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MEETING NOTES

Date: Tuesday, August 17, 2010
Time: 9:00 a.m. – 11:00 a.m.
Meeting Held: SHV WWTP
Re: SHV Sludge Tank Repairs
Pre-Bid Meeting

By: Tim Sullivan
Prepared: August 18, 2010
Revised:
HRC Job No. 20100007.07

Attendees:

See attached sign-in sheet.

I. Introductions

Mark Houle (United Waters) introduced himself and the company as the operators of the WWTP. He went through United Waters' safety training summary required for the site visit, and the signed forms are now on record, for any future site inspections.

Tim Sullivan introduced himself as the Project Manager, and all other attendees introduced themselves.

II. Key Dates

The following key dates were presented by Tim.

- a. Pre-Bid August 17, 2010
- b. Site Visit August 24, 2010
- c. Bid Opening, August 31, 2010
- d. Award September 15, 2010 (Anticipated, NTP to follow)
- e. Final Completion, January 1, 2012.

Note the final completion of January 1, 2011 is incorrect in the specifications. (This will be corrected in Addendum No. 1.)

Tim Sullivan discussed award date of September 15, 2010 as anticipated, but award requires bridge financing. If the bridge financing is not in-place, the notice of award may extend to the winter month. Note: A SHVUA Board Meeting was held following the meeting, and the Board is fully expecting to award the project at the September 15th Board meeting.. Contractors should plan for a fall 2010 construction period.

III. **Project Summary**

Tim briefly presented how the Haig tank was built (cast-in-place base slab, precast columns, beams, side and deck panels) and the problems encountered with shifting precast elements.

IV. **Bid Form and Measurement and Payment**

Tim Sullivan discussed the items of the bid form as follows:

- Construction Administration
- Mobilization/Demobilization
- Tank Cell Wall Shoring
- Column Repairs
- Beam Repairs
- Remove & Reinstall Deck Panels
- New Deck Panel and Access Hatch
- Precast Deck Panel Repairs:
 - Saw cut Panel Edges
 - N-S Precast Deck Panel Grouting
 - E-W Precast Deck Panel Grouting
- Deck Topping
- Geogrid Perimeter Stabilization
- Riprap
- Crack Injection
- Miscellaneous (All Remaining Work)
- Allowance for Unforeseen Conditions

The quantities for the lineal feet of saw cutting assume 1 lineal feet of cut is for both sides of the panel.

V. **Sequencing and Special Project Provisions (01950)**

Tim Sullivan discussed the Special Project Provisions presented in 01950. Of particular note is that the geotechnical work must be done on a cell-by-cell basis, and that will be clarified in an addendum. The first cell of 2011 cannot be obtained until May 15, 2011 and all work must be completed by January 1, 2012.

The sludge hauling contractor can take 15 or 20 loads of sludge per day, so there will be considerable sludge hauling traffic during application periods.

Contractors are cautioned that cell wall shoring is a submittal that must be approved prior to work and that the deck planking to adjacent cell walls provides some shoring and, when removed, auxiliary shoring must be provided. In addition, when the planks are removed for adjoining cell walls, odor control covers must be installed.

Utilities run north-south along the east edge of the tank, including the level sensor electrical conduit. The location of that conduit is unknown.

VI. Tank Photos and Reference Drawings

The tank cannot be entered to observe the conditions. However, there are numerous photos of the tank which are available for viewing at our HRC website.

<http://hrc-engr.com/bidtabs>

VII. Questions

Any questions should be directed to Tim Sullivan per the following:

Tim Sullivan	(248) 454.6879
Hubbell, Roth & Clark, Inc.	tsullivan@hrc-engr.com
420 Bagley, Suite 420	
Detroit, MI 48226	

VIII. Questions and Answers

Can construction hours extend beyond normal business hours?

Yes. The United Water staff is on-site 24/7 and construction can proceed beyond normal working hours. However, extended hours will be contingent, in part, on nearby residents who may complain about sound levels, truck traffic, odors, etc. Any complaints by the residents must be addressed immediately.

Can precast columns be used instead of the repair should on the drawings?

Yes, we can accept a precast or cast-in-place column comparable to the repair column detail (not the existing column section), particular if it saves time.

Are wetlands present on the site, particularly the north end?

The construction area does not contain any wetlands.

Given that the deck has a currently load of 10 kips per axle, does the adjoining soil have a structural limitation to it?

Yes, but it is very dependent on contractor operations. HRC considers this a means and methods since we do not know the equipment size, proximity and resulting load on the tank. We expect that if construction equipment will have a load on the tank, that should be a consideration of the cell wall shoring plan.

Can the trees and/or vegetation around the tank, particularly on the west side, be removed?

Yes, these trees and other vegetation can be removed during construction.

There is additional odor control piping on the deck. Can this be used for the odor control pipe?

Yes, contractors can use this pipe if need be.