



Jefferson County Environmental Services Department

Qualifications-Based Selection Program

REQUEST FOR QUALIFICATIONS STATEMENT

TO: All eligible consultants in the "Large Scale Wastewater Facilities and Line Work - Design Engineering and Construction Management" project category:

FROM: Jefferson County Environmental Services Department
Daniel White, Deputy Director

DATE: March 15, 2023

RE: Request for Qualifications Statement

Your firm is invited to submit your Qualifications Statement to become eligible to compete for consulting engineering and construction management services relative to the following upcoming project:

VALLEY CREEK WRF PHOSPHOROUS REMOVAL IMPROVEMENTS

Attached to this memo you will find the following:

1. A list of materials and information that should be included with your Qualifications Statement.
2. A general definition of the Preliminary Scope of Work.
3. Project Specific Selection Criteria/Grading Sheet
4. A Schedule of Activities for the selection process.

Your Qualifications Statement materials should be forwarded to the following address to be received no later than **5:00 p.m. on April 12, 2023** Qualifications Statements should be mailed or hand delivered. Consultants should submit at least **five (5)** copies of their Qualifications Statement. Qualifications Statements to:

Mrs. Tonya Kelley, P.E.
Chief Engineer
Jefferson County Environmental Services Department
Suite A-300
716 Richard Arrington, Jr. Blvd. N.
Birmingham, Alabama 35203
205-325-5496
kelleyt@jccal.org

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REQUIREMENTS FOR QUALIFICATIONS STATEMENT

PROJECT NAME: VALLEY CREEK WRF PHOSPHOROUS REMOVAL IMPROVEMENTS

Qualifications Statements should include the following information:

1. Name, address, and brief description of the firm.
2. Resumes of key personnel to be assigned to this project.
3. Statement regarding Firm's particular abilities and qualifications related to this project.
4. Description of other projects done by the Firm which are pertinent to this project. Include reference contact information.
5. Other information which you feel may be useful and applicable to this project.
6. USB flash drive with pdf copy of submittal

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PRELIMINARY SCOPE OF WORK

PROJECT NAME: VALLEY CREEK WRF PHOSPHOROUS REMOVAL IMPROVEMENTS

Project Background:

The Valley Creek WRF (NPDES Permit No. AL0023655) is located at 3923 Clear Water Drive Bessemer, Alabama 35023 and discharges to Valley Creek in the Black Warrior River Basin. The WRF is permitted at an 85 MGD design flow. Since 2019, the monthly average flow has varied between 24.8 MGD and 104.6 MGD, and the average flow for the four-year period is 49.5 MGD. Peak hour flows can exceed 170 MGD, and the recent maximum daily effluent flow recorded was 159 MG. The facility produces high quality effluent with monthly average TSS concentrations of 4.7 mg/L and TP monthly averages of 1.1 mg/L and consistently meets all permit effluent requirements.

Project Description:

Jefferson County Environmental Services Department (JCESD) anticipates phosphorous discharge limits being imposed by ADEM on Valley Creek in the future. Even though in 2006, the WRF was constructed with thirty-two Severn Trent Deep Bed Gravity Filters with a combined 170 MGD peak flow capacity and capable of providing significant if not sufficient phosphorous removal, the filters are currently inoperable, and the facility has no other phosphorous treatment or removal process. The filter building flooded in late 2009 following a power loss event and the pump motors and valve operators were damaged. Repairs were made, but the filters were flooded again in 2011 after another similar flooding event and have remained offline and bypassed to date. Based on experience from JCESD's other WRFs, JCESD expects to need the addition of a chemical based phosphorous removal system to meet the still unknown but anticipated TP permit requirements and intends to decrease the pollutant loading from the Valley Creek WRF to the Black Warrior in advance of any TMDL development by the State.

Consultant's Scope of Work:

The general scope of work will include an engineering study and detailed engineering designs and plans for the construction of the recommended improvements, bidding services, and construction observation and management. A study will be conducted to answer the following questions related to the filter building, the risk for future failure, and the viability of their return to service: are the filters needed, can the existing filters be adequately protected from further flooding, and can the filters be cost effectively returned to service or are other treatment alternatives more cost effective. The detailed design scope of work may include: a new chemical feed system; piping for hydraulic connections from the 2nd stage RAS into aeration basins 7-10; piping for hydraulic connections between the old primary clarifier feed box into box 5 to allow a partial bypass of the primaries for better flow control when a reduced number of aeration basins are in service (Aeration Basins 11-20); valve replacement on #10 final clarifier WAS line; (possible) filter equipment remediation and re-routing filter backwash from 1st stage aeration to 2nd stage aeration, and design of other upgrades as desired by the County and recommended by the Consultant.

**Qualifications-Based Selection Program
SELECTION CRITERIA/GRADING SHEET**

PROJECT NAME: VALLEY CREEK WRF PHOSPHOROUS REMOVAL IMPROVEMENTS

Firm Name: _____

Criteria	Rating	x	Weight	=	Total
Pertinent Design Experience: Evaluate firm's experience designing chemical feed systems		x	25	=	
Pertinent Design Experience: Evaluate firm's experience evaluating and designing process and equipment upgrades in similar wastewater facilities.		x	25	=	
Key Personnel and Roles: Evaluate personal qualifications and professional skills of the individual team members designated for this project.		x	20	=	
Construction Management: Evaluate firm's ability to provide engineering construction management and observation.		x	20	=	
Other relevant issues: Evaluate importance of other relevant issues presented by the firm.		x	10	=	
Total Score					

Instructions for ESD Project Engineer:

Weight each category according to the needs of your project. A lower numerical value in a category indicates the category is less relevant to your particular project and a higher numerical value indicates that the category is very relevant to your project.

Instructions for Reviewers:

Assign the consultant a rating for each category on a scale of one (1) to five (5), with five being the highest. Multiply the rating by the predetermined weight for each category and enter the total.

Reviewer Signature

Date

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SCHEDULE OF ACTIVITIES

**PROJECT NAME: VALLEY CREEK WRF PHOSPHOROUS REMOVAL
IMPROVEMENTS**

DATE	TASK
03/15/23	Request for Qualifications Statements distributed to all appropriately classified eligible consultants.
04/12/2023 5:00 PM	Deadline for interested consultants to return Qualifications Statements.
04/24/2023	Date to distribute notification to short-listed consultants advising them of the schedule and requirements for interviews*. Notification will also be sent to consultants who are not short-listed.
05/12/2023	Date to conduct consultant interviews and rank short-listed consultants.
05/17/2023	Date to notify short-listed consultants of selection.

* Final Selection may be made from the Qualification Statements