

ADDENDUM NO. 4

(4/23/2018)

This addendum #4 to the “Ipswich River Substation – Site Construction” bid documents released on 3/29/18 contains responses to several questions that have come up during the bid process:

- The steel 23 kV line poles have not been full designed by the packager at this time. The preliminary base reactions for these steel poles are as follows:
 - Tangent Poles: V=13.7 kip, P=8.6 kip, M=577 Ft-kip
 - Deadend Poles: V=52.8 kip, P=21.6 kip, M=2433 Ft-kip
- A Contact at Hubbell Power Systems for the helical pile foundations is Jason Herron JWHerron@Hubbell.com
- The new pole locations are offset in line from the existing wood poles to allow foundation installation prior to wood pole removal. The existing wood piles are to be cut off just below the surface and left in place.
- A copy of the base AutoCAD file is included with this addendum to assist in soil quantity takeoff calculations. This drawing file includes both existing and proposed contours for the substation area. The recent soil boring approximate locations (B1 – B4) and the old soil boring (B3) that are located in the excavated area have been included as well for reference.
- The screening wall requirements have been modified. The wall shall include a textured “stacked stone” finish on the outside surface. The inside surface may be smooth. The color shall be tan per the specified requirement. The color shall consist of pigment added to the concrete rather than an applied coating. The posts shall be either precast concrete or steel with applied concrete covering. The face of the posts shall match the wall surface in texture, pattern and color. An Anti-Graffiti coating shall be applied to the exterior surface to limit defacing of the wall surface. Two additional vendors who have indicated an interest in supplying this wall are:

Superior Concrete Fence
Texas
Todd Sternfeld
817 277 9255
tssternfeld@concretefence.com
<http://www.concretefence.com/products/ledgestone/>

Andrew Weaver
Northeast Territory Manager
Soundwall Systems, USA

DIR 302-299-6821
WEB armtec.com

- Fiber Optic Cable:
 - Cable Type: All dielectric self supporting fiber optic cable, Single Mode, 144 fibers, similar to OFS cat. # AT-3BE27D6-144-CNAE.
 - Longest Span: 380'
 - Typical Span: 230'
 - Patch panels are all new (Ipswich River pre-installed in switchgear, Johnson Street and Office to be installed under this contract). Each patch panel is a Century Fiberoptics FTS-175-24LCDLS24-1/B.
 - A Fiber termination diagram will be provided after bid. Splicing at the junction at Johnson Street is described on the line drawing. At Ipswich River and the office at Warren Street, all fibers shall be pulled into the facility. At each location, a total of 24 fibers shall be terminated on the patch panels, with the remainder coiled for future use.
 - Fiber cables shall be field tested and results recorded for OWNER records. Testing shall consist at a minimum of OTDR testing to verify all splicing and Insertion Loss testing end to end of each individual fiber after installation and splicing are complete.

- Waters River Substation Firewall:
 - Drawing 919911WR-C210 has been revised. A revised copy (919911WR-C210- B) is included with this addendum.
 - This firewall is being installed between the two existing transformers in the substation yard. The foundation plan for that portion of the substation is included with this addendum to locate the new wall.
 - One transformer must remain energized at all times. One transformer may be de-energized during certain construction periods if required.

- We do not have final equipment packager material lists at this time. Please work from the ML sheets and drawings included with the bid packages.