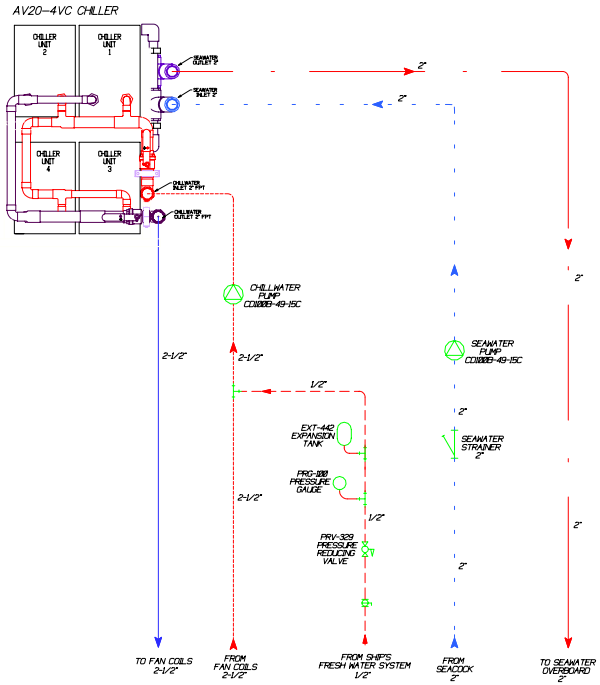
CHILLER UNIT PIPING

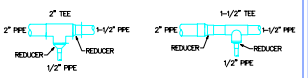
NOTE: AFTER FINAL INSTALLATION AND INITIAL START-UP HAVE BEEN COMPLETED, ENSURE THAT MAXIMUM SEAWATER FLOW THROUGH THE CHILLERS DOES NOT EXCEED 80 GPM. EXCESSIVE FLOW WILL CAUSE PREMATURE CONDENSER FAILURE DUE TO EROSION.

ALL PIPE SIZES NOMINAL



NOTES:

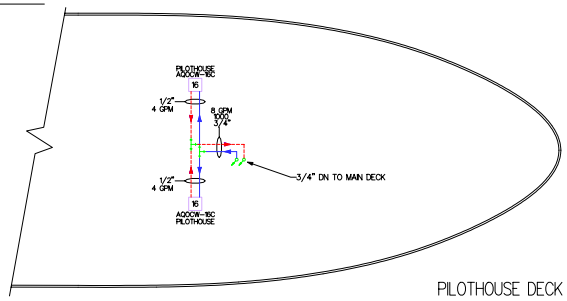
1) INSULATE ALL CHILLWATER LINES WITH 3/4" WALL INSULATION
2) INSULATE ALL DRAIN LINES WITH 3/8" WALL INSULATION
3) GLUE AND DUCT TAPE ALL INSULATION JOINTS-NO AIR GAPS ALLOWED
4) SUITABLE PIPING MATERIAL:
   A) TYPE "L" OR "M" COPPER TUBING
   B) CPVC (COOLING ONLY SYSTEMS MAY USE PVC)
   C) SINGLE BRAID HEATER HOSE
5) TO FACILITATE SERVICING AND FINAL FLOW BALANCING, INSTALL INLET AND OUTLET ISOLATION AND FLOW CONTROL VALVES AT EACH FAN COIL.
6) SET MAKE-UP WATER PRESSURE REDUCING VALVE TO 15 PSIG.
7) ALL SEAWATER PUMPS MUST BE INSTALLED BELOW THE WATER LINE.
8) WHENEVER TEES ARE USED TO BRANCH OFF THE MAIN SUPPLY/RETURN HEADER, THOSE TEES MUST BE SIZED BASED ON THE LARGEST OF THE 3 PIPES AS SHOWN BELOW:



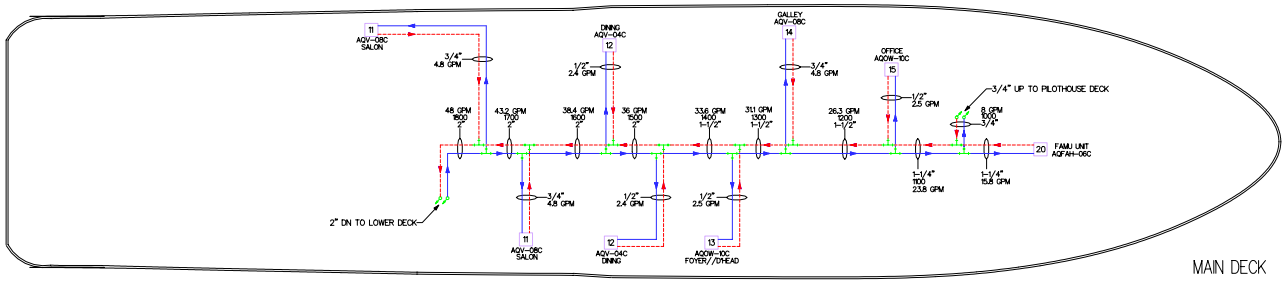
CORRECT INCORRECT

	Ball Valve		Pipe UP to next level
	Pressure Reducing Valve		Pipe DOWN to next level
	Check Valve, Swing Gate		Pressure Gauge
	Gate Valve		Pump (Indicate Use)
	Elbow, Turned Up	flow	Strainer
	Elbow, Turned Down		Reducer, Concentric
	Tee, Outlet Up		
	Tee, Outlet Down		
	Tee		
	CHILLWATER SUPPLY		
	CHILLWATER RETURN		
	SEAWATER SUPPLY		
	SEAWATER DISCHARGE		
	FRESH WATER MAKEUP		

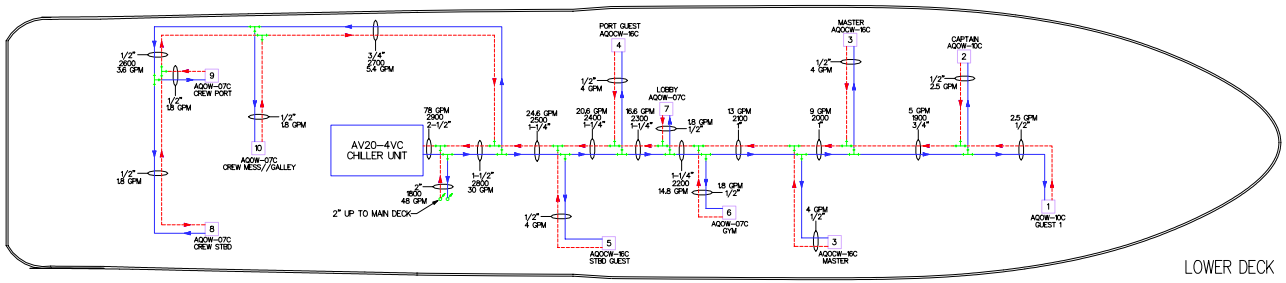
FAN COIL PIPING



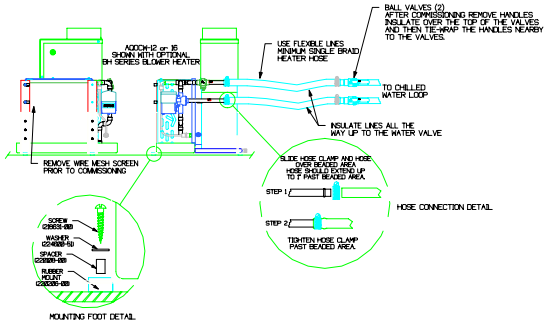
PILOTHOUSE DECK



MAIN DECK



LOWER DECK



FAN COIL INSTALLATION DETAILS – TYPICAL

ALL PIPE SIZES NOMINAL

AQUA-AIR MARINE AIR CONDITIONING SYSTEMS

120' PROJECT
HVAC PIPING DIAGRAM

DRAWING NUMBER	DRAWN BY	DATE
5005-59	SB	01-23-02

SCALE	APPROVED BY	REVISION DATE	REV
NONE	DN		A