REQUEST FOR PROPOSALS
TRAVELING BRIDGE FILTER REHAB
CITY OF TIFTON, GA

PART 1: BACKGROUND AND SUMMARY

The City of Tifton/Tift County Utility Department provides wastewater treatment for industrial, commercial and residential customers throughout the City and County. In 2012, the City contracted with ESG Operations, Inc. for daily operations, maintenance, and management of the wastewater system; including 19 lifts stations, 7 sewer master meters, the collection system, and the Tifton Regional Wastewater Treatment Complex. The wastewater treatment facility is permitted to treat up to 8 million gallons per day (MGD) monthly average daily flow (ADF) and up to 10 MGD weekly ADF. ESG strives to provide the joint City of Tifton/Tift County with the highest level of professional operation services and to maintain 100% compliance with the wastewater treatment facility permit issued by the Georgia Environmental Protection Division (GaEPD).

The Tifton Regional Wastewater Treatment Complex was constructed in 1979 and included influent pumping, primary screening, aeration, clarification, filtration, chlorination, effluent discharge and sludge treatment. The plant is still operating today with very few changes. Filtration was originally provided inside a 53'8"x 138'8" concrete basin housing two (2) 16'x120' low head filters equipped with porous plate underdrains, 11" of sand filtration media, and automatic traveling bridge backwash systems. After several years of intermittent operation due to maintenance issues, the filters were completely shut down 5+ years ago. During this time, wastewater flows have continued over the influent weir and through the center by-pass channel of the basin.

The City of Tifton/Tift County, in conjunction with ESG Operations, is seeking proposals to demolish the existing filtration equipment and provide a low head, automatic backwash filtration system capable of residing in the original concrete basins with minimal, or preferably no, structural changes. This is to be a performance based proposal. After completion of the rehabilitation work, the filters shall be capable of treating a combined daily average flow of 8 MGD of secondary waste effluent and a peak flow of 20 MGD. The final filtrate shall contain less than 10 mg/l suspended solids given a daily average suspended solids loading of 30 mg/l (based on daily composite sampling). The filters shall also be capable of reducing a 24-hour upset loading of 200 mg/l to $\leq$30 mg/l. Head loss through a clean filter shall not exceed six inches.

The contractor/manufacturer is free to propose any new or existing technology, provided that they meet not only the performance, experience, and prior installation requirements presented herein, but will also be able to perform given the space and low head loss constraints presented by the existing basin layout. Copies of the original filter construction plans (both process and structural) have been included as Appendix A to aid the contractor and/or equipment manufacturer in the proposal process. Supporting plan sheets showing the upstream and downstream basins as well as electrical feeds to the filters have been included as Appendix B. **Note that the actual as-built conditions of the basins may**

differ. It will be the responsibility of the chosen contractor to verify the actual site conditions prior to equipment fabrication.

PART 2: PROPOSAL GUIDELINES

This Request for Proposals represents the requirements for an open and competitive process. **Proposals will be accepted until 3:00 PM local time on Thursday, October 13th, 2016**. Any proposals received after this date and time will be returned to the sender. All proposals must be signed by an official agent or representative of the company submitting the proposal.

All proposals shall be organized into sections allowing a reviewer to easily find information needed to evaluate the filtration equipment. Proposals should include, but are not limited to, the following: contractor general information/background, proposed filter system information, manufacturer general information/background, previous experience/references, costing, and proposing party contact information. Equipment descriptions, cut sheets, performance data, detailed drawings, and operational overviews shall be sufficient to allow the reader to understand how the system will continuously filter waste to meet the performance requirements noted herein. Should the proposed technology **not** be capable of meeting the 24-hour upset loading requirement, the proposal should clearly state this and provide information on what upset loading concentration could effectively be reduced to $\leq$30 mg/l. The data should also detail how the system will automatically backwash, dispose of washwater, interface with operators, be maintained, and be accommodated inside the current basin layout.

To aid the selection process, the **Total Cost of each proposal shall include full demolition and all new replacement parts with no re-use of any existing filtration equipment.** If the company proposing feels that re-use of existing components is practical, they should offer an alternate price with a deduction shown along with a listing of the equipment parts proposed for re-use. If a proposing company has multiple systems that could meet the requirements of the RFP, then that company may submit pricing for one filtration system option with an alternate price for the second filtration system. However, note that separate sections shall be provided in the proposal clearly separating information about the primary system from information about the alternate. In addition, separate "previous installation" and/or "reference" lists from the manufacturer will be required for each equipment system. All primary and alternate options will be considered.

If the organization submitting a proposal must outsource or contract any work to meet the requirements contained herein, this must be clearly stated. The name and description of the organization being sub-contracted shall be included in the proposal. Additionally, the costs presented in the proposal shall be inclusive of all sub-consultants work necessary for completion of the project.

Contract terms and conditions will be negotiated upon selection of the winning company for this RFP. All contractual terms and conditions will be subject to review by the City of Tifton's legal counsel and will include scope, budget, schedule, and other necessary items pertaining to the project.

PART 3: SCOPE OF WORK

3.1 GENERAL

The contractor shall provide all equipment, tools, labor, and incidentals necessary to remove existing equipment and provide two complete, tested, and working low head, automatic backwash filters inside the existing concrete basin. All work done during the performance of the basin rehab will need to take into account the active status of the treatment facility and continued flows through the by-pass channel in the center of the filter basin as there is no alternate path through the plant. The contractor shall coordinate with ESG plant operators as needed during construction and start-up.

After completion of the work, the filters should be capable of treating a combined daily average flow of 8 MGD of secondary waste effluent and a peak flow of 20 MGD. The final filtrate shall contain less than 10 mg/l suspended solids given a daily average suspended solids loading of 30 mg/l (based on daily composite sampling). The filters shall also be capable of reducing a 24-hour upset loading of 200 mg/l to $\leq$30 mg/l. Head loss through a clean filter shall not exceed six inches.

3.2 DEMOLITION

During demolition, the contractor shall remove the existing equipment from both filter basins. This includes, but is not limited to the following: effluent weirs, overflow weirs, handrails, in-operable mud valves and slide gates, bridges and appurtenances, rails, filter media, cell dividers, porous plates, festoon cables and trolleys, washwater troughs, skimmers, grout below the rails and below the cell dividers, electrical wiring, and existing control panel(s). All demolished equipment shall be removed from the site and legally disposed of by the contractor. No equipment shall be reused with the exception of the concrete basin with existing divisions (influent/effluent), the influent weir, and operable mud valves and slide gates, unless listed for re-use in conjunction with an alternate price.

3.3 REHABILITATION/EQUIPMENT INSTALLATION

Rehabilitation work in each filter shall consist of, but not be limited to, the following:

A. Cleaning/pressure washing of the basin including influent and effluent troughs
B. Structural work, if required per the proposed system
C. Installation of new underdrain system to move filtered wastewater to the effluent trough
D. Installation of new filter media (sand, anthracite, cloth, synthetic, etc.)
E. Installation of new cleaning/backwash mechanism complete with automatic controls. The backwash system shall be capable of cleaning a small section of the filter while the remainder of the filter is actively treating wastewater.
F. Installation of new control panel(s), including SCADA connection capabilities with space for a minimum of 16 discrete and 4 analog I/O's
G. Installation of new electrical cable system and connection to the existing plant power source
H. Installation of new effluent and overflow weirs

I. Installation of replacement slide gates and mud valves as needed (assumed quantities are listed in Part 5, E, however quantities may change during construction based on gate/valve operation capabilities)
J. Installation of new handrails
K. Testing and Start-up

Note that the equipment utilized in the proposed filter system shall be furnished and/or coordinated by a single manufacturer. This will assure unity of the system and a single point of responsibility. All filter system components shall be delivered complete from the manufacturer, as specified, ready for installation. Each component shall be assembled and installed in accordance with the manufacturer's installation drawings.

3.4 RELATED WORK NOT INCLUDED

A. Any work required to provide communication between the new traveling bridge filter control panels and the existing plant SCADA system will not be included as part of this proposal.
B. Any work required to perform water-tight testing and repair expansion joints or cracking in the existing basin shall not be included as part of this proposal.
C. The City may work with the chosen contractor to include these related tasks in the final negotiated contract price, however, they will not be considered during the proposal process.
D. Any permits required for completion of the work shall be acquired by the City and/or ESG Operations.

3.5 WARRANTY

The equipment manufacturer shall provide a written 12 month warranty against defects in materials and workmanship for all equipment and labor. The 12 month period shall begin on the date of acceptance of the filter. A dated letter of acceptance shall be provided by the City of Tifton/ESG upon start up and beneficial use of the filters. However, in absence of such a letter, the date of acceptance shall be the Monday of the first full week of continuous beneficial use without shut-down due to a failure of the subject equipment.

3.6 DELIVERABLES

A. Shop Drawings

The contractor shall provide 4 sets of shop drawings for engineering approval prior to the beginning of equipment fabrication. Of these, two copies will be returned to the contractor with appropriate action noted. Each set of shop drawings shall include, but not be limited to:

1. Dimension drawings showing the complete units
2. General cut sheet or catalog data on the unit and its components to enable the engineer to determine if the proposed equipment meets the specifications.
3. Where applicable, performance data shall be submitted: filtration system, pumps, underdrains, etc.

4. Control details and electrical schematics, including details on circuit breakers, motor starters, limit switches, etc.

B. O&M Manuals
   1. Operation and Maintenance manuals shall be furnished and shall be specific for this installation. Manuals shall include all required cut sheets and drawings to instruct operation and maintenance personnel unfamiliar with such equipment.
   2. Provide three preliminary hard copies (2 to contractor, 1 to owner) of the O&M Manuals at least 60 days prior to start-up.
   3. Incorporate any revisions and provide three final hard copies and one electronic copy of the O&M Manuals to the owner within 30 days of start-up.

C. Tools and Spare Parts
   1. Any special tools required for normal operation and maintenance shall be furnished with the equipment.
   2. A complete set of spare parts shall be provided to the maintenance staff prior to start-up of the filter equipment. The spare parts shall consist of items as typically recommended by the manufacturer.

3.7 START-UP/TRAINING SERVICES

A. Provide a minimum of 8 trips and 15 days on-site for oversight of equipment installation, electrical/controls wiring, start-up, and operational/maintenance training.

B. All services shall be provided by a factory representative of the equipment manufacturer who has complete knowledge of the proper operation and maintenance of the equipment being installed.

C. O&M Training for the owner shall be scheduled at least 7 days before training to ensure that all required operation and maintenance personnel can be in attendance.

PART 4: PROJECT TIMELINE

All proposals in response to this RFP are due no later than 3:00PM local time on October 13th, 2016. They shall be submitted by mail or hand delivered to Becky Moore, at the City's office, 130 East 1st Street, Tifton, Georgia 31794.

Any questions should be submitted in writing to Becky Moore at the address shown above or by e-mail at bmoore@tifton.net on or before October 5th, 2016. After this date, the City will not guarantee that questions will be answered. Written answers to questions submitted by this date will be provided as either an Addendum or a Q&A document on the City's website. Any discussions or answers will be considered non-binding unless provided in writing as part of the online RFP document package. **It is the responsibility of the party responding to the RFP to check the website periodically to see what Q&A information has been added**.

Evaluations of proposals will be conducted during the month of October. If additional information or discussion is needed during this time, the company will be notified. Site visits may be scheduled by the selection team to see similar installations of proposed equipment.

Contract negotiation with the preferred company will begin immediately after evaluations are complete. Notifications to those companies not selected will be provided in November.

Executed Contract and Notice to Proceed Issued by December 15th, 2016

Anticipated Contract Time is 240 Days.

PART 5: BUDGET

All proposals must include the cumulative cost to complete all of the tasks described in the project scope. Pricing should be individually listed for the following items, in accordance with the format shown, and then totaled:

A. Demolition (lump sum)
B. Basin Cleaning/pressure washing (lump sum)
C. Structural Work, if any, specific to the proposed system (lump sum)
D. Filter System Equipment including Deliverables per section 3.7 (lump sum)
E. Peripheral Equipment (materials and installation)
    1. 36"x36" Slide Gate (each) – assume quantity of 2
    2. 36"x48" Slide Gate (each) – assume quantity of 2
    3. 6" Mud Valve (each) – assume quantity of 2
    4. Effluent Weir, SS (each) – quantity of 2
    5. Overflow Weir, FRP (each) – assume quantity of 34
    6. Handrails (L.F.) – assume quantity of 385
    7. Handrail Post and Chain (L.F.) – assume a quantity of 260

    *The peripheral equipment should meet the requirements of the specifications provided in Appendix C.

F. Start-up/Training Services (lump sum)

PART 6: BIDDER QUALIFICATIONS

A. General
    Contractors proposing on this Project and their sub-contractors will be required to comply with all Federal, State, territorial, and local laws both during the proposal process and, if selected, during performance of the work.
B. Experience
    1. The contractor shall be experienced in the rehabilitation and/or installation of low head filters and be able to provide references showing at least 5 projects of similar scope and size

over the last 10 years. A list of projects and references for each shall be provided as part of the proposal.

2. The equipment manufacturer shall be experienced in the rehabilitation of existing low head filter basins and be able to provide references showing at least 10 rehabilitation projects utilizing the same type of equipment in concrete tankage and filtering the same type of waste. The equipment shall have been in operation for a minimum of 3 years. A list of projects and references for each shall be provided as part of the proposal.

C. Licensing

No proposal will be considered unless it is accompanied by satisfactory evidence that the proposing party holds Georgia State Contractor's License of proper classification and in full force and effect, in compliance with ACT O.C.G.A. 43.14.

D. Bonds

Prior to contract execution, the chosen contractor shall be required to furnish Performance and Payment Bonds each in the amount of 100% of the final contract amount. Surety companies executing Bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State of Georgia. The successful contractor will be required to perform work as the Prime Contractor, or 70% minimum.

E. Insurance

1. Liability

The Contractor shall maintain such insurance as will protect him from claims under workmen's compensation acts and from any other claims for damages to property, and for personal injury, including death, which may arise from operations under this contract, whether such operations be by himself or by any sub-contractor or anyone directly or indirectly employed by either of them. Certificates of Insurance indicating that the successful proposer has obtained such coverage, shall be filed with the Owner prior to the commencement by the successful proposer of the services. Such certificates shall be in form and substance reasonably acceptable to the Owner and shall indicate that, except in respect to workers compensation insurance coverage and professional errors and omissions, Owner is an additional insured with respect to such coverage, and shall indicate that such coverage is primary and not contributory with any similar insurance purchased by the Owner. The certificates shall contain a provision that the insurer will endeavor, if allowed by the policy, to provide Owner with thirty (30) calendar days' notice of nonrenewal, cancellation, or termination of the coverage. If the successful proposer receives a nonrenewal cancellation, or termination notice from an insurance carrier affording coverage required herein, the successful proposer agrees to notify Owner by fax within two (2) business days with a copy of the nonrenewal, cancellation, or termination notice, or written specifications as to which coverage is no longer in compliance. Failure to comply with any of the provisions relating to insurance coverage herein shall be deemed a material breach if not cured. Certificates of such insurance shall be filed with the Owner. The contractor shall be responsible for providing adequate limits of insurance when working within property owned by railroads, as established by such railroad company.

2. Indemnity

To the fullest extent permitted by laws, statutes, rules and regulations, the Contractor shall indemnify and hold harmless the City , Engineer, Engineer's Consultants and the Officers, Directors, Employees, Agents, and other Consultants of each and any of them from and against claims, costs, damages, losses, and expenses, including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court costs, arising out of or resulting from performance of the work, but only to the extent caused in whole or in part by negligent, reckless, willful and wanton, or wrongful acts or omissions of the Contractor, its Officers, Directors, Employees, Agents, and anyone directly, or indirectly employed by them or anyone for whose acts they may be liable, regardless of whether or not such claim, cost, damage, loss, or expense is caused in part by a party indemnified hereunder, except that no party shall indemnify any other party or person for their own sole negligence. Such obligation shall not be construed to negate, abridge or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Paragraph.

3. Comprehensive General Liability
   The successful Bidder shall exercise proper precaution at all times for the protection of persons and property. He shall carry approved insurance from insurance companies authorized to do business in Georgia and having an A.M. Best's rating of B+ or better with the following minimums:

   ***The limits of insurance are as follows:**
   a) general liability insurance of at least One Million (1,000,000) Dollars (Combined Single Limit per occurrence) and Two Million (2,000,000) Dollars aggregate;
   b) automobile insurance of at least One Million (1,000,000) Dollars (Combined Single Limit per accident for bodily injury or property damage); and
   c) Workers' Compensation Insurance as will protect potential bidder or offerer from Workers' Compensation Acts.

PART 7: PROPOSAL EVALUATION CRITERIA

The owner will evaluate all proposals received based primarily on the following criteria:

A. Technology proposed focusing on:
   1. The proven ability of the technology to adequately treat the subject wastewater
   2. The backwash mechanism
   3. The necessity of structural changes for equipment accommodation in existing basins
   4. The ease of equipment maintenance
   5. The operator interface/automatic controls
B. Experience of Manufacturer
C. Experience of Contractor/Installer
D. Pricing

All proposing parties acknowledge and accept that the decision of the owner is final.