Service Contract for Design, Construction, Operation. Maintenance and Asset Management

Section 703 Capital Modification Submittal / Phase 2 Improvements

This Section 703 Capital Modifications Submittal (this "Submittal") is delivered and effective as of September 1, 2021, pursuant to Section 703 of that certain Service Contract for Design, Construction, Operation, Maintenance and Asset Management dated August 20, 1998 (as amended from time to time, the "Agreement"), by and between the City of Taunton, Massachusetts ("City") and Veolia Water North America-Northeast, LLC (as successor in interest of Professional Services Group, Inc., "Veolia"). Capitalized terms used herein and not otherwise defined have the meanings given to them in the Agreement.

The parties intend that this Submittal be consistent with the Special Legislation.

LIST OF EXHIBITS

- Exhibit (i) Reason for the Capital Modification
- Exhibit (ii) Description of the Capital Modification
- Exhibit (iii) Startup and Testing Program
- Exhibit (iv) Construction Price
- Exhibit (v) Construction Schedule
- Exhibit (vi) Draw-down Schedule

** Please note this Agreement, and the obligations contained therein, shall not be binding nor take effect until the Parties have reached mutual agreement on the scope of work and all terms, Veolia has received requisite internal approvals under its governance procedures, and the Parties have executed the Agreement. **

[signature page follows]

Acknowledged and agreed by their authorized representatives as of the first date written above.

City of Taunton, MA

BY: _______Shaunna O'Connell, Mayor

Recommended:

Veolia Water North America-Northeast, LLC

BY:_____

Keith Oldewurtel

Executive Vice President and COO (Title)

BY: _____

Fred Cornaglia, Commissioner DPW

(SEAL)

53 State Street, 14th Floor

Boston, MA 02109 (Address)

As to Form and Character

BY: ______ Thomas Gay, Assistant City Solicitor

Appropriation

BY:_____

Ann Hebert, Auditor

account

CERTIFICATION OF ACKNOWLEDGEMENT OF CONTRACTOR IF A CORPORATION For AGREEMENT

State of:	
County:	
ON THIS DAY OF	, 20, BEFORE ME PERSONALLY
came	to me known, who being me duly
sworn, did depose and say as follow	s:
That he resides at:	
and is the	
of	

the corporation described in and which executed the foregoing instrument; that he knows the corporate seal of said corporation; that the seal affixed to the foregoing instrument is such corporate seal and it was so affixed by order of the Board of Directors of said corporation; and that by the like order he signed thereto his name and official designation.

Notary Public (Seal)

My commission expires _____

Exhibit (i) **Reason for the Capital Modification**

In April 2015, USEPA and MassDEP issued the City a final discharge permit. The permit included several changes from the previous permit; most notably, it contained a Total Nitrogen Limit of 210 lbs/day (3 mg/L at the ADF of 8.4 MGD). The permit also identified the receiving water (the Taunton River) as salt water, which negated any need for a phosphorus limit on the discharge.

Process improvements, sizing and equipment selection is a function of influent flow rates and pollutant loadings. Influent flows are expected to increase from the current annual average monthly flow of 6.7 mgd during a year with average rainfall to 10.2 mgd by the year 2037. The presently permitted discharge flow rate for the WWTF is 8.4 mgd. Pollutant loads will also increase from the present design values as the existing facility was designed around very weak influent wastewater characteristics. The current design influent concentrations for BOD, TSS and TKN are 174 mg/l, 175.4 mg/l and 28.8 mg/l, respectively. These concentrations have proven to be low compared with actual concentrations.

Several improvements are recommended to improve facility performance and increase treatment capacity.

- Additional Capacity. The Main Lift Pump Station is currently being replaced, which will increase peak flow to the WWTF from 22.4 MGD (20 MGD Actual Capacity) to 25 MGD. If determined to be necessary in the future to further abate the City's CSO, the existing Main Lift Station will be retrofitted to deliver an additional 5 MGD to the WWTF for treatment under a high flow management plan.
- 2) General Upgrade. The WWTF was originally constructed in 1950, with significant upgrades in 1978 and 2000. Much of the existing equipment is beyond its design life, and buildings are aging and inefficient.
- 3) Headworks. Excessive humidity and inadequate ventilation in the metal screenings building has caused corrosion of the structure, piping, and equipment. The building needs to be replaced. The configuration of the headworks with grit removal ahead of the screenings facility is reverse of that of a typical installation.
- 4) Existing Primary Clarifiers. Due to their age, the primary clarifier mechanisms, primary sludge pumps, and all valves in the sludge withdrawal piping and on the pump discharges require replacement.
- 5) Disinfection. The existing disinfection system and tankage is inadequate to properly treat the increased design flow incorporated into the facility upgrade. The higher design flow associated with the upgrade will necessitate construction of additional disinfection capacity.
- 6) Building Systems. Most of the WWTF buildings were constructed during the 1975 upgrade, and some date back to the original plant construction in 1950. Buildings do not meet current building codes, and have old utility systems (plumbing, electrical, HVAC, etc.). Electrical and plumbing systems will require updating as part of the WWTF upgrade. Windows, doors, and roofs on all buildings need replacement.
- 7) Plant Water. The plant water system provides facility effluent water to be used by the

headworks, gravity thickeners, plant hydrants, washdown water, and polymer system. The current system is functional, but is currently operated at a very high pressure setpoint to maintain proper pressure and flowrate in the headworks. The planned upgrade of the facility will result in additional plant water requirements. Changes in the facility's needs will result in significant changes to the plant water system. A new plant water system will be installed as part of the facility upgrade.

Proposed Improvements are listed in Exhibit (ii)

Exhibit (ii) Description of the Capital Modification

Equipment will be upgraded at the Wastewater Treatment Facility. The facility is located at 825 West Water Street, Taunton, MA. This scope of Work is based on the Preliminary Design Report dated September 2019, Construction Documents entitled City of Taunton, MA, Wastewater Treatment Facility, Phase 2 Improvements Bidding Requirements, Bond Forms, Contract Agreement, Conditions of the Contract and Technical Specifications dated XXXXXXXXX 2021 prepared by Beta Group, Inc. for the City of Taunton.

- 1) Phase 2 Improvements Construction
 - a) Construction of a new biological treatment tank
 - b) Mechanical Retrofit of existing biological treatment tanks
 - c) Installation of new blowers and air piping
 - d) Mechanical Retrofit of all final clarifiers and secondary sludge pump stations
 - e) Demolition and repurposing existing blower building as storage space
- 2) Phase 2 Improvements Engineering
 - a) The City is responsible for preparation of the engineering plans and specifications. The City has hired Beta Group, Inc. as its design engineer. Veolia is responsible to the City for the preparation of procurement documents, bid solicitation, construction, and startup of the project, but shall have no responsibility of any kind whatsoever for the engineering plans and specifications, or for any errors, omissions or deficiencies thereof. City, or its design engineer, shall:
 - i) Complete all site surveying and geotechnical investigations needed.
 - ii) Evaluate permitting requirements.
 - iii) Prepare a basis of design.
 - iv) Prepare all design documents, including but not limited to:
 - (1) P&IDs
 - (2) General facility layout & site positioning
 - (3) General equipment layout configuration
 - (4) Process equipment design & specifications
 - (5) Electrical & process mechanical configuration
 - (6) SCADA platform
 - (7) Structural development
 - (8) Site development
 - (9) Architectural design development
 - v) Prepare engineer's cost estimates.
 - vi) Submittal Reviews
 - vii) Respond to Requests for Information (RFI)
 - viii) Phase 2 Improvements O&M Manuals
 - ix) Record Drawings
- 3) General
 - a) Include participation of Disadvantaged Business Enterprise (DBE) subcontractors at the level required to meet SRF funding requirements in the engineering scope of services.
 - b) All Subcontractors shall be subject to the approval of the City
 - c) All subcontracts shall be based on Veolia Terms and Conditions.

- 4) Construction Management
 - a) Contractor & materials procurement
 - i) Initiate key equipment purchasing, coordinated through Veolia purchasing group. Review and approve all purchase orders issued on the project.
 - ii) Develop the required bid packages and support the solicitation by invitation, discipline bids reflecting the following scopes or combinations there-of:
 (1) Building / Mechanical
 - (2) Electrical
 - (3) Instrumentation.
 - (4) Sole-source selected equipment, if necessary. This will be other process equipment and may include electrical gear, pumps, mixers, etc.
 - iii) Veolia will act as the construction manager during construction and hire subcontractors, as required, to complete the construction. Solicit bids from three (3) or more qualified contractors for each construction discipline (final content of each bid package will be agreed to with the City and may include more than one construction discipline) indicated above and award a contract to the lowest bidder who is determined to be responsible and qualified and who has satisfactorily demonstrated an ability to perform the work as required. Veolia reserves the right to sole source work if it is in the best interest of the Phase 2 Improvements. Any sole source procurement will be approved by the City.
 - iv) Support the award of project discipline bids Update and issue construction documents stamped by the discipline P.E. or Architect and stamped "Issued for Construction." The issuance of these documents initializes the beginning of the construction phase for that discipline's work.
 - v) Performance and Payment Bonds to be provided by Construction Subcontractors with Dual Obligee Bonds listing Veolia and the City of Taunton as Obligees.
 - b) Disadvantaged Business Entity (DBE) Participation
 - Veolia will allocate DBE participation percentages across the various project components, i.e professional services, equipment purchases, and construction subcontractors, to satisfy the MassDEP DBE Goals for the Total Contract Price as follows:
 - (1) Disadvantaged MBEs (D/MBE) 4.2% of Total Contract Price.
 - (2) Disadvantaged WBEs (D/WBE) 4.5% of Total Contract Price.
 - ii) The aggregate amounts from all DBE participants, including, but not limited to professional services, equipment purchases, and construction subcontractors, will be used to calculate the final DBE participation percentages.
 - iii) Final copies of Veolia's executed contracts with its professional service providers, equipment suppliers, and construction subcontractors will be submitted to the City and MassDEP. These MassDEP forms include:
 - (1) Schedule of Participation for SRF Construction, EEO-DEP-190C
 - (2) Letter of Intent for SRF Construction, EEO-DEP-191C
 - (3) DBE Certification of United States Citizenship
 - (4) DBE Certification Letters
 - c) Generation & maintenance of project schedules
 - i) Develop project Maintenance of Operation Plan (MOPO) (execution plan) to define how disruption to the wastewater pumping service will be minimized. Detailed

MOPO sequencing of construction plan to be incorporated into discipline bid documents.

- ii) Finalize Project Schedule develop the final project schedule after receipt of all subcontract bids, to be updated on a monthly basis.
- iii) Review project schedule/coordinate impact on wastewater systems operation update project execution plan including MOPO.
- iv) Develop and maintain construction schedule for duration of project w/monthly updates
- v) Provide progress projections with cash flow analysis for City use, monthly cost requisition submittals.
- d) Document control and submittal processing
 - i) Review and maintain complete shop drawing records, as-built construction records
- e) Preparation & maintenance of daily field reports
- f) Processing & dissemination of field clarification requests
 - i) Address/manage all Requests for Information ("RFI") from discipline contractors
 - ii) Coordinate engineering support from the design engineers for RFI from contractors.
- g) Coordination of testing & inspections
 - i) Develop quality assurance / quality control ("QA/QC") program for the project to include all materials testing, equipment start-up and testing to be finalized when all equipment is purchased.
- h) Monitoring field progress and reporting same
- i) Maintenance of project budget
 - i) Respond to any request for contract change orders, manage project claims to minimize project impact, notify City of change orders or claim notices received, their disposition, provide review of legitimacy, and confirm any associated costs.
- j) Supervise construction installation activities
 - i) Provide resident services during active construction to oversee the execution of the construction with coordination/management of the discipline contracts by Veolia.
 - ii) Coordinate and directly manage all contractor activity on-site.
 - iii) Attend weekly construction meetings during active construction
- k) Evaluation of scope & pricing on any Change Order requests
- 1) Monitor contractor's field safety program
 - i) Develop, manage, and supervise the on-site project Safety program, including any contractor/sub-contractor activities.
- m) Construction Review
 - i) Construction Review Intent
 - The City will review, monitor, and, as it deems necessary, inspect the Phase 2 Improvements Construction to ensure conformance to the Design Requirements. In addition, the City shall review the progress of construction to verify payment for services.
 - ii) City Access, Review Meetings
 - (1) The City shall have access to the Phase 2 Improvements at all times. Veolia shall report to the City monthly, hold monthly progress review meetings with the City, and otherwise solicit the City's input to the process as required. Veolia shall record the minutes of all meetings and construction progress, and provide the City with copies of minutes and documentation of said meetings.

- n) Construction Submittals
 - i) Veolia shall identify the key submittals to be prepared by Veolia and the expected submittal dates. The City shall designate the number of copies of submittals and distribution.
 - ii) The following documents shall be provided to the City for information.
 - (1) Shop Drawings
 - (a) All major process shop drawings shall be available to the City for review and comment.
 - (2) Product Data
 - (a) Product data shall include, but not be limited to standard prepared data for manufactured products (sometimes referred to as catalog data), such as the manufacturer's product specification and installation instructions, availability of colors and patterns, roughing-in diagrams and templates, catalog cuts, product photographs, standard wiring diagrams, printed performance curves and operational-range diagrams, production or quality control inspection and test reports and certifications, recommended spare parts listing, and printed product warranties, as applicable to the Phase 2 Improvements Construction.
 - (3) Samples
 - (a) Samples shall include, but not be limited to, physical examples of the work such as sections of manufactured or fabricated work, small cuts, or containers of materials, complete units of repetitively-used products, and color/texture/pattern swatches, as applicable to the Phase 2 Improvements Construction.
 - (4) Review Procedures and Time Periods
 - (a) The City will complete its review of each construction submission within five (5) Business Days of receipt, or such longer period as the parties may agree, and will either take no exceptions with said construction submission, or will notify Veolia of any concerns, problems, non-approval on non-compliance of such submission within that time. If the City does not respond within that time, the submission shall be deemed approved by the City. If any such submission is not approved by the City, Veolia will resubmit with modification as identified by the City, and the City's review and comment period upon each such resubmission shall be five (5) Business Days. If Phase 2 Improvements Construction is delayed by virtue of the City's failure to identify reasons for rejection of a submittal, an equitable cost and/or schedule adjustment to reflect the direct consequences of the resulting delay shall be executed as a Change Order; provided that Veolia shall have provided to the City written notice reminding the City of this provision and of the City's failure to respond to a particular submittal at the expiration of the applicable period.
- o) Format for Construction Submittals
 - i) Submittals shall contain:
 - (1) The date of submission, noting whether it is an original submission or a resubmission.
 - (2) The Project title and number.
 - (3) The names of:

- (a) Contractor
- (b) Supplier
- (c) Manufacturer
- (4) Identification of any deviations from design requirements.
- (5) Massachusetts P.E., if necessary
- 5) Project close-out
 - i) Develop a project punch list and manage completion of all work.
 - ii) Provide contractors releases from all sub-contractors.
 - iii) Make revisions to construction drawings (red lines) and submit to City's Engineer
 - iv) Complete all punch-list items
 - v) Turn-over of all pertinent project records, shop drawings, etc.
- 6) Phase 2 Improvements Construction Specifications & Drawings
 - a) Progress Set of Engineering Documents prepared by Beta Group, Inc. for the City of Taunton dated XXXXXXXXX, 2021.
 - b) Application for Financial Assistance, Clean Water State Revolving Fund, Construction Stage, February 2019
 - i) App D, Model Sub-Agreement Provisions [include in all subcontracts as well]
 - ii) App F, D/MBE and D/WBE Forms [include in all subcontracts as well]
 - iii) App G, Statement of Tax Compliance [include in all subcontracts as well]
 - iv) App J, American Iron and Steel Requirements [include in all subcontracts as well]

Exhibit (iii) Startup and Testing Program

- 1) Start-up and testing of process equipment
 - a) Support the installation of all process equipment, with the review of appropriate testing to confirm correct installation.
 - b) Testing of equipment and systems will occur in two phases: Start-Up Test(s) and the Acceptance Test. The formal Acceptance Test and procedures plan will be submitted to the City after the engineering documents and O&M manuals are completed.
 - c) Start-Up Test
 - i) In the initial phase, Start-Up Testing of equipment and subsystems will be completed to demonstrate that each is installed correctly, functions as intended, and meets the applicable conditions specified. Start-Up Testing will occur once the equipment or subsystems have been installed and are mechanically and electrically complete. A description of the Start-Up Tests will be outlined in a detailed Start-Up Plan prepared by Veolia specifically for this Amendment. The Start-Up Test will include, as applicable:
 - (1) Run tests to check motor vibration, temperature, and noise.
 - (2) Functional test of controls and instruments, including the interface with the SCADA system.
 - (3) For pumps and blowers measurement of flow vs. head at three points on the pump curve.
 - (4) Additional equipment-specific tests in accordance with good and accepted practice.
 - ii) The process equipment and subsystems will be subjected to performance tests to demonstrate that when the Phase 2 Improvements are completed, they can perform in accordance with the specifications.
 - iii) To the extent practicable, all equipment and sub-systems shall be demonstrated to operate properly over all specified hydraulic and treatment process conditions.
 - iv) The process equipment supplier shall be required to conduct a performance test on their equipment after installation. Veolia shall direct and oversee the Performance Test as mutually agreed to and appropriate for the system being tested.
 - d) Acceptance Test
 - i) Upon successful completion of the Start-Up Test, the second phase, the Acceptance Test will occur. The Acceptance Test will be conducted in accordance with the Acceptance Test plan, to be prepared by Veolia specifically for the Upgrade. The Acceptance Test is to demonstrate that the completed work functions as intended and meets the design requirements. The Acceptance Test is to be conducted over the full design range of the Phase 2 Improvements to the extent practicable.
 - ii) The Acceptance Test will include various sub-tests all conducted within a 30-day period prior to the plant Acceptance Test which will have a duration of 48 hours.
 - iii) The Acceptance Test will include:
 - (1) Name of equipment/system and reference to the specific equipment/system information provided in the Start-Up Plan.

- (2) Testing Schedule and duration with proposed dates and times for testing each item of equipment/system.
- (3) Summary of power, lighting, chemicals, water, sludge, test equipment, etc. needs required to conduct the testing.
- (4) Outline of specific responsibilities of Veolia operators, manufacturer representatives, or factory personnel during the test period.
- (5) Detailed description of the step-by-step testing requirements, with appropriate references to standardized testing and process control procedures and laboratory analyses.
- (6) Samples of forms to be used to collect and record test data, and to present tabulated test results.
- (7) Summary of how the acceptance test data collected will be interpreted and protocol for determining that the specific performance criteria of discharge permit will be met.
- (8) Description of equipment/system limits that identify conditions that the equipment/system will only be allowed to be operated within and that are in accordance with the design criteria.
- (9) Simulated Power Outage
 - (a) A simulated power outage test will be conducted to demonstrate proper switch over to standby power and full restart and all Phase 2 Improvements components to pre-power loss conditions.
- (10) SCADA System Functional Test
 - (a) A 30-day continuous demonstration test will be conducted to demonstrate proper operation of the SCADA System. All controls and functions will be demonstrated during the test.

A. CONSTRUCTION

A A	
Veolia Fee (10%)	\$2,903,239
Shared Contingency (5%)	\$1,451,620
Veolia General Liability Insurance - \$14.00/\$1,000	\$560,000
A. CONSTRUCTION TOTAL	\$33,947,252

Engineering Services During Construction, BETA Group, Inc.	\$2,200,000
Capital Program Management Services, Veolia	\$3,852,748
B. TECHNICAL SERVICES TOTAL	\$6,052,748

C. POLICE

TOTAL CONTRACT PRICE - A+B+C

- 1. The City shall pay Veolia for completion of the Phase 2 Improvements a sum equal to the Total Contract Price of the Phase 2 Improvements. Total Contract Price of the Phase 2 Improvements includes, but is not limited to:
 - a. Payroll costs for the employees in the direct employ of Veolia.
 - b. Cost of all materials incorporated into the Work.
 - c. Cost and management fee for Veolia subcontractors.
 - d. Costs of special consultants employed for services related to the Work.
 - e. Cost of transportation, travel, and subsistence costs for Veolia employees.
 - f. Cost of consumables.
 - g. Cost of rentals of equipment.
 - h. Cost of sales, consumer, use, or similar taxes.
 - i. Cost fuel and sanitary facilities.
 - j. Cost of telephone service, express delivery.
 - k. Cost of bonds and insurance.
 - 1. Capital Program Management Fee.
 - m. Project contingency.
- 2. Total Contract Price
 - a. Total Contract Price will include:

\$40,000,000

\$0

- i. Construction Cost for Equipment & Subcontractors. A 10.0% Fee and a 5.0% Contingency will be added to the Equipment and Subcontractor Costs.
- ii. Fixed Fee for Capital Program Management Services.
- iii. Project Contingency Use
 - 1. Use of the shared project contingency will be mutually agreed upon by the City and Veolia. Veolia and the City will share in a 50/50% split of the unused contingency upon final completion of the project.
 - 2. The City's portion of the unused project contingency can be used, as directed and approved by the City, for City requested Modifications, existing planned project phases not yet completed, or to build new project phases associated with the Upgrade.
- iv. The aggregate amounts of Items i iii will be the Total Contract Price.
- v. The Schedule of Values will be updated to reflect the Total Contract Price.
- vi. DBE Participation will be adjusted to confirm the Total Contract Price achieves the DBE goals.
 - 1. Disadvantaged MBEs (D/MBE) 4.2% of Total Contract Price.
 - 2. Disadvantaged WBEs (D/WBE) 4.5% of Total Contract Price.
- 3. Qualifications:
 - a. Assumes 18 months on site construction
 - b. The City will pay all permit costs.
 - c. Sales and use taxes are the City's responsibility and are not included in the Total Contract Price.
 - d. Testing, storage, removal, and disposal of hazardous or contaminated materials is not included.
 - e. Beta Group Inc. will have sole responsibility for the Engineering Documents, including any errors, omissions and deficiencies thereof. Veolia makes no warranty with respect to the Engineering Documents.
 - f. The City will pay all Utility Fees.
 - g. To the fullest extent permitted by law and notwithstanding any other provision of the Service Contract, Veolia's liability for performance or nonperformance of any obligation arising under the Service Contract (whether arising under breach of contract, tort, strict liability, or any other theory of law or equity) in connection with the Capital Modification herein described, including, but not limited to its indemnity and warranty obligations, shall not exceed the Total Contract Price (as used herein) cumulatively; provided that the foregoing limitation shall not apply to any insurance proceeds or from losses resulting from the gross negligence or willful misconduct of Veolia or Veolia's subcontractors, employees or agents. IN NO EVENT SHALL VEOLIA OR ANY OF ITS REPRESENTATIVES OR AFFILIATES BE LIABLE FOR CONSEQUENTIAL, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, PUNITIVE OR ENHANCED DAMAGES ARISING UNDER THE SERVICE AGREEMENT IN CONNECTION WITH THE CAPITAL MODIFICATION HEREIN DESCRIBED.
- 4. Payment Procedures

- a. Veolia shall submit and the City will process Applications for Payment.
- b. The Schedule of Values will serve as the basis for payment and will be incorporated into a form of Application of Payment acceptable to the City. Changes to the Schedule of Values shall have revised values approved by the City.
- c. Work completed to date measured as a percentage of the total work shall be submitted by Veolia and substantiated as required by the City.

Exhibit (v) Construction Schedule

Illustrative Schedule

PROJECT CONSTRUCTION SCHEDULE: The Phase 2 Improvements project work shall commence on a date coordinated with the City. A detailed construction schedule will be distributed within ten days of the issuance of the notice to proceed.

Veolia shall complete all work required under the Phase 2 Improvements within 548 days of the issuance of a Notice to Proceed.

Exhibit (vi) Draw-down Schedule

Estimated Drawdown Schedule:

	Month	Running Total
Month 1	500,000	500,000
Month 2	200,000	700,000
Month 3	400,000	1,100,000
Month 4	500,000	1,600,000
Month 5	600,000	2,200,000
Month 6	1,000,000	3,200,000
Month 7	2,000,000	5,200,000
Month 8	3,000,000	8,200,000
Month 9	3,000,000	11,200,000
Month 10	3,000,000	14,200,000
Month 11	4,500,000	18,700,000
Month 12	5,000,000	23,700,000
Month 13	4,500,000	28,200,000
Month 14	3,500,000	31,700,000
Month 15	3,000,000	34,700,000
Month 16	3,000,000	37,700,000
Month 17	1,500,000	39,200,000
Month 18	800,000	40,000,000