

REQUEST FOR COUNCIL ACTION

Meeting

Date: June 8.26

AGENDA SECTION: General Business	ORIGINATING DEPT: Administration
ITEM DESCRIPTION: SEH Supplemental Agreement	PREPARED BY: B. Schimmel, Jr.

Following the Council Spring Planning Workshop on Capital Improvement Projects, the Council directed staff to work with the City Engineering Staff putting together the planning study work for the next phases of Wastewater Treatment Facility Improvements.

This planning will help guide the city through various phases of expansion improvements for our future Wastewater needs. This study work will address areas of projected growth, including residential, commercial, and industrial development.

The Council initially approved up to the \$45,400 amount listed in the attached Supplemental Services Agreement outlining the work ahead. There is an added amount of scope requirements now needed, which are shown in the Task categories, and would add an additional \$28,400 for your approval, which was discussed at the workshop held earlier tonight.

COUNCIL ACTION REQUESTED:

To approve or deny the additional Agreement work.

Supplemental Letter Agreement

In accordance with the Agreement for Professional Services between City of Stewartville ("Client"), and Short Elliott Hendrickson Inc. ("Consultant"), effective June 13, 2023, this Supplemental Letter Agreement dated May 5, 2026 authorizes and describes the scope, schedule, and payment conditions for Consultant's work on the Project described as: Stewartville WWTP Facilities Plan.

Client's Authorized Representative: Bill Schimmel

Address: 105 East 1st Street, Stewartville, Minnesota 55976, United States

Telephone: _____ **Email:** _____

Project Manager: Susan Danzl

Address: 3428 Lakeridge Place NW, Rochester, Minnesota 55901

Telephone: 651.280.0884 **Email:** sdanzl@sehinc.com

Scope: The early steps of a Facility Plan were started in 2023, but halted due to uncertainty around large potential developments. Those developments are starting to take shape and now the City would like to move forward with completing a Facility Plan. The two major changes to the scope of services are to (1) include two future flow and loading scenarios for evaluation – one with industrial growth and one without and (2) replace phosphorus alternative evaluation with Nitrogen Management Plan as required by the City's NPDES permit. This agreement modifies the existing scope of services as follows:

Task 1: Existing Conditions.

Item 5: Existing flows and loads were estimated for four years of data from 2018 thru 2022. This amendment will add three years of data from 2023-2025. Original fee: \$12,804. **Added cost: \$4,500.**

Task 2: Future Loading Conditions.

Original scope assumed population projections based on City's Comprehensive Plan, which was developed prior to industrial and other private development. An additional 15.5 hours were added to revisit population projections and discuss industrial flows and loads, including one in-person meeting to review with Project Manager. Two separate future flow and loading conditions will be established for the evaluation of alternatives. As part of this task, in anticipation of an expanded flow condition, SEH will prepare a Preliminary Effluent Limit Request to the MPCA to obtain preliminary effluent limits for an expanded condition. Original fee: \$841. **Added cost: \$6,000.**

Task 3: Evaluation of Alternatives.

The original scope of services had \$16,691 allocated for the Evaluation of Alternatives, including an optional task for Phosphorus removal. The updated scope of services, detailed below and incorporating the Nitrogen Management Plan and two flow/loading scenarios, results in a **net added cost of \$17,900.**

Replace items 3, 4, 5, and 6 with the following:

Item 3. Secondary Treatment/Oxidation Ditches: Evaluate expansion options for secondary treatment system for an expanded flow and loading scenario. Two alternatives will be considered: (1) expanding capacity with a 3rd oxidation ditch and clarifier and (2) converting the oxidation ditch to a conventional activated sludge system.

Item 4. Nitrogen Management Plan: The revised permit did not include any phosphorus limits, and therefore, the optional task will be replaced with the Nitrogen Management Plan (NMP), which is required by the NPDES permit.

- a. Characterize nitrogen sources to the wastewater treatment facility, including influent contributors, internal recycle streams, and any high-strength return flows

- b. Evaluate past and current wastewater treatment facility operations to identify operational practices that maximize nitrogen removal
- c. Identify and evaluate influent nitrogen source reduction opportunities, including coordination with significant or high-nitrogen contributors and consideration of local limits or user-specific nitrogen management measures
- d. Evaluate treatment process optimization strategies and operational improvements to reduce effluent nitrogen concentrations and loadings
- e. Assess treatment capacity, side-stream loading, inflow and infiltration impacts, and other factors affecting nitrogen removal performance
- f. Evaluate potential treatment modifications or optimization strategies needed to achieve effluent denitrification protective of downstream aquatic life, including consideration of long-term performance targets identified in the permit
- g. Identify nitrogen management and reduction actions implemented during the current 5-year permit cycle
- h. Develop a forward-looking nitrogen management and reduction strategy for the next five years, including implementation actions and anticipated nitrogen reductions
- i. Prepare a written Enhanced Nitrogen Management Plan document suitable for submittal to the MPCA and immediate implementation upon approval

Item 5. Solids Handling: The facility currently stores solids in an aerated tank and uses drying beds to dry the solids. The drying beds were installed instead of the 2008 Facility Plan recommendations for reed beds due to the concerns over invasive reed species. It was a good decision to pivot away from reed beds, as the native reeds are proving to be less effective; however, the drying beds have posed challenges as well. The solids handling evaluation will be an important piece of the Facilities Plan and will consider the following alternatives for the **two loading scenarios**:

- a. Liquid Sludge Storage. Facilities of similar size to Stewartville often handle the biosolids as liquid (<5% solids). SEH will look at solids thickening with increased liquid sludge storage. There are many thickening technologies. For the basis of this evaluation and comparing this alternative to other solids handling alternatives, SEH proposes to look at rotary drum thickeners.
- b. Dewatering & Cake Storage. This would entail keeping the system much the same as today, but dewatering to approximately 20% solids with increased biosolids storage.
 - i. There are multiple dewatering technologies, for the basis of this evaluation and comparing this alternative to other solids handling alternatives, SEH will base the evaluation on screw presses.
 - ii. SEH will evaluate covered and uncovered biosolids storage options.
- c. Drying. SEH will evaluate two different options to continue to produce 80%+ dried solids:
 - i. Solids dehumidification. SEH will evaluate a solids dehumidifier.
 - ii. Drying bed expansion. Variable weather conditions makes drying bed use difficult. The long-term plan was to build more drying beds. As a baseline alternative, SEH will evaluate the costs for expanding the drying bed area and the solids storage to handle the future projected solids.

Item 6. Disinfection: The 2008 Facility Plan identified disinfection needs for the facility due to capacity limitations. SEH will evaluate two options for disinfection for two flow scenarios: upgrading the existing gas disinfection system or retrofitting the chlorine contact tank to ultraviolet disinfection.

Task 4: Recommendations

No changes

Task 5: Public Hearing.

No changes

Task 6: Facilities Plan Supplement.

No changes

City Responsibilities:

Add to bullet list:

- Provide nitrogen data from return streams.
- Pay costs associated with Preliminary Effluent Limit Request to the MPCA. This cost is \$1,550.

Schedule:

Draft NMP will be completed by May 22, 2026. NMP is due to the MPCA June 2, 2026 (18 months after permit reissuance). Preliminary Effluent Limit Request will be submitted to the MPCA by July 31, 2026. Assuming 4 months for the MPCA to respond to the Preliminary Effluent Limit Request, Draft Facility Plan will be presented by 1/31/2027.

Payment:

The original estimated fee was \$45,400 including expenses. Only part of Task 1 (\$6,474.20) has been completed to date. **The added scope adds \$28,400 to the scope, for a total of \$73,800.**

The payment method, basis, frequency and other special conditions are set forth in attached Exhibit A-1.

Other Terms and Conditions: Other or additional terms contrary to the Master Agreement for Professional Services that apply solely to this project as specifically agreed to by signature of the Parties and set forth herein: None .

Short Elliott Hendrickson Inc.

City of Stewartville

By: _____

By: _____

Full Name: _____

Full Name: _____

Title: _____

Title: _____