331114 Potable Water Horizontal Directional Drilling

2016 O1

GENERAL:

:.003 cw 0.84 0 1.15

1.2. PVC Pipe (<u>Trenchless Construction</u>)

- 1.2.1. 4 Inches to 12 inches: AWWA C900; Class 235 (DR 18); cast iron O.D. equivalent; with grooved ends suitable for restrained joint coupling.
- 1.2.2. Couplings: Non-metallic restrained joint coupling with PVC precision machined housing, nylon joint retaining splines, elastomeric O-ring seals, beveled leading edges, with pressure rating equal to or greater than pipe.
- 1.2.3. Gaskets: ASTM F477, elastomeric seal.
- 1.2.4. Coupling Lubricant: Coupling manufacturer's standard for permanent joints.
- 1.2.5. Compliance: Complete restrained joint pipe and coupling system shall be Factory Mutual approved, Underwriter's Laboratory Listed, and shall comply with National Sanitation Foundation Standard No. 61 and UNI-BELL UNI-B-13.
- 1.2.6. Restrained joint piping system shall be Certa-Lok C900/RJ system, as manufactured by CertainTeed, Valley Forge PA, or approved equal.
- 1.2.7. Link Assembly: Seal annular space for piping passing through walls with interlocking synthetic rubber link assembly, Link-Seal® as manufactured by PSI-Thunderline Corporation, Houston TX, or approved equal.

2. Trenchless Piping Installation

- 2.1. It is the desire of the system owner to assure that trenchless piping installation be completed in a timely, quality and accurate manner utilizing good, well-maintained equipment and trained competent personnel. Trenchless piping must be installed on a route as close to the drawings as possible to prevent interference with buried utilities and other obstructions, and to prevent future accidental excavation damage.
- 2.2. Trenchless piping installation shall only be allowed if previously approved by system owner.
- 2.3. Directional drilling and pipe installation shall be done only by an experienced operator specializing in directional drilling and whose key personnel have at least five (5) year experience in this work.
- 2.4. Pipe installed by the directional drilled method must be located in plan as shown

- On the Drawings, and must be no shallower than shown on the Drawings unless otherwise approved. The actual horizontal and vertical alignment of the pilot bore shall be plotted at intervals not exceeding twenty (20) feet. This "as built" plan and profile shall be updated as the pilot bore is advanced. Instrumentation shall be utilized at all times that will accurately locate the pilot hole and measure drilling fluid flow and pressure.
 - 2.5. Pilot hole shall be drilled on bore path with no deviations greater than 5 feet leieet1,r ta w 9.48 -0(t)--llon ti(t)-2(e)12(. 1(, a)4(nd (l)43 Td0(e)4100C p(h nouu)]TJ T* [(l h4(e) ll 5c6(l)12(6(d))2tr)izn smaanaaf9ll 6timess(u)2 uir(ll 6 5)-2()iz(u).4 Tw [(an)-4(d)32.74(nd ll h4(e) ll 5c6(l)12(6(d))2tr)izn smaanaaf9ll 6timess(u)2 uir(ll 6 5)-2()iz(u).4 Tw [(an)-4(d)32.74(nd ll h4(e) ll 5c6(l)12(6(d))2tr)izn smaanaaf9ll 6timess(u)2 uir(ll 6 5)-2()iz(u).4 Tw [(an)-4(d)32.74(nd ll h4(e) ll 5c6(l)12(d) 5c6(l)12(d) 5c6(l)12(d) 5c6(l)12(d) 5c6(l)12(d) 5c6(l)12(d) 5c6(l)12(d) 5c6(l)12(e) 5c6(l)2(e) 5c6(l)