PROFESSIONAL SERVICES
SUPPLEMENTAL AGREEMENT No. 1
FOR
CITY OF PFLUGERVILLE AND MANVILLE WSC
INTERCONNECT AT WATER TREATMENT PLANT

STATE OF TEXAS §
§
COUNTY OF TRAVIS §

FIRM: DCS Engineering, LLC ("Consultant")

ADDRESS: 1101 S. Capital of Texas Hwy, Bldg G-100
Austin, TX 78746

This Supplemental Agreement No. 1 to a contract for Professional Services is made by and between the City of Pflugerville, Texas, hereinafter called the "City" and DCS Engineering, LLC, hereinafter called the "Consultant".

WHEREAS, the City and Consultant executed an Agreement for Professional Services, hereinafter called the "Agreement", on the 19th day of January, 2015 for the Water Treatment Plant Engineering Services Project; and

WHEREAS, it has become necessary to amend the Agreement to modify the provisions for the Scope of Services, Work Schedule, and Compensation; and

NOW THEREFORE, premises considered, the City and the Consultant agree that said Agreement is amended as follows:

I.

Article III. Scope of Services and Work Schedule and Exhibit A, shall be amended as set forth in the attached addendum to Exhibit A.

Article IV. Compensation to Consultant shall be amended by increasing by $69,850.00 the amount payable under the Agreement for a total of $69,850.00, as shown by the attached Addendum to Exhibit A.

EXECUTED and **AGREED** to as of the dates indicated below.

CITY OF PFLUGERVILLE	**CONSULTANT DCS ENGINEERING, LLC**
_____	_____
(Signature)	*(Signature)*
Printed Name: Brandon E. Wade	Printed Name: Darren Strozewski, P.E.
Title: City Manager	Title: Principal
Date: _____	Date: 12/22/14

APPROVED AS TO FORM:

_____

George Hyde
City Attorney
Denton Navarro Rocha Bernal Hyde & Zech, P.C.

SUPPLEMENTAL AGREEMENT NO. 1 – EXHIBIT A
City of Pflugerville and Manville WSC Interconnect at Water Treatment Plant

In accordance with the Professional Services Supplemental Agreement No.1 titled City of Pflugerville and Manville WSC Interconnect at Water Treatment Plant Project between City and Engineer ("Agreement"), City and Engineer agree that additional work shall be added to the Professional Services Agreement for Water Treatment Plant Engineering Services dated January 19, 2015 as follows:

1. **Specific Project Data**
   A. Title: City of Pflugerville and Manville WSC Interconnect at Water Treatment Plant Project
   B. Description:
   The Project involves the design of approximately 1,400 feet of new 16" and 12" pipe from an existing 16" pipe near the intersection of Weiss Lane and Pflugerville Parkway to the 36" pipe that feeds the two clearwells on the Pflugerville Water Treatment Plant site. The water transmission line work is anticipated to use open cut construction methods with steel casing across Weiss Lane. The project will include design of the interconnecting pipeline, a backflow preventer in a hot box, a control valve in a vault with a flow meter and control panel, coordination with Water Treatment Plant SCADA and control systems, bidding and construction phase services as described below. DCS does not anticipate easement acquisition as part of this project since all work is anticipated to be within existing easements, on City owned land, and/or within existing public rights of way. The engineer's opinion of most probable construction cost is $516,000.
   C. Number of Construction Contracts: This project is anticipated to be constructed under a single construction contract.

2. **Services of Engineer**
The Engineer shall provide the following scope of work related to the engineering design of:
   - 1,400 linear feet of new 16-inch and 12-inch diameter waterline
   - Control Valve in valve vault with Control Panel to record and limit supplied water volumes.
   - Flow Meter
   - Double Backcheck Flow Preventer in Hot Box
   - Water Treatment Plant SCADA and control system analysis and coordination

ITEM 1.0 - PROJECT MANAGEMENT

1.1 Management Plan
The ENGINEER shall prepare a Management Plan, which shall include the project Scope of Work, organization responsibilities, communications procedures, schedule, budget, quality control process, and billing.

1.2 Subconsultant Management
The ENGINEER shall provide management of Subconsultants including coordination of their project services. The list of sub-consultants is included under Section 6.

1.3 Project Meetings
The ENGINEER shall conduct project meetings to obtain input and decisions from City staff. ENGINEER shall be responsible for developing meeting agendas and shall prepare the material as needed to achieve the meeting objectives. ENGINEER shall prepare meeting minutes and submit them electronically. Specific meetings planned for project management purposes are as follows:

1.3.1. Project Kickoff Meeting:
The ENGINEER shall conduct a project kickoff meeting at the City offices to introduce the project team members, review project goals and objectives, discuss project elements and responsibilities, delineate communications procedures, and review the project schedule. ENGINEER shall identify any information needed from City staff to complete the work.

1.3.2. Preliminary Design Workshop
The ENGINEER shall conduct a workshop at the City office after submittal of the preliminary design layout. Items to be discussed during the workshop may include, but not

be limited to, waterline alignments, utility conflicts, technical issues, easement acquisition, decisions needed from City staff, etc.

1.3.3. 90 Percent Design Review
The ENGINEER shall conduct a 90 percent design review at the City office after submittal and City review of the 90 percent plans and specifications. The purpose of this meeting is to collect and discuss city comments on the 90 percent design plans, identify any decisions needed from City staff, etc.

1.4 Quality Assurance/Quality Control
The ENGINEER shall provide Quality Assurance/Quality Control by having a senior representative of the ENGINEER review the final plans and specifications with their comments addressed prior to submitting the final review plans and specifications to the City.

1.5 Project Schedule
The ENGINEER shall prepare a Project Schedule.

1.6 Engineer's Opinion of Probable Cost
The ENGINEER will prepare an "Opinion of Probable Cost" which shall include the estimated construction cost for the waterline at the conclusion of the Preliminary Design and Final Design (90 Percent) phases of work.

ITEM 2.0 - PRELIMINARY DESIGN SERVICES

2.1 Surveying

2.1.1 Topographic Survey – Prepare a topographic survey of the pipeline alignment for the portion of the waterline outside the water plant property limits. As part of the topographic survey, street and highway right of ways and property boundaries will be established as required. All surface features will be located along with underground utilities as marked in the field by the Texas One-Call System. This topographic survey scope of work is based on the below items:

2.1.1.1 Approximately 200 ft by 200 ft area at the intersection of Weiss Lane and Pflugerville Parkway following the waterline alignment; and the area between the two clear well tanks as measured from the northern fence line to the site sidewalk on the south side of the tanks.

2.1.1.2 This scope of work is based on using the boundary survey, topographic survey, and all Autocad drawings generated for the Clear Well No. 2 construction project by others. This information is identified to be provided by the Owner to DCS in Autocad format. Confirmation of the previously established right of ways and existing easements will be conducted as part of DCS's enclosed work. The Texas One-Call System will be used to mark utilities along the waterline alignment, and they will be observed during field work by DCS.

2.1.2. Temporary benchmarks shall be established for the project as needed using existing structures (i.e. bridges, inlets, headwalls, etc). The survey shall include the establishment of horizontal and vertical control points. Horizontal control shall be on the Texas State Plane Coordinate System, NAD 83, Central Zone Grid Coordinates by utilizing GPS static observations and OPUS solutions to achieve second-order accuracy. The vertical control shall be based on NAVD 88 vertical datum by utilizing GPS static observations.

2.1.3 Utility Potholing – Perform two (2) potholes of existing Manville WSC 16" waterline and the City's 24" forcemain in unpaved areas to confirm horizontal and vertical locations. The 2" and 6" Manville WSC waterlines will be field located as part of the construction activities. Pothole locations will be based on record drawing locations of existing wet utility lines. No dry utilities (phone, cable, gas, electric) will be potholed. The pothole locations will be surveyed by the project surveyor.

2.2 Coordination with Regulatory Agencies and Private Utilities

2.2.1 Regulatory Agencies

The ENGINEER shall identify the regulatory agencies for which permitting of construction activities will be required and shall coordinate with these agencies to brief them on the particulars associated with this Project and gather permitting information which will be useful in ordinance compliance and final design. The ENGINEER will prepare and process permits required by outside agencies. The City shall be responsible for permit fees and signatures as necessary for processing.

2.2.2 Travis County
The ENGINEER shall coordinate crossings of Travis County right-of-ways with the Area Engineer in order to brief them on the Project and to determine if they have any concerns or objections regarding the proposed construction. The County's concerns will be incorporated into the preliminary and final design of the waterline.

2.2.3 Private Utility Companies (Gas, Electric, Telephone, Manville Water Service Corporation, and Cable). The ENGINEER shall review the existing facility information of each private utility to identify potential conflicts and determine the waterline alignment. Effort will be expended to resolve any potential conflicts as well as to arrange any coordination requirements for construction.

2.3 The ENGINEER shall prepare a plan and profile of the proposed waterline based upon the horizontal alignment, topographic survey, existing easements, and property boundaries for review with the City. The route will be based upon those generally described above.

2.4 Pipe Materials: The ENGINEER will evaluate various waterline pipe materials to indicate clearly the drawbacks and benefits involved with each alternative to the City, and clearly set forth the Engineer's recommendation. All materials shall be in accordance with the City's construction standards and specifications.

2.5 Pipe Pressure Rating: Based upon the preliminary plan and profile of the pipelines and available pressure plane and water modeling information, the ENGINEER will evaluate and recommend the pressure ratings required for the waterline. All materials shall be in accordance with the City's construction standards and specifications.

2.6 Pipe Design Considerations: The ENGINEER will evaluate and set forth recommendations for the preferred joints and joint restraints to be used in the Project.

2.7 The ENGINEER will evaluate and set forth recommendations for the preferred coatings, linings, wrappings, cathodic protection, etc. for the proposed waterline.

2.8 The ENGINEER will evaluate and set forth recommendations for installation considerations such as:
- 2.8.1 Depth of cover;
- 2.8.2 Bedding and backfill;
- 2.8.3 Open-cut, boring, tunneling, and/or horizontal directional drilling.

2.9 Preliminary plans and a preliminary Engineer's Opinion of Probable Construction Cost will be provided to the City. Upon review by the City, ENGINEER will include City staff comments and move forward into the final design phase.

ITEM 3.0 – FINAL DESIGN SERVICES

3.1 ENGINEER shall evaluate testing methods and acceptance criteria and clearly set forth recommendations to be incorporated into the "Technical Specifications."

3.2 Prepare plans and specifications (contract documents) for construction authorized by the City. Half size drawings (i.e. 11" x 17" drawings) and project manual (i.e. specification book) will be produced for this project. Plans and specifications shall be per the City's Uniform Development Code and Engineering Design Guidelines & Construction Standards and all updates of these standards up to the time of the beginning of the bidding phase.

3.3 Prepare traffic control plans in those areas deemed necessary. Traffic control layouts and details will be included in the plan set(s).

3.4 Submit required information and/or plans and specifications to obtain approval or permits from Travis County and Manville WSC for the proposed waterlines.

3.5 Deliverables:
- 3.5.1 90 Percent Design Submittal: The 90 Percent design submittal will include plans and specifications:
- 3.5.2 Final Submittal: The final submittal will include final plans, specifications, and Engineer's Opinion of Probable Construction Cost.

ITEM 4.0 - BIDDING SERVICES

4.1 Assist the City in receiving bids from General Contractors for this project. Work will include conducting a prebid meeting with the Contractors to review the scope of work as presented on the contract documents described above. Addenda to the bid documents shall be generated as required to address Contractor comments or questions. Additional costs for advertising are not included in this fee proposal and will be billed separately, if required.

4.2 The bid documents will be structured to have one bid for the Project.

4.3 Civcast will be utilized to maintain the plan holder and distribution lists. Civcast will provide bid packages to the Contractors at no cost. DCS will provide PDF copies of the plans and specification book to Civcast for their use.

4.4 Assist the City in the opening and tabulation of bids for construction of the Project, and consult with the City as to the proper action to be taken, based on the engineering considerations involved.

4.5 Assist in the preparation of formal Contract Documents, perform the bid tabulation, and letter of recommendation of award for Contractor.

ITEM 5.0 - CONSTRUCTION PHASE SERVICES

5.1 Coordinate and oversee the participation in a Pre-construction conference for the Project to be held at the beginning of construction at the City's office.

5.2 Review samples, catalog data, schedules, shop drawings, laboratory, shop and mill tests of material and equipment and other data which the contractor submits. This review is for the benefit of the City and covers only general conformance with the information given by the Contract Documents. The contractor is to review and stamp his approval on submittals prior to submitting to Engineer, and review by the Engineer does not relieve the contractor of any responsibility such as dimensions to be confirmed and correlated at the job site, appropriate safety measures to protect workers and the public, or the necessity to construct a complete and workable facility in accordance with Contract Documents.

5.3 Administer three monthly construction status meetings and conduct site visit on the same day. Review and recommend for approval Contractor pay request applications.

5.4 Conduct, in company with the City, a final inspection of the Project for compliance with the Contract Documents, and submit recommendations concerning project status, as it may affect City's final payment to the contractors.

5.5 Prepare record drawings and provide two copies to City. Furnish one electronic copy on CD and one 11 x 17 copy of the record drawings to the City.

5.6 Resident Project Representative services are specifically excluded from this scope of work. Therefore, daily or weekly inspection of the work will not be conducted by DCS. In accordance with City requirements, the City of Pflugerville's Resident Project Representatives will be performing these duties on this project.

5.7 DCS shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor or the safety precautions and programs incident to the work of the Contractor. DCS shall not guarantee the performance of the Contractor nor be responsible for the acts, errors, omissions or the failure of the Contractor to perform the construction work in accordance with the Contract Documents.

5.8 Construction staking is specifically excluded from this scope of work and shall be provided and paid for by the construction Contractor.

5.9 Construction Materials Testing is specifically excluded from this scope of work and shall be paid for by the City directly to the testing lab during construction. The costs for all failing tests will be paid for by the Contractor. Construction materials testing will be performed per the utility testing requirements included in the City's standard construction notes.

3. **Owner's Responsibilities**
   A. Owner shall provide the geotechnical reports prepared for the City for the original construction of the Water Treatment Plant; and the Clear Well No. 2 projects. These reports will be utilized for the proposed work; and no new borings will be obtained.
   B. Owner shall provide the boundary survey, topographic survey, and all Autocad drawings generated for the Clear Well No. 2 construction project by others. This information will be utilized for the proposed work.
   C. Owner shall be responsible for permit fees and signatures as necessary for processing.

4. **Times for Rendering Services**
   A. Consultant shall have those responsibilities set forth in Article II of the Professional Services Agreement.
   B. The above referenced services will be performed over a total nine months (three months for surveying and design, two months for bidding and award, and four months for construction) with a notice to proceed assumed to be issued by January 20, 2015 and conclude by October 20, 2015.
   C. Authorization to Proceed: Signing of this Agreement for services shall be authorization by the Owner for DCS to proceed with the work.

5. **Payments to Engineer**
   A. City shall pay Engineer for services rendered as follows: DCS Engineering, LLC will invoice monthly for services rendered the preceding month based on the percentage of services completed. City shall pay DCS Engineering, LLC within 30 days for the services rendered and invoiced.
   B. Lump Sum Fee: We propose to provide the services described above on a lump sum fee basis of $69,850. Our proposed fees for the above scope of work are shown by task in the below table. The above referenced services will be performed within the duration discussed above.

Fee Schedule

Task	Description	Lump Sum
400	Preliminary Design	$6,750
500	Final Design	$29,170
600	Bidding	$8,500
700	Construction Administration	$16,000
800	Topographic Survey – Inland Geodetics	$6,500
810	Utility Potholing – Cardno	$2,930
	Total Lump Sum Fee =	**$69,850**

   C. The terms of payment are set forth in Article IV of the Professional Services Agreement and Supplemental Agreement No. 1- Exhibit A.

6. **SubConsultants:**
   A. Surveying – Inland Geodetics, LLC

7. **Other Modifications to Agreement:**
   None