/4"	3/4"	1/2"	1/2"	2"	2"	6"						58"X24"X10"	6" DUCT TO PAN COASTER EXH.
UP 5E	3/4"	3/4"	1/2"	1/2"	2"	2"							26"X24"X6"	
UP 5N	3/4"	3/4"	1/2"	1/2"	2"	2"							38"X24"X6"	
UP 8W	3/4"	3/4"	1/2"	1/2"	2"	2"							26"X24"X6"	



DRAWN/ CHECKED: TB  
 ISSUE / REVISIONS:  
 BID SET 07/21/2017  
 PH 2 - GEN BLDG 07/28/2017  
 REV 1 09/13/2017

PROCESS SUITES UTILITY PIPING

**P4.0**

**BEND RESEARCH, INC**  
 CORPORATE PLACE FACILITY - BUILDING EXPANSION NORTH