

Staff Report

Subject: Approval of Engineering Evaluation for Effingham County Water Treatment Plant (WTP) Phase II

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Department: Public Works

Meeting Date: October 1, 2024

Item Description: Approval of the Engineering Evaluation proposal for Effingham County Water Treatment Plant (WTP) Phase II.

Summary Recommendation: Staff recommends approval of the engineering evaluation for the Water Treatment Plant Phase II by Goodwyn Mills Cawood (GMC) to assess the feasibility of constructing a new water treatment facility and its infrastructure.

Executive Summary/Background: Effingham County currently purchases water from the City of Savannah but seeks to evaluate the feasibility of constructing a new water treatment plant. This Phase II study, conducted by GMC, follows recommendations from the Phase I evaluation, which proposed building a 24 MGD raw water intake, a 12 MGD water treatment plant, and related infrastructure.

The scope of Phase II includes:

1. **Project Management** – Workshops and stakeholder meetings to oversee the project.
2. **Community Engagement** – Assistance in engaging the community on the water treatment plant project.
3. **Distribution** – Analysis of water models and alternatives for raw water mains and distribution routes.
4. **Source Water Assessment** – Ensuring the water quality of the Savannah River.
5. **Demand Projections & Capacity Analysis** – Projecting future water demands and performing a cost-benefit analysis.
6. **Treatment & Piloting** – Assessing treatment technologies and conducting treatability studies.
7. **Mitigation** – Reviewing technologies to address the dissolved oxygen deficit at the raw water source.
8. **Design Development Report** – Development of a final design for the water treatment facility.

The total cost of this study is **\$372,000**, with an additional **\$50,000** for water quality analysis.

The project is expected to take approximately **37 weeks** from the start date of October 2, 2024.

Alternatives for Commission to Consider

1. Approve the engineering evaluation proposal for WTP Phase II.
2. Do not approve the proposal and provide further direction to staff.
3. Take no action.

Recommended Alternative: 1

Other Alternatives: 2, 3

Department Review: County Manager, County Engineer, Procurement

Funding Source: SPLOST/Grant Funds

Attachments: Proposal for Engineering Evaluation of Effingham County WTP Phase II