TASK ORDER

Task Order No. CDM-19-004-TO, consisting of 21 pages.

Task Order

In accordance with paragraph 1.01 of the Master Services Agreement between Owner and **CDM Smith, Inc.** ("Engineer") for Professional Services – Task Order Edition, dated September 30, 2016, ("Agreement"), Owner and Engineer agree as follows:

1. **Specific Project Data**

   A. Title: North Lake Water Treatment Plant Expansion

   B. Description: Preliminary Engineering, Final Design, Bidding, Construction Services and Resident Project Representative Services for the North Lake Water Treatment Plant Expansion. The plant will be expanded from the current treatment capacity of 28.6 million gallons per day (MGD) to a treatment capacity of 37.4 MGD. The plant expansion will include a new treatment structure with rapid mix, flocculation, sedimentation and filtration; modifications to and expansion of chemical storage and feed facilities; expansion of the high service pumping facilities; addition of an Administration Building; additional yard piping; and improvements to the plant site paving.

   C. City of Georgetown Project Number: 2JP

   D. City of Georgetown General Ledger Account No.: 660-9-0580-90-168

   E. City of Georgetown Purchase Order No.: _____

   F. Master Services Agreement, Contract Number: 2016-738-MSA

2. **Services of Engineer**

CITY OF GEORGETOWN, TEXAS
NORTH LAKE WATER TREATMENT PLANT EXPANSION
SCOPE OF WORK

BACKGROUND

The project includes expansion of the Georgetown North Lake Water Treatment Plant (WTP) constructed on the current North Lake WTP site. The expansion will increase the plant capacity by 8.8 million gallons per day (MGD), providing a total treatment plant capacity of 37.4 MGD. The plant expansion will include a fourth treatment process train consisting of rapid mix, flocculation, sedimentation and filtration located in one treatment structure; expansion of the high service pumping facilities; modifications to the liquid chemical storage and feed facilities for alum, cationic polymer, sodium hypochlorite, liquid ammonium sulfate (LAS) and sodium permanganate; yard piping modifications and additions; civil site improvements including paving and grading; and addition of a new Administration Building. It is assumed that the existing washwater recovery facilities, gravity thickener, and sludge dewatering building with belt filter press are capable of handling the additional flow of the plant.

This scope of work includes engineering services associated with the preliminary and final design of the North Lake WTP Expansion discussed above. The scope of work also includes services during the bidding and construction of these facilities.

1. SCOPE OF SERVICES

ENGINEER shall provide for OWNER the following specific Services:

Phase 1 - Preliminary Engineering

Under Phase 1, ENGINEER will review the existing North Lake WTP facilities and evaluate the improvements required to provide an additional 8.8 MGD of treatment capacity. The treatment process will remain the same as the existing facilities. A Preliminary Engineering Report with 30% complete drawings will be prepared documenting the plant expansion and providing a basis for final design. The following tasks will be performed as part of Phase 1.

1.0 General Tasks

Task 1.0.1 – Project Management. ENGINEER will provide general project management throughout the project to include oversight and coordination of all of ENGINEER's efforts executing the work internally and with OWNER. ENGINEER will monitor scope, schedule and budget and will prepare a project execution plan. ENGINEER will provide a project status report to the OWNER with the monthly invoice.

Deliverables: Monthly invoices and status reports (electronic copies)

Task 1.0.2 – Project Meetings. Project progress meetings will be held during the course of the Preliminary Design Phase with the OWNER's staff to discuss aspects of the project presently underway, project schedule, and upcoming issues. These meetings will generally be about two to three hours in duration and are not intended to be formal presentations. The appropriate ENGINEER team members will attend the meetings to discuss pertinent issues. Two progress meetings are planned for this phase of the project.

Deliverables: Meeting agenda and meeting summaries (electronic copies)

Task 1.0.3 – Quality Assurance/Quality Control. ENGINEER will follow internal Quality Management procedures throughout the project related to checking and reviewing procedures. The Preliminary Engineering Report and 30% Drawings will be submitted to the ENGINEER Technical Review Committee (TRC) for review. The review will provide comments and suggestions concerning process viability and implementation, site planning, and project scheduling.

Deliverables: Review Comment Response Memorandum and tracking spreadsheet (electronic copies)

Task 1.0.4 – Review Meeting. A review meeting with OWNER's staff will be conducted for the PER and 30% Design documents. This meeting will be held approximately one to two weeks following submittal of the drawings to provide time for review. The review meeting will be approximately 3 hours. Following their review, OWNER's staff will provide written comments to ENGINEER. ENGINEER will provide written responses to these questions.

Deliverables: Review Comment Response Memorandum and tracking spreadsheet (electronic copies)

Task 1.0.5 – Geotechnical Engineering. ENGINEER will take soil borings and perform geotechnical work for the water treatment plant site in areas of proposed new structures and buildings. Eight (8) borings will be taken on the WTP site. Laboratory analyses will be prepared on the soil samples. A geotechnical report will be prepared to include the results of the analyses and geotechnical recommendations for the design of foundations for the proposed structures. Clearing of the site for access by drilling equipment is not included in the scope.

Deliverables: Geotechnical Report (One hard copy and electronic copy in .pdf format)

Task 1.0.6 – Environmental and Archaeological Services. ENGINEER will perform environmental and archaeological services of the plant site. The following assessments will be provided:

- Jurisdictional Waters Assessment
- Endangered Songbird Habitat Assessment
- Karst Feature Survey
- Spring Survey Report to comply with the City of Georgetown Water Quality Ordinance
- Archaeological Survey and THC Antiquities Code permit application

Memorandum or reports will be prepared and submitted presenting the findings.

Deliverables: Environmental and Archaeological Report (one hard copy)

Task 1.0.7 – Surveying. ENGINEER will conduct a topographical survey for the area of the new water treatment plant structure. The survey will include spot elevations to develop ground contours for the area; location of the corners of existing structures within the area; and spot elevations of edges of pavement, driveways, visible utilities including overhead electric, manholes and junction boxes, etc. A tree survey will be conducted to locate and identify all hardwood trees in the area that are 4" diameter or larger. The tree survey will be used to determine mitigation requirements on the Corps of Engineers property. Two temporary bench marks (TBMs) will be set in the area.

Deliverables: None

1.1 Evaluation Tasks

Several items will be evaluated during the Preliminary Design Phase to determine the best means for implementation into the Final Design. ENGINEER will review findings for these evaluations with OWNER's staff and, after agreement is reached, incorporate agreed upon changes within the Preliminary Design.

Task 1.1.1 –Plant Hydraulics. ENGINEER will update the existing hydraulic models previously prepared for the North Lake WTP and perform hydraulic evaluations and analyses for the raw water pump station and pipeline, water treatment plant unit process, residuals handling facilities and high service pump station. Hydraulic profiles will be developed through the plant processes, both treatment and residuals handling facilities so that the structures and piping are sized appropriately and elevations set properly for minimum, average, and maximum day plant flows.

Additional raw water piping will be needed to feed the new treatment structure. The hydraulic evaluation will determine the extent of additional parallel piping that will be required due to significantly greater headloss at higher flows through the existing 30-inch raw water pipeline. A new high service pump station, previously designed but not constructed, will be incorporated into the project. The system curve will be reevaluated for additional flow and pumps previously selected will be checked to ensure sufficient flow can be pumped from the plant.

Deliverables: Summary Technical Memorandum for Hydraulics (including hydraulic profile drawings and raw water pump station and high service pump station system curves) (electronic copies)

Task 1.1.2 – Electrical Power Assessment and Evaluation. The existing power supply and delivery system will be evaluated to determine if sufficient power is available to meet the needs of the North Lake WTP Expansion. ENGINEER will review available power delivery to the plant site. ENGINEER

will update and further develop the electrical loads for the new plant facilities to determine the initial and ultimate power requirements for the new plant facilities.

ENGINEER shall coordinate with the electric utility for providing sufficient power to the site. Upon completion of the evaluation, ENGINEER shall prepare a memorandum summarizing and documenting any modifications to the power delivery requirements for the expanded plant.

Deliverables: Electrical Power Assessment Technical Memorandum (electronic copy)

Task 1.1.3 – Process Instrumentation and Control Development. ENGINEER will design the plant I&C systems to match the existing instrumentation and process controls. ENGINEER will design around the existing programmable logic controllers (PLCs) and HMI used at the plant. ENGINEER shall work with OWNER staff to determine any changes to control strategies that may be required or desired. ENGINEER will prepare preliminary system architectural drawings for the proposed system and prepare a technical memorandum presenting the I&C system.

Deliverables: Process Instrumentation and Control System Technical Memorandum. (electronic copy)

Task 1.1.4 – Permits / Code Review. ENGINEER/Architect will conduct a preliminary assessment of all project related code and permit requirements and develop a memorandum outlining the issues to be included during the design phase of the project. The previously designed Administration Building will be reevaluated to determine if modifications are necessary for meeting current codes.

Deliverables: Permits and Code Review Memorandum

1.2 Preliminary Design

Task 1.2.1 – Project Planning and Design Development. It is assumed that the existing conventional treatment process is currently meeting all water quality goals and treatment regulations. The current disinfection scheme will be reviewed and updated to enable the plant to meet CT requirements. A preliminary CT study will be performed. A process flow diagram and water balance will be developed to determine the flow streams through each of the unit processes for the expanded plant, including residuals handling and recycle facilities, to ensure the desired plant capacity of 37.4 mgd.

ENGINEER will develop the process/mechanical and civil design of the North Lake WTP Expansion to provide sufficient definition of the plant site and facilities to allow the environmental, geotechnical, and surveying work to be performed and completed. Design criteria will be developed and/or updated for the water treatment plant unit process, including treatment basins, gravity filters, chemical feed facilities, washwater recovery system, solids handling facilities, treated water storage tanks, and high service pumps. Based on these design criteria, the unit processes will be sized, process and chemical equipment sized and selected, and electrical load list developed. An overall process flow diagram for the plant facilities will be developed. A site plan drawing will be provided to include locations of structures and buildings, roadways and parking, site fencing, and other facilities.

Deliverables: Summary Memorandum for WTP Planning and Development (electronic copy)

Task 1.2.2 - Preliminary Engineering Report and 30% Drawings. ENGINEER will prepare a Preliminary Engineering Report (PER) and 30% complete design drawings for the North Lake WTP Expansion project that will incorporate the work performed during Task 1.2.1 and items evaluated in Task 1.1. The PER will include all plant design criteria and the proposed list of major equipment, and electrical load list. The 30% drawings will include site plan, yard piping plans, preliminary paving and grading plans, layouts of facilities, structures and buildings, process, mechanical and instrumentation diagrams (PMIDs), electrical one-line diagrams, I&C system architecture. The PER will serve as the guide for developing the detailed final design.

Deliverables: Preliminary Engineering Report and 30% Drawings (five hard copies of report and ½ size drawings and electronic copies)

Task 1.2.3 – Preliminary Project Cost Estimates. ENGINEER will develop preliminary opinions of probable construction costs for the plant facilities. A memorandum will be prepared documenting the cost estimating assumptions and cost summaries.

Deliverables: 30% Opinion of Probable Cost

Phase 2 - Final Design

ENGINEER will develop contract documents for bidding and construction of the North Lake WTP Expansion project. The final design will be based on the work developed in Phase 1 – Preliminary Engineering.

2.0 General Tasks

Task 2.0.1 – Project Management. ENGINEER will perform project management duties through the Final Design Phase, including tracking budget and schedule, producing monthly status reports and invoicing.

Deliverables: Monthly invoices and project status reports (electronic copies)

Task 2.0.2 – Project Meetings. Project progress meetings will be held during the course of the Final Design Phase with the OWNER's staff to discuss aspects of the project presently underway, project schedule, and upcoming issues. These meetings will generally be about two to three hours in duration and are not intended to be formal presentations. The appropriate ENGINEER team members shall attend the meetings to discuss pertinent issues. Four progress meetings are planned for this phase of the project.

Deliverables: Meeting agenda and summaries (electronic copies)

Task 2.0.3 – Quality Assurance/Quality Control. The 60% complete plans and specifications will be submitted to the ENGINEER Technical Review Committee (TRC) for review. The review will include process and technical feasibility, constructability, discipline coordination, and plans and specification

coordination. The 90% complete plans and specifications will be submitted to senior level staff for a "red-yellow-green" quality check to ensure coordination and constructability.

Deliverables: TRC Comment Response Memorandum (electronic copies)

Task 2.0.4 – Review Meetings. Review meetings with OWNER staff will be conducted for the 60% and 90% complete plans and specifications. These meetings will be held approximately two weeks following submittal of the documents to provide time for review. It is anticipated that review meetings, approximately 4 hours each, will be conducted at both the 60% and 90% completion. Following their review, OWNER staff will provide written comments to ENGINEER. ENGINEER will provide written responses to these questions.

Deliverables: Review Comment Response Memoranda and tracking spreadsheet (electronic copies)

2.1 Regulatory and Permitting Tasks

Task 2.1.1 – TCEQ Coordination. ENGINEER will review documents for compliance with TCEQ rules and regulations. ENGINEER will submit the PER and 100% complete plans and specifications to TCEQ for review. Upon receipt of plan review comments, ENGINEER will respond in writing and make necessary changes to the contract documents.

Deliverables: Letter response to TCEQ review comments. (electronic copy)

Task 2.1.2 – Texas Department of Licensing and Regulation (TDLR) Coordination. ENGINEER will include necessary provisions within the North Lake WTP Expansion design to provide accessibility compliance per the TDLR. ENGINEER will obtain the services of a Registered Accessibility Specialist (RAS) and submit 100% plans and specifications to the RAS for review to obtain approval through TDLR. Upon receipt of comments, ENGINEER will make necessary changes in the contract documents to ensure accessibility compliance. RAS will also provide follow-up review following construction.

Deliverables: Copy of TDLR permit application (electronic copy)

Task 2.1.3 – Miscellaneous Permits. Based on the results of Task 1.1.4, ENGINEER will apply for any necessary permits required for construction of the North Lake WTP Expansion, including those required for County and State agencies.

Deliverables: Copy of permit applications (one hard copy and electronic copy)

Task 2.1.4 – Stormwater Pollution Prevention Plan (SWPPP). ENGINEER will develop information and specify requirements for a SWPPP for the North Lake WTP to be prepared and obtained by the Contractor during construction of the project.

Deliverables: None

Task 2.1.5 – Edwards Aquifer Permits. ENGINEER will prepare necessary water pollution abatement plan (WPAP) and above ground storage tank (AST) permits for TCEQ as related to the Edwards Aquifer.

Deliverables: WPAP and AST permits

Task 2.1.6 – U.S. Army Corps of Engineers Coordination. ENGINEER will coordinate with the USACE to approval to construct the plant improvements and to determine the mitigation required for the removal of trees.

Deliverables: None

2.2 Lake Water Treatment Plant Phase IV Expansion Design

The design services for the North Lake WTP Expansion include those tasks necessary to design a raw water pipeline extension, high service pipeline and 8.8-mgd expansion to the water treatment plant and associated high service pump station on the existing North Lake WTP site.

The water treatment plant design will include the following items:

- Raw water pipeline extension
- High Service pipeline from the HSPS to the 30-in water line in DB Wood Road
- Treatment structure (rapid mix, flocculation, and sedimentation basins and filters)
- Liquid chemical storage and feed facilities modifications
- High Service Pump Station expansion (evaluating and incorporating previous design)
- Administration Building (evaluating and incorporating previous design)
- Electrical facility improvements
- Instrumentation and controls expansion and upgrades

It is assumed the following facilities will not need modifications for the expanded plant capacity:

- Gravity Thickener and Thickened Sludge Pump Station
- Sludge Dewatering Building with Belt Press
- Washwater Recovery Basins and Recycle Pump Station

This project will also include: yard piping; plant roadways and sidewalks; site grading and drainage; and miscellaneous meter vaults and valve vaults;

Task 2.2.1 – 60% Plans and Specifications. The plans and specifications for North Lake WTP Expansion will be completed to a 60% level and submitted to OWNER for review and comment. ENGINEER will use General Conditions approved by the OWNER and modify as necessary in Supplementary Conditions to fit this project. Documents shall include General and Special Conditions, Bid Proposal Forms, Instructions to Bidders, and all other sections generally considered to be necessary for solicitation of bids. The 60%

review documents for the North Lake WTP Expansion shall be defined and consist of the minimum level of completion by the following disciplines:

- General/Standard Sheets - 70%
- Process Mechanical - 70%
- Civil - 70%
- Structural - 60%
- Architectural – 60%
- HVAC and Plumbing – 50%
- Instrumentation & Control - 70%
- Electrical - 50%
- Specifications - 40%

Deliverables: Electronic copy and five hard copies of half-size plans and specifications (60% Complete)

Task 2.2.2 – 90% Plans and Specifications. The plans and specifications for the North Lake WTP Expansion will be completed to a 90% level and submitted to OWNER for review and comment. The 90% review documents for the North Lake WTP Expansion shall be defined and consist of the minimum level of completion by the following disciplines:

- General/Standard Sheets - 95%
- Mechanical - 95%
- Civil - 95%
- Structural - 90%
- Architectural – 90%
- HVAC and Plumbing – 90%
- Instrumentation & Control - 90%
- Electrical - 90%
- Specifications - 90%

Deliverables: Electronic copy and five hard copies of half-size plans and specifications (90% Complete)

Task 2.2.3 – Final Plans and Specifications. The plans and specifications for the North Lake WTP Expansion will be finalized based on comments from OWNER and ENGINEER reviewers. ENGINEER will seal and sign the completed documents. ENGINEER will provide five sets of 100% sealed documents to OWNER for final review. These documents will also be submitted to TCEQ, TDLR, and other agencies for review/approval per Tasks 2.1.1, 2.1.2, 2.1.3, 2.1.4 and 2.1.5. ENGINEER shall update plans and specifications with any final comments prior to bidding.

Deliverables: Electronic copy and five hard copies of half-size plans and specifications

Task 2.2.4 – Cost Estimates. ENGINEER will prepare opinions of probable construction cost for the Lake WTP Phase IV Expansion project based upon 60% complete documents and the 90% documents.

Deliverables: Opinions of Probable Construction Cost (60% and 90%)

Phase 3 - Bidding Phase

After acceptance by OWNER of the ENGINEER's Drawings, Specifications and other Design Phase documentation (including the most recent Opinion of Probable Construction Cost), and upon written authorization to proceed, ENGINEER shall perform bidding services as presented in the Phase 3 tasks below. The Bidding Phase is assumed to last for three months.

3.0 General Tasks

Task 3.01 – Project Management. Engineer will perform project management duties, similar to those in previous phases, throughout the Bidding Phase of the project.

Deliverables: Monthly invoices and status reports (electronic copies).

3.1 Bidding Tasks

Task 3.1.1 – Advertisement and Document Distribution. Engineer will prepare Advertisement for Bid for use by the City in advertising the North Lake WTP Expansion project. Engineer will reproduce and distribute contract documents to prospective bidders and vendors and maintain a log of distribution for the North Lake WTP Expansion project. Engineer will provide up to 100 sets of half-size drawings and specifications for the North Lake WTP Expansion project for distribution. In addition, Engineer will provide up to 20 sets of full size drawings for distribution. Ten of these sets will be for Contractor use. Engineer will submit documents to plan rooms, including those for M/WBE contractors. Engineer will maintain a list of plan holders for distribution.

Deliverables: Advertisement for Bid, Plans and Specifications for Distribution, Plan Holders List.

Task 3.1.2 – Pre-Bid Conference. Engineer will attend the pre-bid conference for project and answer, by written addenda, contractors' and suppliers' functional and technical questions during bidding phase.

Deliverables: Pre-bid meeting agenda and meeting minutes

Task 3.1.3 – Clarifications and Addenda. Engineer will provide clarifications and answer questions from prospective bidders and vendors during the bidding phase for the construction project. If necessary, such clarifications will be included in addenda.

Deliverables: Addenda

Task 3.1.4 – Bid Openings and Evaluation. Engineer will attend the bid opening, review bids, and assist with recommendations of contract award for the construction project.

Deliverables: Bid tabulations and recommendations of award

Task 3.1.5 – Conformed Documents. Engineer will prepare conformed documents for the construction project, incorporating addenda items into the plans and specifications, and provide up to 20 sets of ½ size plans and specifications and up to 10 sets of full size plans for use by City staff and Contractor during construction.

Deliverables: Conformed documents

Task 3.16 – Contract Documents. Engineer shall prepare three sets of contract documents for the construction contract, with appropriate bonds, insurance, contracts, and other forms, for contracts between the City and Contractor.

Deliverables: Construction contract documents

Phase 4 – Construction Services

Under Phase 4 of the project, Engineer will provide general services during the construction of the North Lake WTP Expansion project. The construction phase is assumed to last for 24 months.

4.0 General Tasks

Task 4.0.1 – Project Management. Engineer will perform project management duties, similar to those in previous phases, throughout the Construction Phase of the project.

Deliverables: Monthly invoices and status reports (electronic copies).

Task 4.0.2 – Monthly Construction Meetings. Engineer will attend monthly construction progress meetings with City, and Contractor for the North Lake WTP Expansion project. Engineer will provide 2 persons per meeting over a 24-month construction period for the North Lake WTP Expansion project. It is assumed that these meetings will last four hours, including pre and post meetings at the site.

Deliverables: Meeting agenda and summaries (electronic copies)

Task 4.0.3 – Site Visits. Engineer will make periodic visits to the project site to observe the progress and quality of various aspects of the construction contractors' work for the project. Engineer will participate in substantial completion and final completion inspections.

Deliverables: None

4.1 Submittal Review Tasks

Task 4.1.1 – Submittal Log. Engineer will log-in, track, and distribute submittals to the various disciplines and subconsultants.

Deliverables: None

Task 4.1.2 – Shop Drawings. Engineer will perform technical and functional review of all shop drawings and other submittals. It is estimated that 400 shop drawings will be submitted for the North Lake WTP Expansion project.

Deliverables: Shop drawing review comments (electronic copies)

Task 4.1.3 – RFIs. Engineer will respond to all RFIs submitted by the contractor and subcontractors. It is estimated that 80 RFIs will be submitted for the North Lake WTP Expansion project.

Deliverables: RFI responses (electronic copies)

Task 4.1.4 – Change Order Requests. Engineer will review and comment on all Change Order requests and initiate Change Order requests when appropriate. It is estimated that 20 Change Order Requests will be submitted for the Lake WTP Phase IV Expansion project.

Deliverables: Change request documents (electronic copies)

4.2 Testing Tasks

Task 4.2.1 – Instrumentation and Control Testing. Engineer will provide instrumentation and control system coordination and testing during construction of the North Lake WTP Expansion project. Testing will include 3 days for Witness Factory Tests, 3 days for Functional Demonstration Tests, and 4 days for I&C assistance during construction.

Deliverables: Documentation memoranda for approved tests (electronic copies)

Phase 5 – Start-up and Operations Services

Under Phase 5 of the project, Engineer will assist the City in the start-up of the new North Lake WTP Expansion and provide record documentation. These services will be provided during the last three months of construction.

5.0 General Tasks

Task 5.0.1 – Project Management. Engineer will perform project management duties, similar to those in previous phases, throughout the Start-up and Operations Phase of the project.

Deliverables: Monthly invoices and project status reports.

Task 5.0.2 – Plant Start-Up. Engineer will provide up to 80 hours of assistance during plant start-up to ensure the plant is operating as designed.

Deliverables: None

Task 5.0.3 – Plant Staff Consultation. Engineer will consult with the City's plant and engineering staff on a monthly basis, for a period not to exceed 6 months, to review outstanding issues, problems with plant and related matters, and advise on possible solutions and actions to be undertaken by the City.

Deliverables: None

5.1 Records and Documentation

Task 5.1.1 – Record Drawings. Engineer will prepare Record Drawings for the North Lake WTP Expansion project based on Contractor's red-line markups of the conformed field plans. The Record Drawings will be produced with AutoCad. The Record Drawings will be delivered to the City in electronic (.pdf format) and hard copy format.

Deliverables: Electronic (.pdf format) and five hard copies of ½ size Record Drawings

Phase 6 – Resident Project Representative (RPR) Services

Under Phase 6 of the project, Engineer will provide full-time RPR services during construction of the North Lake WTP Expansion. The scope of RPR services is based on a 24-month construction period. The responsibilities of the RPR are presented below:

RPR Responsibilities:

1. *Schedules:* Review the progress schedule, schedule of Shop Drawing submittals and schedule of values prepared by Contractor and consult with Engineer concerning acceptability.

2. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings.

3. *Liaison:*

    a. Serve as Engineer's liaison with Contractor, working principally through Contractor's superintendent and assist in understanding the intent of Contract Documents; and assist Engineer in serving as OWNER's liaison with Contractor when Contractor's operations affect OWNER's on-site operations.

    b. Assist in obtaining from OWNER additional details or information, when required for proper execution of the Work.

4. *Review of Work, Rejection of Defective Work, Inspections and Tests:*

    a. Conduct on-site observations of the Work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.

    b. Report to Engineer whenever RPR believes that any Work will not produce a completed Project that conforms generally to the Contract Documents or will prejudice the integrity of the design

concept of the completed Project as a functioning whole as indicated in the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer of work that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

c. Verify that test, equipment and systems start-ups are conducted in the presence of appropriate personnel, and that Contractor maintains adequate records thereof; and observe, record and report to Engineer appropriate details relative to the test procedures and start-ups.

d. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to Engineer.

5. *Interpretation of Contract Documents:* Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.

6. *Modifications:* Consider and evaluate Contractor's suggestions for modifications I Drawings or Specifications and report with RPR's recommendations to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.

7. *Records:*

a. Maintain at the job site orderly files for correspondence, reports of job conferences, Shop Drawings and Samples, reproductions of original Contract Documents including all Work Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, Engineer's clarifications and interpretations of the Contract Documents, progress reports, Shop Drawing submittals received from and delivered to Contractor and other Project related documents.

b. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the job site, weather conditions, data relative to questions of Work Change Directives, Change Orders or changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer.

c. Record names, addresses and telephone numbers of all Contractors, subcontractors and major suppliers of materials and equipment.

8. *Reports:*

a. Furnish to Engineer periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and Sample submittals.

b. Consult with Engineer in advance of scheduled major tests, inspections or start of important phases of the Work.

c. Report immediately to Engineer and OWNER the occurrence of any accident.

9. *Payment Requests:* Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed and materials and equipment delivered at the site but not incorporated in the Work.

The RPR has limitations to his authority on the project. These are listed below:

Limitation of Authority by RPR

Resident Project Representative:

1. Shall not authorize any deviation from the Contract Documents or substitution of materials or equipment (including "or-equal" items), unless authorized by Engineer.

2. Shall not exceed limitations of Engineer's authority as set forth in the Agreement of the Contract Documents.

3. Shall not undertake any of the responsibilities of Contractor, Subcontractors, Suppliers, or Contractor's superintendent.

4. Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.

5. Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the Work.

6. Shall not accept Shop Drawing or Sample submittals from anyone other than Contractor.

7. Shall not authorize Client to occupy the Project in whole or in part.

8. Shall not participate in specialized field or laboratory tests or inspection conducted by others except as specifically authorized by Engineer.

9. *Conferences and Meetings:* Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences and other project-related meetings.

3. **Owner's Responsibilities**

Owner shall have those responsibilities set forth in the Agreement subject to the following:

1. Designate a person to act as City's representative with respect to the services to be performed or furnished by the Professional. This representative will have authority to transmit instructions, receive information, interpret and define City's policies and decisions with respect to Professional's services.
2. Provide all criteria and full information as to City's requirements for the project, including objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and furnish copies of all design and construction standards which City will require to be included in the Project Drawings and Specifications.
3. Assist Professional by placing all available information pertinent to the Project, including previous reports and any other data relative to the design or construction of the Project at the Professional's disposal.
4. Furnish to Professional, as requested for performance of basic services or as required by the Contract Documents, the following:

a) Data prepared by or services of others, including without limitation explorations and tests of subsurface conditions at or contiguous to the site, drawings of physical conditions in or relating to existing surface of subsurface structures at or contiguous to the site;

b) The services of an independent testing laboratory to perform all inspections, test and approvals of samples, materials and equipment;

c) Environmental assessments, audits, investigations and impact statements, and other relevant environmental or cultural studies as to the Project, the site and adjacent areas;

d) Arrange for access to and make all provisions for Professional to enter upon public and private property as required for Professional to perform services under this Task Order;

e) Examine all alternate solutions, studies, reports, sketches, proposals and other documents presented by Professional;

f) Provide such accounting, bond and financial advisory, independent cost estimating and insurance counseling services and such legal services as City may require or Professional may reasonably request with regard to legal issues pertaining to the Project;

g) Provide labor and safety equipment to open electrical/instrumentation cabinets, open and protect manholes and/or to operate valves and hydrants as required by the Professional; and

h) Give prompt notice to Professional whenever City observes or otherwise becomes aware of any development that affects the scope or time of performance or furnishing of Professional's services, or any defect or nonconformance in Professional's services in the work of any Contractor.

4. **Times for Rendering Services**

Phase	Completion Date
Preliminary Engineering	75 days following Notice to Proceed
Final Design	200 days following Completion of Preliminary Design
Bidding	90 days following Completion of Final Design
Construction	To be Concurrent with the Construction Schedule (Estimated at 730 days following Completion of Bidding)

5. **Payments to Engineer**

A. Owner shall pay Engineer for services rendered as follows:

Category of Services	*Compensation Method*	*Lump Sum or Not to Exceed Amount of Compensation for Services*
BASIC SERVICES		
Preliminary Engineering		$ 274,900
Final Design		$ 1,052,100
Bidding		$ 48,300
Construction Services		$ 522,000
Operations and Start-Up Services		$ 57,900
Total Basic Services (Lump Sum)		**$ 1,955,200**
SPECIAL SERVICES		
Surveying		$ 7,400
Geotechnical		$ 9,600
Environmental and Archaeological Services		$ 17,300
Total Special Services (Time and Materials)		**$ 34,300**
Resident Project Representative (Billing Rate)		**$ 627,700**
Total Contract Value		**$ 2,617,200**

B. The terms of payment are set forth in Article 4 of the Agreement unless modified in this Task Order.

6. **Consultants:**

Terracon (Geotechnical)

Inland Geodetics (Surveying)

aci Consulting (Enviornmental)

David Boren (Architectural)

7. **Other Modifications to Agreement:**

A. Article 6.02 Ownerships of Documents. Insert Paragraph 6.02 B as follows:

"B. Notwithstanding any other provision of this Agreement to the contrary, Engineer shall retain its rights in its pre-existing standard drawing details, designs, specifications, databases, computer software, proprietary information, documents, templates, and any other property owned by Engineer on the date of this Agreement or developed outside of this Agreement."

8. **Attachments:**

Billing Rate Schedule for Resident Project Representative Services

9. **Documents Incorporated By Reference:** The Agreement effective September 30, 2016.

TASK ORDER

Terms and Conditions: Execution of this Task Order by Owner and Engineer shall make it subject to the terms and conditions of the Agreement (as modified above), which Agreement is incorporated by this reference. Engineer is authorized to begin performance upon its receipt of a copy of this Task Order signed by Owner.

The Effective Date of this Task Order is _____, 20____.

OWNER:	ENGINEER:
By: _____	By: _____
Name: Dale Ross	Name: Allen Woelke, P.E.
Title: Mayor, City of Georgetown, Texas	Title: Vice President
	Engineer License or Firm's Certificate No. F-3043
	State of: Texas
Date: _____	Date: _____

ATTEST:	APPROVED AS TO FORM:
_____	_____
Robyn Densmore, City Secretary	City Attorney

DESIGNATED REPRESENTATIVE FOR TASK ORDER:		DESIGNATED REPRESENTATIVE FOR TASK ORDER:	
Name:	Michael Hallmark	Name:	Allen Woelke
Title:	Project Manager	Title:	Vice President
Address:	300-1 Industrial Ave. Georgetown, TX 78626	Address:	12357-A Riata Trace Parkway Suite 210 Austin, TX 78727
E-Mail Address:	Michael.Hallmark@georgetown.org	E-Mail Address:	woelkead@cdm.com
Phone:	512-930-3569	Phone:	512-346-1100
Fax:		Fax:	512-345-1483

NORTH LAKE WATER TREATMENT PLANT EXPANSION
RESIDENT PROJECT REPRESENTATIVE SERVICES
BILLING RATE SCHEDULE

Category	Billing Rate
Resident Project Representative	$125/hr
RPR Supervisor	$190/hr
Contract Admin	$ 95/hr
Other RPR Expenses	At Cost