

October 5, 2020

City of Tuscaloosa
Hilliard Fletcher WWTP Digester System Heating
Evaluation and Improvements Project-Phase I
Owner Project No.: A20-1083
Volkert Project No.: 1002902

TO: ALL PLAN HOLDERS

SUBJECT: ADDENDUM NO. 2

The following revisions are hereby added as **Addendum No. 2** to the referenced project plans and specifications. These items shall be considered when preparing bids for the construction of this project.

PART 1 - CHANGES TO THE SPECIFICATIONS

1. Refer to Specification 11362 – Flexible Watertube Boilers

A. ADD – The following shall be added as Paragraph 1.01.D.:

D. Semi-Annual Maintenance shall include the following:

1. Annual Inspection

a. Boiler

1. **Secure boiler, lockout, and drain**
2. **Open fireside and waterside of unit and clean furnace area and refractory of all minor accumulations of soot and carbon deposits. Inspect for any adverse conditions.**
3. **Repair minor cracks and wash-coat all refractory with protective high temperature cement**
4. **Remove and clean all hand holes and cross plugs on waterside.**
5. **Inspect condition of low water cutoffs and clean, as necessary.**
6. **Close unit properly seal heads on fireside and replace all waterside gaskets.**
7. **Clean burner, air damper, diffuser, pilot assembly, and oil nozzle.**
8. **Provide written post-inspection report.**

b. Tune-Up and Safety Checks

- 1. Inspect operation of all fuel valves, fuel, air, temperature and pressure interlock controls and adjust, as necessary.**
- 2. Inspect flame safeguard control for proper operation.**
- 3. Test fire unit to operating temperature or pressure. Allow unit to cycle off and automatically restart.**
- 4. Set combustion on fuel choice for maximum efficiency throughout entire range, if load conditions allow, and provide results in writing with the following information and service:**
 - i. Review boiler room operator reports, if provided by Owner.**
 - ii. Check for normal operation of all safety devices except relief valves and check for normal operation of all the following operating controls:**
 - 1. Test main flame failure**
 - 2. Test pilot flame failure**
 - 3. Test high temperature limit**
 - 4. Test operating limit**
 - 5. Test gas pressure switches at high pressure cutoff and at low pressure cutoff**
 - 6. Test combustion air proving switch**
 - 7. Test high and low fire proving switches**
 - 8. Remove pilot assembly, clean, and adjust, if necessary**
 - 9. Check position of diffuser and adjust, if necessary**
 - 10. Complete service report with recommendations**
 - iii. Obtain flue gas analysis on fuel currently being used.**
 - iv. Adjust combustions settings, as necessary, on fuel in use at that time.**
 - v. Provide Owner with printout of flue gas analysis.**
- 2. Semi-Annual Service**
 - a. Inspect operation of all fuel valves, fuel, air, temperature and pressure**

interlock controls and adjust, as necessary.

- b. Inspect flame safeguard control for proper operation.**
- c. Test fire unit to operating temperature or pressure. Allow unit to cycle off and automatically restart.**
- d. Set combustion on fuel choice for maximum efficiency throughout entire range, if load conditions allow, and provide results in writing with the following information and service:**
 - 1. Review boiler room operator reports, if provided by Owner.**
 - 2. Check for normal operation of all safety devices except relief valves and check for normal operation of all the following operating controls:**
 - i. Test main flame failure**
 - ii. Test pilot flame failure**
 - iii. Test high temperature limit**
 - iv. Test operating limit**
 - v. Test gas pressure switches at high pressure cutoff and at low pressure cutoff**
 - vi. Test combustion air proving switch**
 - vii. Test high and low fire proving switches**
 - viii. Remove pilot assembly, clean, and adjust, if necessary**
 - ix. Check position of diffuser and adjust, if necessary**
 - x. Complete service report with recommendations**
 - 3. Obtain flue gas analysis on fuel currently being used.**
 - 4. Adjust combustions settings, as necessary, on fuel in use at that time.**
 - 5. Provide Owner with printout of flue gas analysis.**

- B. DELETE AND REPLACE – Refer to Paragraph 2.10.A. Delete text “VDT400” and replace with text “VDN400”.**

PART 2 - QUESTIONS, ANSWERS, AND CLARIFICATIONS

- Q1: Refer to Specification 11450 – Digester Biogas Conditioning System. Item 2.03.A.3.h lists the inlet gas condition for H₂S to be 1500 parts per million by volume. Is this the**

requirement for the Digester Biogas Conditioning System design or should the concentrations in the Sanders Engineering report be used?

A1: The intent of the Sanders Engineering report included in the technical specifications Appendix A is to provide a detailed analysis of digester gas from each of the three digesters on a randomly selected day. Supplier should use this information accordingly.

Q2: Is there a chance the existing roof that is to be patched when we remove the existing stack and install the two new stacks, is under warranty and needs to be done by the original roof installer? If so, please provide the name of the roofing subcontractor.

A2: There is no warranty on the roof.

Receipt of this Addendum No. 2 shall be acknowledged in *Section Three – Proposal (Bid)*.

Sincerely,



Ray Miller, P.E.
Vice President

PLAN HOLDER LIST FOR DISTRIBUTION

Volkert Contract No.: 1002902	Construction Estimate: Approx. \$2.2 million
Hilliard Fletcher WWTP Digester	Ray Miller/
Description: System Heating Evaluation & Improvements - Ph. 1	Project Manager: Thomas Brymer/ Ethan Hand
Plan Set Cost: \$100.00	Contact: Keturah V. Doherty
Bid Date: Thurs., October 8, 2020 @ 10:00 a.m., Local Time	
Council Chambers - City of Tuscaloosa - 2201 University Blvd.	

<i>Name of Company</i>	<i>Phone Number</i>	<i>Location: City & State Only</i>
Dixie Mechanical, Inc.	251-423-4131	Tuscaloosa, AL
Mark Johnson Construction, LLC	205-752-1978	Tuscaloosa, AL
EMC (Electric Machine Control, Inc.)	205-661-3998	Trussville, AL
The Eshelman Company, Inc.	205-424-7570	Bessemer, AL
Varec Biogas, an Ovivo Company	714-317-7856	Huntington Beach, CA
Haren Construction Company, Inc.	423-604-3030	Etowah, TN
J & P Construction Co., Inc.	205-345-6156	Tuscaloosa, AL
Cahaba Water Solutions, Inc.	205-821-2511	Pelham, AL
The Creel Company, Inc.	251-460-2722	Mobile, AL
H&M Construction Co., LLC	334-641-4250	Demopolis, AL
McAbee Construction, Inc.	205-349-2212	Tuscaloosa, AL
McKelvey Mechanical, Inc.	205-758-1011	Tuscaloosa, AL
Red Dipper, Inc.	510-746-6041	San Francisco, CA
J T Harrison Construction Co., Inc.	205-333-1120	Northport, AL

No bid will be accepted or read from a bidder who is not on the list of entities who have picked up a set of plans for this project. Only entities which have picked up a set of plans from Volkert, Inc. and placed their names on the list of plan holders will be allowed to bid on this project. Bids must be submitted upon the standard forms, furnished by the Owner, included in the Project Specifications.