

Council Member _____ introduced the following Resolution, which was seconded by Council Member _____.



RESOLUTION 050823-D

AUTHORIZING AN AGREEMENT WITH ENGINEERS OF THE SOUTH FOR ENGINEERING SERVICES IMPROVING EXISTING EQUIPMENT AND INCREASING THE CAPACITY OF THE FILTRATION EQUIPMENT AT THE WASTE WATER TREATMENT PLANT

WHEREAS, the Mayor and City Council of the City of Alabaster, Alabama, have determined that it is both wise and expedient to enter into said contractual agreement with **Engineers of the South for Engineering Services** related to **Improvements to Existing Equipment and Increasing the Capacity of the Filtration Equipment** for the city’s Waste Water Treatment Plant (WWTP); and

WHEREAS, the project will improve the reliability, capacity and efficiency of the tertiary filtration process operations at the WWTP, and

WHEREAS, the amount of this service agreement will not to exceed **\$260,000**. This has been approved as part of the City’s 2023 Capital Improvement Plan for Environmental Services, and

WHEREAS, the project improvements will generally include:

- Replacing the existing sand filters with disk filters
- Installing the new disk filters inside the existing concrete structures of the sand filters
- Increasing capacity of the existing sand Filter #1 (old side = currently rated at 3.0 mgd) to match the capacity of the existing sand Filter #2 (new side = currently rated at 4.6 mgd). The goal is to provide redundant trains of equal capacity. Each disk filter will be sized for a peak flow of 14 mgd (28 mgd peak flow total).
- Provide hydraulic review of existing pipe from the existing Clarifiers #1 and #2 to the existing Filter #1. If necessary, recommend replacement of the pipe as needed to increase the flow capacity through Filter #1 to meet the desired capacity.
- Review the condition of the effluent launders and weirs in Clarifiers #1 and #2. Recommend and include replacement, if needed.
- Review the feasibility of adding rapid mix and flocculation within the existing filter structure(s) to improve the chemical mixing and filter performance. Provide guidance, recommendations and design of these features, if desired.
- Electrical upgrades or improvements as required to service the project.

NOW THEREFORE, BE IT RESOLVED, AS FOLLOWS:

1. The City Council authorizes the Mayor to enter into an agreement with Engineers of the South for the Solids Handling Building Improvements at a cost not to exceed \$260,000.
2. That the City Clerk is authorized and directed to attest any related, and necessary documents on behalf of the City for said purchases.

	Y / N		Y / N
Sophie Martin	_____	Jamie Cole	_____
Rick Ellis	_____	Zach Zahariadis	_____
Stacy Rakestraw	_____	Kerri Pate	_____
Greg Farrell	_____		

ADOPTED AND APPROVED THIS 8TH DAY OF MAY 2023.

ATTEST: CITY OF ALABASTER

J. Mark Frey, City Clerk

Sophie Martin, Council President

APPROVED:

Scott Brakefield, Mayor



April 25, 2023

Mr. Fred Hawkins, PE
Director of Building, Engineering & Environmental Services
1953 Municipal Way
Alabaster, AL 35007

Re: Alabaster WWTP – Filter Improvements

Dear Fred:

Engineers of the South, LLC (EOS) is pleased to provide the City of Alabaster with this proposal for engineering services. This project consists of improving the existing equipment and increasing the capacity of the filtration equipment at the existing Alabaster Wastewater Treatment Plant (WWTP). This project will improve the reliability, capacity and efficiency of the tertiary filtration process operations.

The general concept discussed with the City includes:

- Replacing the existing sand filters with disk filters
- Installing the new disk filters inside the existing concrete structures of the sand filters
- Increasing capacity of the existing sand Filter #1 (old side = currently rated at 3.0 mgd) to match the capacity of the existing sand Filter #2 (new side = currently rated at 4.6 mgd). The goal is to provide redundant trains of equal capacity. Each disk filter will be sized for a peak flow of 14 mgd (28 mgd peak flow total).
- Provide hydraulic review of existing pipe from the existing Clarifiers #1 and #2 to the existing Filter #1. If necessary, recommend replacement of the pipe as needed to increase the flow capacity through Filter #1 to meet the desired capacity.
- Review the condition of the effluent launders and weirs in Clarifiers #1 and #2. Recommend and include replacement, if needed.
- Review the feasibility of adding rapid mix and flocculation within the existing filter structure(s) to improve the chemical mixing and filter performance. Provide guidance, recommendations and design of these features, if desired.
- Electrical upgrades or improvements as required to service the project.

This proposal specifically excludes:

- Electrical improvements beyond the new filter equipment.
- SCADA improvements of any kind. All SCADA improvements shall be by Owner.
- FEMA or US Corps of Engineers permitting for Flood Plain related issues.
- Site survey (already completed by Owner).
- Permitting.
- Environmental review.
- Structural review of existing structures / buildings.

In general, the proposed project includes the following (complete scope located in Attachment A):

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- The Preliminary Phase (excludes surveying as the City provided a whole site survey) is hourly engineering time to:
 - Visit additional example disk filter installations with City Personnel (if desired).
 - Provide at least three (3) different concepts / scopes with Opinion of Preliminary Construction Costs for Owner review.
 - Review the existing elevations, pipe diameters, flows, etc. to confirm hydraulic capacities and piping improvements necessary.
 - Review the existing electrical infrastructure to ensure adequate capacity for new equipment.
 - Coordinate the design with the existing and conceptual future downstream unit processes.
- The Design Phase will produce a complete set of Contract Documents, Plans, and Specifications ready to bid.
- The Bidding Phase includes advertising, Pre-Bid Meeting, answering questions, producing Addenda as required, Bid Opening, and Recommendation of Award.
- The Construction Phase includes the Pre-Construction Conference, part-time construction observation (estimated at half of construction time), concrete testing, submittal review, monthly pay request review, change orders as required, and record drawings upon completion.

Proposed compensation:

• Preliminary Phase	Hourly NTE:	\$ 18,500.00	Time: 60 days
• Design Phase	Lump Sum:	\$154,500.00	Time: 150 days
• Bidding & Construction Phases	Hourly NTE:	\$ 84,500.00	
• Construction Survey Stakeout	Hourly NTE:	\$ 2,500.00	
	Project Total:	\$260,000.00 (maximum)	

We are available to begin work immediately and appreciate this opportunity to assist the City of Alabaster. If you have any questions concerning this proposal, please call me at our Pelham office or on my cell phone at (205) 516-0816.

Sincerely,
Engineers of the South, LLC



Greg Thompson, PE
Project Manager

Acceptance of Proposal:
City of Alabaster

Signature
Date: _____

Attachments: A – Scope / Typical Types of Engineering Services
B – Schedule of Rates and Fees
C – Articles of Employment

CC: File: X:\EOS Archives\Alabaster\Alabaster WWTF - Filter\Proposal\AL-2301 - Filter Improvements (2023-04-25).docx