



PLUMMER

2018-349-01

August 19, 2022

Mr Edwin Santillan , P.E.
Project Manager
Engineering Department
City of Corpus Christi, Texas
1201 Leopard Street
Corpus Christi TX 78401

Re: Project 19032A – ON Stevens WTP Filtration System Hydraulic Upgrades
Amendment No. 1 – Design, Bidding, and Construction Phase Services

Dear Mr., Santillan:

This letter is a request for Amendment No, 1 to provide design, bidding and construction phase services for repairs and improvements to the ON Stevens Water Treatment Plant Filtration System Hydraulics. The repairs and improvements were recommended in Plummer “Preliminary Engineering Report” for the Filtration System Hydraulics Improvement, O.N. Stevens Water Treatment Plan (CITY Project No. 19032A).

The scope of services is detailed in the attached document. The basic list of improvements is as follows:

- Replacement of filter media in Plant 1 and 2 filters;
- Replacement of Plant 1 and 2 filter valves, gates, actuators, and effluent flow meter;
- Repair of leaks in Plant 1 filter influent channels;
- Addition of humidity control system in both Plant 1 and 2 filter galleries;
- Recoating of Plant 1 and 2 filter galley piping with insulating coatings; and
- Addition of a Plant 1 combined filter effluent (CFE) sample location utilizing a tap added to the 60” pipe by others.
- Modifications of the Filter-to-Waste piping for Plant 1 and Plant 2, to achieve a TCEQ compliant air-gap.

Fee

The Basic Service fee request of \$950,164 and Additional Services fee request of \$218,721 is detailed in the attached spreadsheet. A summary of fee is shown in the table below.

Task	Fee
BASIC SERVICES	
1 Preliminary 30% Detailed Design	\$310,897
2 Detailed Design 60%, 90% and 100%	\$628,168
3. Advertisement and Bid Phase Services	\$11,100
TOTAL	\$950,165
Additional Services	
4. Construction Phase Services	\$191,693
5. Warranty Phase Services	\$19,528
6. Expense Allowance	\$7,500
TOTAL	\$218,721
PROJECT TOTAL	\$1,168,886

If you have any questions regarding this request, please let me know.

Sincerely,

PLUMMER ASSOCIATES, INC.

David Gudal, P.E.
Principal-In-Charge

Cc: Marshall Plunk
William Causey

Enclosures

Exhibit A
CITY of Corpus Christi, Texas

Amendment No. 1

O.N. Stevens Water Treatment Plant Filtration System Hydraulic Improvements

Project No. 19032A

Scope of Services

Project Description

The City of Corpus Christi (CITY) has retained Plummer Associates, Inc. (ENGINEER) to provide design and bid phase engineering services for the Filtration System Improvements Project (the PROJECT) at the O.N. Stevens Water Treatment Plant (WTP), which includes the following WTP improvements:

- Replacement of filter media in Plant 1 and 2 filters;
- Replacement of Plant 1 and 2 filter valves, gates, actuators, and effluent flow meter;
- Repair of leaks in Plant 1 filter influent channels;
- Addition of humidity control system in both Plant 1 and 2 filter galleries;
- Recoating of Plant 1 and 2 filter galley piping with insulating coatings; and
- Addition of a Plant 1 combined filter effluent (CFE) sample location utilizing a tap added to the 60” pipe by others.
- Modifications of the Filter-to-Waste piping for Plant 1 and Plant 2, to achieve a TCEQ compliant air-gap.

Project Assumptions

1. The PROJECT is one of several projects anticipated at the WTP that will support the WTP’s ability to produce a flow of 100 million gallons per day (MGD) from WTP 1 and a total WTP flow of 200 MGD.
2. As described in the Plummer “Preliminary Engineering Report” for the Filtration System Hydraulics Improvement, O.N. Stevens Water Treatment Plan (CITY Project No. 19032A), the piping modifications identified and recommended by LNV in Clearwell No. 3 Project (CITY Project No. 18131A) are anticipated to allow WTP 1 to achieve a flow of 100 MGD. The Clearwell No. 3 piping modifications identified in CITY Project 18131A are therefore assumed to be proceeding into design and construction, as they are required to increase the capacity of WTP 1.
3. The WTP 1 CFE will be collected from the WTP 1 effluent chemical injection vault, which is in the scope of the Clearwell No. 3 project (CITY Project No. 18131A). The vault, pipeline sample taps, and electrical required for the WTP 1 CFE sample pumps are included in the scope of the Clearwell No. 3 project (CITY Project No. 18131A). The PROJECT will include the design of the WTP 1 CFE sample pump, sample piping and valves, and CFE instrumentation.

4. The ENGINEER will prepare detailed plans, specifications, contract documents, designs, and layouts of improvements to be constructed at the WTP, generally as described below and in the Plummer "Preliminary Engineering Report".
5. The ENGINEER will provide recommendations to the City for the filter media replacement. However, the City will self-perform the filter media replacement and the filter media replacement will not be included as part of the contract documents for bidding by general contractors.
6. Project Management (Task A) covers project management activities for the duration of Tasks B and C stated below.
7. The Design Phase Services (Task B) are assumed to be forty-four weeks (44) in duration.
8. The Advertisement Phase Services (Task C) are assumed to be ten (10) weeks in duration.
9. The ENGINEER will render services for Amendment No. 1 in accordance with the professional standards contemporaneously prevailing in the Corpus Christi area.

Article I. BASIC SERVICES

Basic Services includes the following anticipated tasks:

- Task 1: Preliminary (30%) Detailed Design Phase
- Task 2: Detailed Design Phase
- Task 3: Advertisement and Bid Phase

TASK 1: PRELIMINARY (30%) DETAILED DESIGN PHASE

1.1. Project Meetings, Reporting, Coordination, and Management

- 1.1.1. **Project Kickoff Meeting:** The ENGINEER will conduct a remote/virtual Project Kickoff Meeting at the beginning of the Detail Design Phase with the CITY. The ENGINEER will consult with the CITY to clarify and define the CITY's requirements for the PROJECT and review the scope and schedule of the PROJECT and critical project milestones. ENGINEER will prepare and present the following at the Project Kickoff Meeting:
 - 1.1.1.1. An overview of work to be completed.
 - 1.1.1.2. Draft Project Management Plan (PMP) including critical success and project risk factors.
 - 1.1.1.3. Project Baseline Schedule showing key milestones.
 - 1.1.1.4. With input from CITY and referencing the Filtration System Hydraulic Improvements Preliminary Engineering Report, establish PROJECT goals, constraints, potential construction phasing and coordination with other design and construction projects at the WTP, performance criteria, and risks.
- 1.1.2. **Preliminary (30%) Detailed Design Review Meeting:** The ENGINEER will coordinate, prepare for, and conduct one (1) review meeting for the 30% plans and specifications with the CITY to receive CITY comments on the deliverables. Meeting shall take place via video conference.. The ENGINEER will prepare an agenda for the meeting, facilitate the meeting and

prepare/distribute meeting notes. The ENGINEER will present an updated project schedule at each review meeting.

- 1.1.3. **Project Management:** The ENGINEER will provide project management for the BASIC SERVICES. Project management will include developing and implementing a project management plan; tracking and managing internal schedules of work; monitoring and addressing issues related to the scope of work, budget, design efforts, and deliverables; preparing monthly progress reports including updates to the schedule and action, decision, and changes logs, providing labor resources necessary to fulfill scoped work; scheduling and participating in quality control reviews; and coordinating with the CITY's other consultants regarding ongoing WTP projects.

- 1.1.4. **Consultant Coordination Meetings and Conference Calls:** NONE.

1.2. Project Schedule:

- 1.2.1. The ENGINEER will develop a preliminary implementation schedule and construction sequencing plan. This schedule will include provisions to coordinate interruptions of services and construction schedules with other ongoing projects at the WTP.

1.3. Filter Survey for Design:

- 1.3.1. LiDAR scanning of WTP 1 and 2 Filter Galleries, exterior walkways, and grating, registered to a local control monumentation network, relative to the PROJECT construction vertical datum.
- 1.3.2. 3D model of the exterior of the filter buildings, imported into Infracore.
- 1.3.3. Pre-construction orthometric images of the exterior.
- 1.3.4. Navigable virtual deliverable of the facilities showing pre-construction conditions.

1.4. Preliminary (30-Percent) Design

- 1.4.1. The ENGINEER will prepare 30-percent design drawings and specifications setting forth in detail the requirements for the construction of the PROJECT, which shall comply with all applicable laws, statues, ordinances, codes, and regulations. The standard of care applicated to the ENGINEER's services will be the degree of skill and diligence normally employed by professional engineers or consultants performing the same or similar services at the time of such services are performed.
- 1.4.2. Preliminary (30-Percent) Specifications
- 1.4.2.1. Technical specification will be prepared based upon the ENGINEER's standard specifications.
- 1.4.3. Preliminary (30-Percent) Design of Facilities: The ENGINEER will design the following facilities to be included as base bid items:
- 1.4.3.1. Filter media replacement in all 22 filters including 12 inches of sand and 32 inches of anthracite. The ENGINEER's filter media replacement scope includes performing analyses of at most three years of CITY provided filter data (settled and filtered water turbidity, flow, filter run times, and headlosses), sampling the existing media from one of the filters for lab analysis, and providing the City with a recommendation on the configuration of the replacement filter media. The filter media replacement

- will not be included in the contract documents for bidding by general contractors.
- 1.4.3.2. Include design of the repair or replacement of the underdrain in Filter No. 8.
 - 1.4.3.3. Replace inlet gates, backwash waste gates, valves, actuators and flow meters, and modify the Filter-to-Waste piping as follows:
 - 1.4.3.3.1. Filters 1-12 inlet gates and actuators, backwash waste gates and actuators, and effluent control valves and actuators.
 - 1.4.3.3.2. Filter 13-22 effluent control valves (existing actuators shall remain).
 - 1.4.3.3.3. Filters 1-22 air scour valves and actuators, filter to waste valves and actuators, backwash supply valves and actuators, drain valves, and effluent flow meters.
 - 1.4.3.3.4. Relocating the Filter-to-Waste piping for Plant 1 and Plant 2, so that it is closer the floor of the filter gallery and modifying the discharge to achieve a TCEQ compliant air-gap.
 - 1.4.4. Assess the condition of the concrete filter influent channels and design a coating system to repair the leaking influent channels at Plant 1. The ENGINEER intends to use a Remotely Operated Vehicle (ROV) visual inspection of the concrete filter channels. For BASIC SERVICES, the ENGINEER assumes that structural modifications and/or repairs are not required to fix the leaking channels. The design of structural modifications and/or repairs of the influent channels shall be a SPECIAL SERVICE.
 - 1.4.5. Preliminary (30-Percent) design of single Plant 1 CFE sample for turbidity measurement (from vault installed in Clearwell No. 3 project).
 - 1.4.6. Preliminary (30-Percent) design humidity control in both filter galleries to reduce corrosion including thermal insulating coatings on piping and make up air dehumidification.
 - 1.4.7. Preliminary (30-Percent) Design of Electrical, Instrumentation and Control: The ENGINEER will provide preliminary design of electrical, instrumentation and SCADA system improvements associated with the Project components listed above. Compile comments and incorporate any requirements into the plans and specifications.
 - 1.4.8. ENGINEER will prepare a draft Basis of Design Report. Submit at 30 percent review. Upon receiving comments from CITY, prepare Final Basis of Design Report. Submit one hard copy and one electronic copy to the CITY.
 - 1.4.9. The ENGINEER will provide ENGINEER's opinion of probable construction cost (OPCC) for budget purposes based on the 30 percent deliverable. The ENGINEER'S OPCC will be based on materials and labor prices prevailing at the time of preparation, without consideration of inflationary increases in cost. In providing opinions of costs, financial analysis, economic feasibility projections, and schedules for the Project, the ENGINEER has no control over cost or price of labor and materials; unknown conditions of existing equipment or structures that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by third parties; quality, type, management, or direction of

operations personnel; and other economic and operational factors that may materially affect the ultimate Project cost or schedule. Therefore, the ENGINEER makes no warranty that the CITY's actual project cost, financial aspects, economic feasibility, or schedules will not vary from the ENGINEER's opinions, analyses, projections, or estimates.

1.5. Deliverables:

- 1.5.1. Review Packages for 30% review meeting: One (1) hard copy (half size) and one electronic copy (PDF format via electronic delivery).
- 1.5.2. OPCC for 30% design.
- 1.5.3. Construction Schedule for 30% design.
- 1.5.4. Draft and Final Basis of Design Reports: One (1) hard copy and one electronic copy (PDF format via electronic delivery).
- 1.5.5. Draft PMP (.pdf Format)
- 1.5.6. Project Baseline Schedule (.pdf format)
- 1.5.7. Meeting Materials including: Agendas, Presentation Slides and Draft and Final Notes (hard copies and .pdf format)
- 1.5.8. Project Status Reports delivered by email.

TASK 2: DETAILED DESIGN PHASE

2.1 Project Meetings, Reporting, Coordination, and Management

- 2.1.1. **60%, 90%, 100% Detailed Design Review Meeting:** The ENGINEER will coordinate, prepare for, and conduct three (3) review meetings, one each for the 60, 90, and 100% plans and specifications with the CITY to receive CITY comments on the deliverables. Meeting shall take place via video conference. The ENGINEER will prepare an agenda for the meeting, facilitate the meeting and prepare/distribute meeting notes. The ENGINEER will present an updated project schedule at each review meeting.
- 2.1.2. **Project Management:** The ENGINEER will provide project management for the BASIC SERVICES. Project management will include developing and implementing a project management plan; tracking and managing internal schedules of work; monitoring and addressing issues related to the scope of work, budget, design efforts, and deliverables; preparing monthly progress reports including updates to the schedule and action, decision, and changes logs, providing labor resources necessary to fulfill scoped work; scheduling and participating in quality control reviews; and coordinating with the CITY's other consultants regarding ongoing WTP projects.
- 2.1.3. **Consultant Coordination Meetings and Conference Calls:** NONE.

2.2 Project Schedule:

- 2.2.1. The ENGINEER will continue development of an implementation schedule and construction sequencing plan. This schedule will include provisions to coordinate interruptions of services and construction schedules with other ongoing projects at the WTP.

2.3 60-Percent, 90-Percent, and 100-Percent Design

- 2.3.1. The ENGINEER will prepare drawings and specifications setting forth in detail the requirements for the construction of the PROJECT, which shall comply with all applicable laws, statues, ordinances, codes, and regulations. The standard of care applied to the ENGINEER's services will be the degree of skill and diligence normally employed by professional engineers or consultants performing the same or similar services at the time of such services are performed.
- 2.3.2. Specifications
- 2.3.2.1. The ENGINEER will utilize front end documents approved by the CITY.
- 2.3.2.2. Technical specification will be prepared based upon the ENGINEER's standard specifications.
- 2.3.3. Design of Facilities: The ENGINEER will design the following facilities to be included as base bid items:
- 2.3.3.1. Filter media replacement in all 22 filters including 12 inches of sand and 32 inches of anthracite. The ENGINEER's filter media replacement scope includes performing analyses of at most three years of CITY provided filter data (settled and filtered water turbidity, flow, filter run times, and headlosses), sampling the existing media from one of the filters for lab analysis, and providing the City with a recommendation on the configuration of the replacement filter media. The filter media replacement will not be included in the contract documents for bidding by general contractors.
- 2.3.3.2. Include design of the repair or replacement of the underdrain in Filter No. 8.
- 2.3.3.3. Replace inlet gates, backwash waste gates, valves, actuators and flow meters, and modify the Filter-to-Waste piping as follows:
- 2.3.3.3.1. Filters 1-12 inlet gates and actuators, backwash waste gates and actuators, and effluent control valves and actuators.
- 2.3.3.3.2. Filter 13-22 effluent control valves (existing actuators shall remain).
- 2.3.3.3.3. Filters 1-22 air scour valves and actuators, filter to waste valves and actuators, backwash supply valves and actuators, drain valves, and effluent flow meters.
- 2.3.3.3.4. Relocating the Filter-to-Waste piping for Plant 1 and Plant 2, so that it is closer the floor of the filter gallery and modifying the discharge to achieve a TCEQ compliant air-gap.
- 2.3.3.4. Assess the condition of the concrete filter influent channels and design a coating system to repair the leaking influent channels at Plant 1. The ENGINEER will provide a Remotely Operated Vehicle (ROV) visual inspection of the concrete filter channels. For BASIC SERVICES, the ENGINEER assumes that structural modifications and/or repairs are not required to fix the leaking channels. The design of structural modifications and/or repairs of the influent channels shall be a SPECIAL SERVICE.

- 2.3.3.5. Design single Plant 1 CFE sample for turbidity measurement (from vault installed in Clearwell No. 3 project).
- 2.3.3.6. Design humidity control in both filter galleries to reduce corrosion including thermal insulating coatings on piping and make up air dehumidification.
- 2.3.3.7. Electrical, Instrumentation and Control: The ENGINEER will provide electrical, instrumentation and SCADA system improvements associated with the Project components listed above. Develop I/O lists and process and instrumentation diagrams (P&IDs) with an operating and control description for the gate and valve actuators and dehumidification. ENGINEER will furnish such information necessary to coordinate with the electric utility company and the CITY's other consultants regarding projects at the WTP. Compile comments and incorporate any requirements into the plans and specifications.
- 2.3.3.8. ENGINEER will submit the final sealed plans and specifications to the TCEQ for approval.
- 2.3.4. The ENGINEER will provide ENGINEER's opinion of probable construction cost for budget purposes based on the 60, and 90 deliverables and prepare final opinion of probable construction cost for the improvements to be constructed based on the Construction Documents. The ENGINEER'S OPCC will be based on materials and labor prices prevailing at the time of preparation, without consideration of inflationary increases in cost. In providing opinions of costs, financial analysis, economic feasibility projections, and schedules for the Project, the ENGINEER has no control over cost or price of labor and materials; unknown conditions of existing equipment or structures that may affect operation and maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by third parties; quality, type, management, or direction of operations personnel; and other economic and operational factors that may materially affect the ultimate Project cost or schedule. Therefore, the ENGINEER makes no warranty that the CITY's actual project cost, financial aspects, economic feasibility, or schedules will not vary from the ENGINEER's opinions, analyses, projections, or estimates.

2.4 Deliverables:

- 2.4.1. Review Packages for 60%, 90%, and 100% review meetings: One (1) hard copy (half size) and one electronic copy (PDF format via electronic delivery).
- 2.4.2. OPCC for 60%, 90% design and Final Sealed Contract Documents.
- 2.4.3. Construction Schedule for 60%, 90% design and Final Sealed Contract Documents.
- 2.4.4. TCEQ Plan Review Documents: One submittal of one (1) hard copy (half size) and one electronic copy (PDF format via electronic delivery).
- 2.4.5. Final Sealed Contract Documents: One (1) hard copy (half size) and one electronic copy (PDF format via electronic delivery).

TASK 3: ADVERTISEMENT AND BID PHASE SERVICES

- 3.1 ENGINEER will Prepare for and participate in one (1) pre-bid conference, via video conference.
- 3.2 ENGINEER will review pre-bid questions concerning the bid documents and prepare, in the CITY’s format, for the Engineering Services’ approval, addenda prior to bid open date.
- 3.3 ENGINEER will assist the CITY’s Contracts and Procurement Department with analysis of bids. Based upon the bid analysis, the ENGINEER will make to the City a suggestion of award of the contract.
- 3.4 The City staff will:
 - a. Advertise the Project for bidding, maintain the list of prospective bidders, receive and process deposits for all bid documents, issue (with the assistance of the A/E) any addenda, prepare and supply bid tabulation forms, and conduct bid opening.
 - b. Prepare, review and provide copies of the contract for execution between the CITY and the Contractor.

Article II. SCHEDULE

ESTIMATED SCHEDULE FOR BASIC SERVICES

Project Milestone	Estimated Schedule
Design Notice to Proceed and Project Kickoff Meeting	September/October 2022
Submit 30% Review Set	14 weeks after Project Kickoff Meeting
30% Review Meeting	2 weeks after Submittal of 30% Review Set
Submit 60% Review Set	8 weeks after 30% review meeting
60% Review Meeting	2 weeks after Submittal of 60% Review Set
Submit 90% Review Set	6 weeks after 60% Review Meeting
90% Review Meeting	2 weeks after Submittal of 90% Review Set
Submit 100% Prefinal Design and TCEQ Set	4 weeks after 90% Review Meeting
100% Prefinal Review Meeting	2 weeks after Submittal of 100% Prefinal Review Set
Submit Final Bid Set and Project Advertisement	4 weeks after 100% Prefinal Review Set
Award of Construction Project to Contractor and Notice to Proceed	10 weeks after Advertisement

Article III. ADDITIONAL SERVICES

Various ADDITIONAL SERVICES incidental to the Project, but not within the scope of the Basic Services covered, which may be performed or arranged for separately by the CITY, or may be added to the ENGINEER's responsibilities by mutual agreement and written authorization, include, but are not necessarily limited to, the following:

TASK 4: CONSTRUCTION PHASE SERVICES

- 4.1 ENGINEER will prepare Conformed Documents by adding the addendum items to the Contract Documents. Addenda to the specifications will be added electronically, and addenda to the plan drawings will be added to pdf versions of the drawings. ENGINEER will provide one electronic copy (PDF format) and two (2) sets of Conformed Documents to the CITY (2 half size).
- 4.2 The ENGINEER will provide Construction Phase Services (described below) for one construction project based on the design phase described in Task 2 above. The Construction Phase Services described in Task 4 will be provided based upon a twenty-four (24) month construction schedule. Construction Phase Services for construction beyond twenty-four (24) months will be an Additional Service. Construction Phase Services is limited to the tasks described below in Task 4.
- 4.3 Pre-construction Meeting
 - a. ENGINEER will assist the CITY in conducting one (1) pre-construction conference with the Contractor, and in reviewing construction schedules prepared by the Contractor.
 - b. ENGINEER will provide a meeting Agenda and prepare and distribute meeting minutes.
- 4.4 Submittals:
 - a. ENGINEER will review shop drawings (up to 45 total) and equipment O&M manuals (up to 7 total) for conformance to contract documents.
 - b. The ENGINEER will review up to five (5) field and laboratory tests reports.
 - c. The ENGINEER'S review of shop drawings, O&M manuals, and test reports in excess of the above quantity shall be an Additional Service.
- 4.5 Requests for Information:
 - a. ENGINEER will review up to 15 Contractor request for information (RFI's), to provide interpretations and clarifications of the contract documents for the contractor and authorize minor changes, which do not affect the contractor's price and are not contrary to the general interests of the City under the contract.
 - b. The ENGINEER'S review of RFI's in excess of the above quantity shall be an Additional Service.
- 4.6 Payment Application Review: The ENGINEER will review up to twenty-four (24) contractor monthly applications for payment, based on work completed. The ENGINEER'S review of contractor applications for payment in excess of the above quantity shall be an Additional Service.
- 4.7 Construction Meetings: The ENGINEER will attend up to twenty-four (24) monthly construction meetings via conference call.
- 4.8 Site Visits:

- a. The ENGINEER will make up to one (1) visit to the project site to confer with the City project inspector and the contractor to observe the general progress and quality of work. Additional site visits in excess of the above quantity shall be an Additional Service.
 - b. This site visit should not be considered as full-time project representation observation or continuous monitoring of the progress of construction.
- 4.9 Change Orders:
- a. The ENGINEER will prepare documentation for up to two (2) Change Orders (coordinate with the City's construction division).
 - b. The ENGINEER will review contract modification requests (CMR's) and prepare proposed contract modifications (PCM) (up to two total) as requested by the CITY.
 - c. The ENGINEER'S review or preparation of Change Orders and PCM and review of CMR's in excess of the above quantities shall be an Additional Service.
- 4.10 Substantial Completion: The ENGINEER will conduct one (1) substantial completion inspection with CITY staff and prepare a Certificate of Substantial Completion with list of outstanding punchlist items.
- 4.11 Final Completion: The ENGINEER will conduct one (1) final inspection with CITY staff and provide the CITY with a Certificate of Completion for the PROJECT.
- 4.12 Record Drawings: The ENGINEER will provide record drawings based on construction "red-line" drawings. Record drawings will be delivered to Engineering Services in electronic format, provided in .pdf and .dwg in AutoCAD formats.
- 4.13 Start-Up Phase:
- a. ENGINEER will consult with CITY on training needs for pre-startup operation and prepare a schedule.
 - b. Coordinate with the contractor and CITY for the training.
 - c. It is anticipated that pre-startup training will be conducted for one (1) day involving a total four (4) hours of classroom work for dehumidification system.

TASK 5: WARRANTY PHASE SERVICES

- 5.1 ENGINEER will provide a maintenance observation site visit toward the end of the one-year period after acceptance of the constructed PROJECT. ENGINEER will note observed defects requiring Contractor corrective action to maintain, repair, fix, restore, patch, or note that the Contractor shall replace improvement under the Contractor's maintenance guaranty terms of the contract. ENGINEER will document the observed condition and prepare a report for the City staff noting locations and conditions observed that require Contractor corrective action, with a recommendation of the corrective action required by the Contractor. ENGINEER will complete the observation site visit and prepare the report no later than sixty (60) days prior to the end of the Contractor's maintenance guaranty period.

Other Additional Services:

- A.** Printing/Reproduction Expenses
- B.** Travel Expenses

- C.** Technology Expenses
- D.** Site Surveying for Design (except for the Filter Survey described in Task 2)
 - 1. Providing surveying services to obtain all field information needed for design including topographic survey. Provide horizontal and vertical locations of existing facilities and physical features including fences, property lines, roads, buildings, treatment units, vaults, manholes, drainage structures, and existing utilities, reasonably expected to be affected by PROJECT.
 - 2. Providing survey notes with clear location descriptions of benchmarks and horizontal control points.
- E.** Site Work, Fencing and Miscellaneous Improvements
- F.** Preselection or Prenegotiation of Equipment
- G.** Design of structural modifications and/or repair to the concrete filter influent channels.
- H.** Other services not included in Basic Services that are approved by the CITY.
- I.** Additional site visits for Investigation beyond those provided above.
- J.** Additional site visits for meetings or inspections beyond those provided above.
- K.** Labor and Analytical costs associated with condition assessment of the existing pipelines and/or structures.
- L.** Labor and Analytical costs associated with water quality sampling, not included above.
- M.** GIS processing of geophysical and/or geotechnical data beyond the assumptions provided above.
- N.** Preparing applications and/or supporting documents for funding grants, loans, or planning advances for providing data for detailed applications.
- O.** Providing additional copies of reports, plans, specifications, and contract documents beyond those specifically described above.
- P.** Preparing environmental assessments, environmental information documents, or environmental impact statements, traffic control plans, and storm water discharge permits, except as specifically included above.
- Q.** Appearing before regulatory agencies or courts as an expert witness in any litigation with third parties other than condemnation proceedings arising from the development or construction of the Project, including the preparation of engineering data and reports for assistance to the CITY.
- R.** Payment of fees for permit applications and publication(s) of notices.
- S.** Public relation activities and consulting services.
- T.** Services known to be required for completion of the Project that the CITY agrees are to be furnished by the ENGINEER or by a sub-consultant that cannot be defined sufficiently at this time to establish the maximum compensation.

Article IV. ENGINEER'S PERSONNEL AT CONSTRUCTION SITE

The presence or duties of the ENGINEER's personnel at the PROJECT site, whether as on-site representatives or otherwise, do not make the ENGINEER or its personnel in any way responsible for those duties that belong to CITY and/or other contractors, subcontractors, or other entities, and do not relieve the other contractors, subcontractors, or other entities of their obligations, duties, and responsibilities, including, but not limited to all methods, means, techniques, sequences, and procedures necessary for coordinating and completing all portions of the work of those parties in accordance with their contractor requirements and any health or safety precautions required by such work. The ENGINEER and its personnel have no authority to exercise any control over any health or safety precautions and have no duty for inspecting, noting, observing, correcting, or reporting on health or safety deficiencies of any contractor, subcontractor, or other entity or any other persons at the PROJECT site except ENGINEER's own personnel. Even though the ENGINEER has no duty to discover safety issues, if the ENGINEER observes something that he/she believes to be an unsafe condition, the ENGINEER will notify the CITY.

Article V. COMPENSATION**A. Basic Services**

The CITY will pay the ENGINEER a lump sum fee of \$950,164 for providing for all "Basic Services" described above and in Exhibit A. The fees for Basic Services will not exceed those identified and will be full and total compensation for all services outlined in Basic Services above, and for all expenses incurred in performing these Basic Services. The fee for this project is subject to the availability of funds. The ENGINEER may be directed to suspend work pending receipt and appropriation of funds. For services provided in Basic Services, ENGINEER will submit monthly statements for basic services rendered. In Basic Services, the statement will be based upon ENGINEER's estimate (and CITY concurrence) of the proportion of the total services actually completed at the time of billing. CITY will make prompt monthly payments in response to ENGINEER's monthly statements.

B. Additional Services

ADDITIONAL SERVICES (see Article III), if added to the ENGINEER's responsibilities by mutual agreement and written authorization, will be invoiced on a time and material basis. The budget for Additional Services is \$218,721 (which consists of a budget of \$191,693 for Task 4 (Construction Phase Services), \$19,528 for Task 5 (Warranty Phase Services), and \$7,500 for Items A and B (Printing/Reproduction Expenses and Travel Expenses)). A multiplier of 1.10 will be applied to all direct expenses. The fee for this project is subject to the availability of funds. The ENGINEER may be directed to suspend work pending receipt and appropriation of funds. For services provided in Additional Services, ENGINEER will submit monthly statements for special services rendered. CITY will make prompt monthly payments in response to ENGINEER's monthly statements.