ENGINEERS OF THE SOUTH

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):

- 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

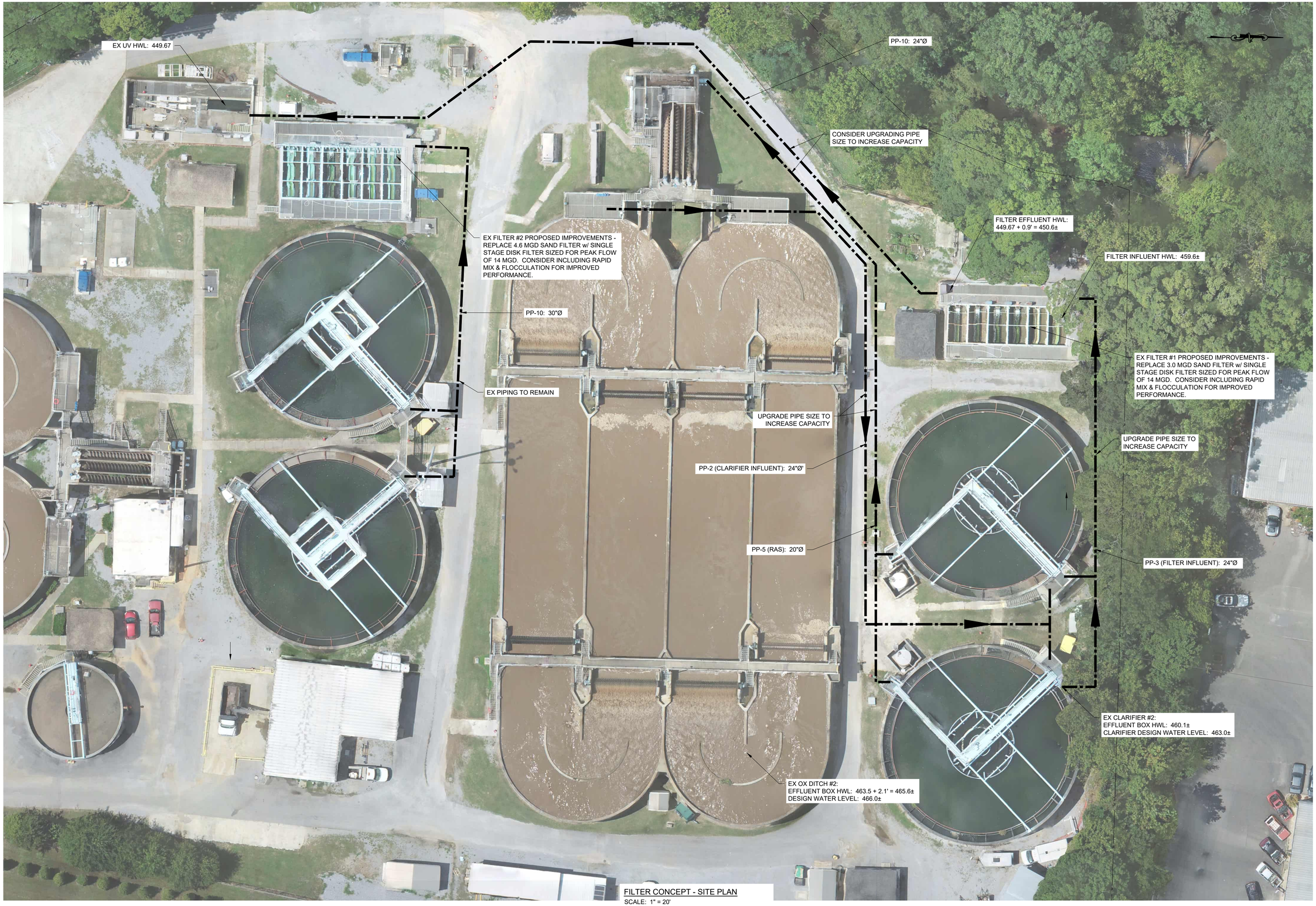
Greg Thompson, PE
Project Manager

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



FILTER CONCEPT - SITE PLAN
SCALE: 1" = 20'

ENGINEERS OF THE SOUTH

PRELIMINARY, NOT FOR CONSTRUCTION, RECORDING PURPOSES OR IMPLEMENTATION

REVISIONS

NO	DATE	DESCRIPTION
☒		FOR REVIEW AND COMMENT
☐		AS-BID
☐		CONSTRUCTION REVISIONS
☐		AS-BUILT

CITY OF ALABASTER
ENVIRONMENTAL SERVICES DEPT

ALABASTER WWTP - FILTER CONCEPT

FILTER CONCEPT - SITE PLAN

BOX IS 2 IN WIDE AT FULL SCALE

JOB NO:	AL-22XX
DATE:	JULY 2022
DESIGNED BY:	GST
DRAWN BY:	GST
DWG:	10-C-05
SHEET NUMBER	XX

VERY PRELIMINARY