

AMENDMENT TO AGREEMENT between SHIVE-HATTERY, INC. AND THE CLIENT

PROJECT NAME: Wastewater Treatment Improvements

CLIENT NAME: City of Earlham

AMENDMENT NO.: One

ORIGINAL AGREEMENT DATE: May 26, 2020

AMENDMENT DATE: June 9, 2021

City of Earlham and Shive-Hattery, Inc. (S-H) agree to amend the Original Agreement as follows:

PROJECT DESCRIPTION: ADD

lowa Department of Natural Resources (IDNR) added lower Total Suspended Solids (TSS) limits for the treatment plant effluent with the Facility Plan Approval. The current design does not address lowering the TSS concentrations in the effluent as these lower limits were not proposed by IDNR in any previous correspondence. An additional process is required to meet the new TSS limits.

Meeting the lower TSS limits opens the possibility of Ultraviolet Light (UV) Disinfection to address the disinfection limits. UV would be the preferred disinfection method if the effluent quality meets UV requirements. IDNR has agreed to provide an extension to the E.coli limit compliance date to allow for time to gather data on the plant effluent prior to bidding and building the disinfection portion. This would allow for the lagoon improvements to be constructed in two phases.

The project phasing would be as follows:

Phase 1 - Influent Screening, MBBR, Settling Lagoon Cover (Address Ammonia Limits and TSS Limits)

Phase 2 - Disinfection (Address E.coli Limits)

Following construction of Phase 1, the City can gather data on plant effluent to evaluate the feasibility of UV disinfection. Then the City will have the opportunity to decide between a Chlorine Disinfection System or UV Disinfection System in the Phase 2 improvements.

This amendment is to design and prepare bidding documents for an insulated floating cover and fine bubble diffused aeration for the Settling Lagoon to address the lower TSS limits.

SCOPE OF SERVICES: ADD

These services will consist of the following tasks:

- 1. Discussion with the IDNR regarding this new limit and the associated changes to the design.
- 2. Prepare design, bidding and permitting documents for the insulated floating cover and fine bubble diffused aeration system for the Settling Lagoon. These documents will be incorporated into the bidding documents for the screen and MBBR.
- 3. Submit plans to IDNR for construction permitting.
- 4. IDNR NPDES Compliance Schedule Extension Request for extending the E.coli limit compliance date.
- 5. Prepare a memorandum to the IDNR to facilitate adding the Settling Lagoon Cover to the scope of the Facility Plan and Construction Permit.

ADDITIONAL SERVICES: ADD

- 1. Design of UV Disinfection Improvements.
- 2. Bidding of Phase 2 Improvements.
- 3. Other engineering and/or surveying services not included in the Scope of Services above.

CLIENT RESPONSIBILITIES: NONE



COMPENSATION: ADD

We will complete this scope of work on a lump sum basis with a fee of \$14,300.

SCHEDULE: CHANGE

We will complete the above services within three (3) weeks and submit to the DNR for their incorporation to their review. We anticipate the award of the contract will be changed from September 1, 2021 to October 1, 2021.

AGREEMENT: This Amendment is subject to all other terms and conditions of the Original Agreement.

ACKNOWLEDGEMENT OF APPROVAL AND OF AMENDMENT:

SHIVE-HATTERY, INC.

By: Fill Suffer Ser Marti N. Ahlgren, PMP

Date Accepted: Tami L. Wilcox, P.E.

MNA/TW