Addendum 3  
File # 17-0475  
Michigan Street Hot Water Pipe Installation

This addendum serves to notify all bidders of the following changes to the solicitation documents:

Additional questions asked and answers provided in bolded red text are listed below:

1. Will the contractor be responsible for X-Raying 10% of each welder's welds and District will test an additional 20% of each welder’s welds? DES will test 20% of each welder’s welds by x-ray. If there is a failing weld, three additional welds will be tested by x-ray, at the Contractor’s expense. If one of those welds fails, then all of the welds previously performed by that welder will be tested by x-ray (at the Contractor’s expense) in sequential order until five joints in succession are satisfactory. Once the additional testing shows acceptable welds, the inspection will revert back to 20% minimum random sampling.
   - “Duluth Energy Systems will be responsible initial weld radiography in accordance with QUALITY ASSURANCE: Section B.” (SHW-28, Quality Assurance)
   - “The ENGINEER will perform a minimum of twenty (20) percent of the total butt welds performed by each welder.” (SHW-28, Quality Assurance)
   - “When all joints in the expanded inspection are satisfactory, the inspection shall revert to 10 percent minimum random sampling.” (SHW-28, Quality Assurance) Should be 20%, typo.

2. What pressure set-point is required for the nitrogen gas for preservation?
   - “Filling hot water pipe with nitrogen gas for preservation purposes through the hose connections on the end caps” 5 psi

3. Will District Energy provide the weld caps to seal the piping sections? No, weld caps shall be provided by Contractor.
   - If not, are they required to be thin-walled similar to the pipe, or can they be standard weight (Sch 40) Standard weight is acceptable.
   - “Following the drying of the pipe, the Contractor shall install weld caps or weld pup pieces to each end of the pipe to “seal up” the dried section. On
the end of each 20” weld cap, the Contractor shall install a ½” nozzle port, ¼ turn ball valve, and plug for the filling and venting of nitrogen.”

4. Can phase-2 be completed before phase-1, or is there a specific sequence of install that needs to be followed?
   o For example, could the contractor start at section 7+00 and work back towards section 3+00. **Ultimately, this will be coordinated with the City of Duluth with winning contractor, otherwise it is acceptable to change the sequence.**

5. Is there a preferred sequence or timing when the power jet piping cleaning should be performed? **The pipe end where flushing (low point) is taking place should be left accessible, but the remainder of the pipe can be backfilled prior to flushing.**
   o Would it be preferred that the water jet pipe cleaning be setup once and the entire system (phase-1 & 2) be flushed, then dried and filled with nitrogen **Means and logistics of the jetting to be determined by the Contractor.**
     ▪ This would require that the trench be exposed (risk of water) until the final nitrogen filling since backfill cannot be applied until after the flush, dry, and nitrogen fill
     ▪ Checking if power jet pipe cleaning can be done on the ~1000-ft of pipe and overcome the elbows in phase-1
   o “After installation but before backfilling, and sequencing the work such that all piping will be cleaned from a low point without cleaning through valves, the CONTRACTOR will thoroughly clean the interior of all pipes of all scale, dirt, and debris by water power jetting of the pipes. All scale and debris shall be flushed and removed from the pipeline.”

Please acknowledge receipt of this Addendum by initialing and dating Addendum #2 below the bid form on the invitation for bids.

Posted: August 15, 2017