

May 24, 2017

Patti Cale-Finnegan
Iowa Department of Natural Resources
502 E. 9th St.
Des Moines, IA 50319-0034

RE: AIS Waiver Request - Stainless Steel Check Valve
Phase I – Water System Improvements
Division III – Well Construction and Rehabilitation
City of North Liberty, Iowa
FOX PN 3373-15A
SRF # FS-52-14-DWSRF-020

Ms. Cale-Finnegan:

On behalf of the City of North Liberty, we are requesting a project specific waiver pursuant to the American Iron and Steel Requirements for the use of non-domestic stainless steel check valves. The check valves are specified to be installed in the discharge columns of submersible well pumps which will be operated using variable frequency drives.

FOX specified a specific type of check valve for use on submersible well pump column pipe installations. The valve is specifically designed for use on this type of installation and for use with a variable frequency drive. Variable frequency drives are being utilized to enable the City to vary the output from each well depending on demand and drawdown in each well. Additionally, stainless steel valves were specified due to corrosion issues the City has experienced in their wells in the past. For these reasons, this is a very specialized item. A cut sheet of the specified valve is attached.

These check valves are specified for installation in four wells. Well 3 and Well 4 are Silurian aquifer wells that have been re-cased as part of the current project. Well 8 is a new Jordan aquifer well and Well 9 is a new Silurian Well.

The quantities and list prices of valves for the wells are listed here:

Well 3 - Qty two (2) - 4" valves @ \$1576 = \$3152
Well 4 - Qty two (2) - 4" valves @ \$1576 = \$3152
Well 8 - Qty three (3) - 8" valves @ \$8078 = \$24,234
Well 9 - Qty two (2) - 4" valves @ \$1576 = \$3152
Total list price of nine (9) specified valves = \$33,690

Peerless Well & Pump is the subcontractor responsible for providing and installing the well pumps as well as the check valves in question. As stated in the attached email, Peerless has been unable to find a stainless steel well check valve that meets AIS requirements. Even the ductile iron VFD check valve is not AIS compliant. They have talked to suppliers of all (three) manufacturers they consider to be experienced providers of submersible well pump check valves and all indications are that no one makes this type of stainless steel valve in the United States.

Sincerely,
FOX Engineering Associates, Inc.



Taylor Hopper, P.E.
Project Engineer

Attachments: specification excerpt
 valve cut sheet
 supplier email