



Questions and Answers for Bid No. 26-004
OPS North & Northwest Cooling Tower Replacement
Q&A Issue Date: 8/05/25
Bid Due Date: 8/12/25

Q1- Our question is in reference to the North and Northwest cooling Tower Replacement Project. In the spec book we do not see any reference or mentioning of air or watering balancing. Will the balancing be contracted by commissioning or owner direct. Please Advise.

A1: BDH: Test and Balance to be done by the contractor. Refer to attached TAB specifications section and the revised whole project manual.

Q2- Questions on electrical as follows:

- on sheet EO.1 note #2 shows (2) sets of #4 conductors in the existing 1-1/2" conduit (these would be the feeds from the VFDs typically we don't run load side vfd conductors in the same conduit

A2: BDH: These are the feeds TO the VFD. The VFD's are located in the tower enclosure. Refer to 1/E1.1.

- Then on the line diagram E2.1 note #2 shows " provide (2) sets of #4, 1-#8 conductors in existing and 1 new conduit

Question would be do we need to run a new 1-1/2" conduit with the (2) 3/4" conduits over to the new cooling tower ?

A2: BDH: No. Note #1 calls for two (2) new 3/4" conduits to the tower enclosure. Note #2 calls to route new conductors in existing conduit.

Q3- Division 23 question regarding "piping application schedule" on M7.1 System – Condenser Water Outdoor w/ Heat Trace – Joints: ADD Victaulic PGS-300 as an approved joining type for CPVC.

PIPING APPLICATION SCHEDULE						
SYSTEM DESCRIPTION	SIZE	MATERIAL	JOINTS	INSULATION		NOTES
				TYPE	THICKNESS	
DOMESTIC COLD WATER - OUTDOOR W/ HEAT TRACE	ALL	COPPER (TYPE L)	SOLDER	FIBERGLASS WITH ALUMINUM JACKET	1"	A
CONDENSER WATER OUTDOOR W/ HEAT TRACE	ALL	CPVC	SOLVENT	FIBERGLASS WITH ALUMINUM JACKET	1"	A
NOTES: A) PROVIDE ALUMINUM JACKETED INSULATION WHEN LOCATED OUTDOORS						

Requesting to be allowed to bid Victaulic PGS-300 Grooved CPVC System on this. We have used it on multiple instances on Condenser Water in Waukee IA. Could provide references with the School District Maintenance team. Photo attached from Waukee North MS.

General website: <https://www.victaulic.com/systems/system-solution-cpvc-pipe/>
 ^submittals are on this webpage at bottom.

Benefits

- Increased installed confidence
 - If a Solvent weld joint is installed incorrectly there is no way of knowing... until it fails on the hottest day of the year... Proper installation of a Victaulic couplings fully visually inspectable.. Pad to pad for of a properly installed joint. Additionally the groove is measurable for confirmation of conformance with our specifications.
- Union at every joint – more maintainable/modular for future maintenance etc
- Temperature independent solution. Works just as well on a cold day as it does a warm one.

A3: BDH: Refer to OPS Maintenance dept for approval of Victaulic CPVC connection. Maintain the solvent joint connection for CPVC on this project unless specifically directed by OPS.

A3: BE (OPS): Victaulic connection maybe used on 2-1/2" diameter lines and larger. See attached section of OPS specification guidelines.

- C. Mechanical (Grooved) Couplings on steel pipe allowable. Couplings shall comply with ASTM F1476 and consist of two ductile iron housing segments, pressure responsive gasket, and zinc-electroplated steel bolts and nuts:
1. Victaulic Installation Ready Style 177 or Style 77 (flexible), or approved equal, in Mechanical Rooms for sizes 2-1/2" diameter and larger.
 2. Victaulic Installation Ready Style 107H or Style 07 (rigid), with offsetting angle-pattern bolt pads; or approved equal, in other than Mechanical Rooms in accessible areas (lay-in ceilings or exposed) for sizes 2-1/2" and larger.
 3. 14" and larger: Victaulic AGS series with lead-in chamfer on housing key and wide width gasket.
 - a. Rigid Type: Housing key shall fill the wedge shaped AGS groove and provide rigidity and system support and handing in accordance with ANSI B31.1 and B31.9. Victaulic Style W07.
 - b. Flexible Type: Housing key shall fit into the wedge shaped AGS groove and allow for linear and angular pipe movement. Victaulic Style W77.
 4. Installation ready couplings are suitable for water temperatures to +250 deg F with grade EHP gaskets.
 5. Gustin-Bacon (Tyler Pipe) is an acceptable manufacturer equal to Victaulic