



**NOTES**

1. SEE PRETREATMENT UNIT AND MEMBRANE SPECIFICATIONS FOR MANUFACTURER SUPPLIED VALVES AND EQUIPMENT.
2. PIPE SUPPORTS NOT SHOWN FOR CLARITY. SEE DETAILS FOR PIPE SUPPORTS AND HANGERS.
3. CHEMICAL FEED PIPING AND VALVES NOT SHOWN FOR CLARITY. SEE SHT. M-12.
4. USE DUCTILE IRON WALL PIPE WITH SEEP RING FOR ALL PIPES WHICH PASS THROUGH WALLS. SEE SHT. C-3.
5. USE WALL PIPE SLEEVE OR WALL PIPE PENETRATION FOR CHEMICAL LINES AND SAMPLE LINES. SEE SHT. C-3.
6. ROUTE RIGID AIR PIPING TO EACH WALL ACTUATOR AS REQUIRED. PROVIDE AIR SETS FOR EACH ACTUATOR AS SPECIFIED.
7. ALL ABOVE GROUND PIPING SHOWN SHALL BE FLANGED DUCTILE IRON, STEEL PIPING AND/OR GROOVED END JOINTS, AS SPECIFIED, MAY BE USED AT THE CONTRACTOR'S OPTION.
8. SEE SPECIFICATIONS FOR PIPING SCHEDULE.
9. PROVIDE PIPE SUPPORTS BENEATH ALL CONTROL VALVES.
10. DRAINS FROM TURBIDIMETERS, PH METERS, AND CHLORINE ANALYZER SHALL BE HARD PIPED TO NEAREST FLOOR DRAIN.
11. SEE SHT. M-7 FOR PIPING SECTIONS.
12. SEE PLUMBING/HVAC SHT. P-2 FOR FLOOR/TRENCH DRAIN LOCATIONS, EXCEPT FOR CHEMICAL SPILL TRENCH DRAINS SHOWN ON THIS SHEET.
13. PIPING BETWEEN PRETREATMENT TANKS AND MEMBRANES, AS WELL AS BACKWASH PIPING, SHALL NOT BE CEMENT LINED.

**PIPING LEGEND**

(A) 4" SCH. 80 PVC 90° BEND	(12) 12" D.I. FL. SPOOL PIECE
(B) 4" SCH. 80 PVC TEE	(13) 12" D.I. FL. x P.E. SPOOL PIECE
(C) 4" SCH. 80 PVC 45° BEND	(14) 12" D.I. FL. 90° BEND
(D) 4" FL. x P.E. PVC ADAPTER	(15) 12"x12" D.I. FL. TEE
(E) 4" EPOXY COATED PUSH-ON C.I. GATE VALVE	(16) 12"x4" D.I. FL. TEE
(F) 4"x2" SCH. 80 PVC REDUCER	(17) 12"x8" D.I. FL. REDUCER
(G) 8" D.I. FL. SPOOL PIECE	(18) 12"x8" D.I. FL. CROSS
(H) 8" D.I. FL. x P.E. SPOOL PIECE	(19) 12"x4" D.I. FL. CROSS
(I) 8" D.I. FL. 90° BEND	(20) 12" VICTAULIC TD FL. ADAPTER
(J) 8"x8" D.I. FL. TEE	(21) 16" D.I. FL. SPOOL PIECE
(K) 8" D.I. FL. 45° BEND	(22) 16" D.I. FL. x P.E. SPOOL PIECE
(L) 10" D.I. FL. SPOOL PIECE	(23) 16" D.I. FL. 90° BEND
(M) 10" D.I. FL. x P.E. SPOOL PIECE	(24) 16"x16" D.I. FL. TEE
(N) 10" D.I. FL. 90° BEND	(25) 16"x12" D.I. FL. REDUCER
(O) 10"x10" D.I. FL. TEE	(26) 16" D.I. BLIND FLANGE
(P) 10"x8" D.I. FL. REDUCER	(27) 16"x10" D.I. FL. TEE
	(28) 16"x12" D.I. FL. TEE

**ABBREVIATIONS**

T.D. - TRENCH DRAIN

**OPERATIONS BUILDING - PIPING PLAN**

SCALE: 1/8" = 1'-0"