



DATA SHEET
Agenda Item No. 12.B.

Meeting Date: June 7, 2018

Agenda Item:

Consider approval of Contract and Task Order No. 1 with Alan Plummer Associates, Inc. for Design of the Parallel Pipeline from Taylor Water Treatment Plant to Stone Hill Pump Station.

Placement:	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Individual Consideration	<input type="checkbox"/> Executive Session
Vote:	<input type="checkbox"/> Non-Weighted	<input checked="" type="checkbox"/> Weighted Capital	
Recommending Department: Engineering and Construction			

Background:

Currently the District has a single 48-inch treated water pipeline from the Taylor Regional Water Treatment Plant (TRWTP) to the Stone Hill Pump Station (SHPS). Due to the continued growth in District's service area, this pipeline is reaching its ultimate capacity. The proposed Parallel Pipeline from TRWTP to SHPS (Project) is needed to meet increasing demands, as well as provide redundancy and operational flexibility.

To continue moving forward with the Project, staff requested proposals from five engineering firms to provide professional services related to design and construction of the proposed treated water pipeline. District received four written proposals and subsequently conducted formal interviews with all respondents. Based on their qualifications, District staff selected the team of Alan Plummer Associates Inc. and Lockwood, Andrews & Newnam, Inc. and initiated negotiations for a Contract and Task Order to provide the needed professional services.

Contract and Task Order No.1 with Alan Plummer Associates, Inc. is for services related to preliminary engineering for the project design. Specifically, Task Order No.1 includes basic services for system hydraulic evaluation, pipeline alignment analysis, development of a feasibility report and preparation of a preliminary design report. Special services are included to provide for surveying, geotechnical investigation, corrosion protection, subsurface utility investigation and easement acquisition. The total task order amount is \$900,097.

Financial:

Funding for the project is available in the Capital Budget for Regional Treated Water System FY 2018, referenced as Parallel Pipeline Taylor RWTP to Stone Hill Pump Station.

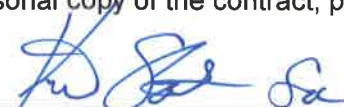
Recommendation:

Staff recommends approval of Contract and Task Order No. 1 with Alan Plummer Associates, Inc.

Enclosures:

Draft Task Order No. 1.

The proposed contract is a standard District professional services agreement and is not enclosed. If you would like a personal copy of the contract, please contact Kurt Staller.

Submitted By:  Date: June 1, 2018
Tom Snyder, Director of Engineering & Construction

**ATTACHMENT A-1
Task Order No.1**

This Task Order is part of the AGREEMENT between Alan Plummer Associates, Inc. ("APAI" or "ENGINEER"), and Upper Trinity Regional Water District ("District" or "OWNER"), approved concurrently with this Task Order No. 1, for a project generally described as:

REGIONAL TREATED WATER SYSTEM – PARALLEL PIPELINE FROM TAYLOR REGIONAL WATER TREATMENT PLANT TO STONE HILL PUMP STATION (Project)

The purpose of this Task Order is as follows:

1. Conduct hydraulic evaluation to select diameter of the parallel pipeline;
2. Conduct pipeline alignment study;
3. Prepare a Preliminary Design Report;
4. Prepare Engineering Feasibility Report (EFR) as required for the Texas Water Development Board SWIFT Funding.

1.0 PROJECT DESCRIPTION

Background:

The District has one pipeline from the Taylor Regional Water Treatment Plant (TRWTP) to the Stone Hill Pump Station (SHPS). The pipeline is a 48-inch reinforced concrete cylinder pipe that crosses IH35E, the Kansas City Southern Railroad, TXU/Oncor's electric transmission line and several streets in Lewisville, and elementary school. The existing pipeline is in easements that vary in width, but generally 30-ft wide. The existing alignment extends through a congested area of residential lots, apartment parking lots and runs within the property boundary of an elementary school. Due to the continued growth in District's service area, this pipeline is reaching its ultimate capacity. Also, it was installed in 1997, and may soon require periodic shutdowns for maintenance and repairs. The proposed Parallel Pipeline from TRWTP to SHPS is needed to meet increasing demands, provide redundancy and operational flexibility.

Project:

The project consists of the design and construction of approximately 19,000 linear feet of large diameter pipeline installed in a very congested area, which will include utilizing trenchless technologies at highway and railroad crossings; and other locations, as necessary. The project includes assisting the OWNER with acquisition of required crossing permits and required temporary and permanent easements. The project is expected to receive SWIFT funding from the Texas Water Development Board.

**ARTICLE I
SCOPE OF SERVICES**

The ENGINEER agrees to furnish the OWNER the following specific services:

2.0 BASIC SERVICES

BASIC SERVICES provided by the ENGINEER shall generally be covered under the following activities:

- Activity A – Project Coordination
- Activity B – Hydraulic Evaluation
- Activity C – Pipeline Alignment Study
- Activity D – Engineering Feasibility Report
- Activity E – Preliminary Design

Specific tasks for each activity are identified in the following sections.

ACTIVITY A – PROJECT COORDINATION

Task 1 – Project Management

Provide project management for Activities A, B, C, D, and E. Project management shall include, but not be limited to, 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 and deliverables; preparing and processing monthly billings; providing labor resources necessary to fulfill scoped work; scheduling and participating in quality control reviews; coordinating and tracking requests for information; and providing updates to the OWNER on a monthly basis. ENGINEER has budgeted up to eight (8) months for project management.

Deliverables:

- Monthly Invoices, with supporting documentation
- Monthly progress reports, including
 1. Budget report
 2. Project schedule
 3. Issues log and information request log

Task 2 – Kickoff Meeting and Meeting Preparation

ENGINEER shall prepare for and facilitate a Project kick-off meeting/workshop for the Project. The meeting will include members of the ENGINEER'S team and OWNER's staff. At the meeting, the ENGINEER shall confirm with the OWNER the scope of work, deliverables, schedule, and administrative protocols.

- A. ENGINEER will prepare and present at the kickoff meeting the following:
1. Review the scope of work and deliverables;
 2. Review Project Management Plan including critical success factors
 3. Review the project schedule, including
 - a. Identifying critical path tasks
 - b. Work to be performed in the next 2 months to address proposed construction by Valley Ridge Properties across OWNER's easement;
 4. Advise OWNER as to the necessity of OWNER providing or obtaining data or services from others.
 5. Develop an Information Request Log and Action Item Log documenting meeting outcomes.

- B. ENGINEER will prepare and distribute draft meeting notes to the OWNER for review within 3 business days of the kickoff meeting. After receipt of comments, the meeting notes will be revised as appropriate, finalized and distributed to the OWNER and team for record purposes.

Deliverables:

- Draft and Final Meeting Notes. Meeting notes will include a copy of all meeting handouts as an attachment.
- Project Management Plan
- Baseline Evaluation Schedule of Activities and Tasks

Task 3 – Project Progress Meetings

ENGINEER will coordinate, prepare for, and conduct coordination update meetings to review progress of the Project. Meetings shall take place at the OWNER's office in Lewisville. Meetings are anticipated to occur monthly or at intervals designated by the OWNER.

- A. ENGINEER will prepare an agenda for the meetings. At a minimum, the agenda will include the following items:
1. Review of work completed during the past month or since last meeting,
 2. Review of work planned for the next month,
 3. Information requested and status (Information Request Log),
 4. Overall project schedule,
 5. Status of past action items (Action Item Log),
 6. Identification of new Action Items.
- B. ENGINEER will moderate the meetings.
- C. ENGINEER will prepare and distribute draft meeting notes for review within 3 business days of the progress meeting. After receipt of comments, the meeting notes shall be revised as appropriate, finalized and distributed to the OWNER and project team for record purposes.
- D. Up to four (4) progress meetings are budgeted under this Task Order. Up to four (4) conference calls/intermediate progress meetings are also planned. The budgeted meetings are in addition to the initial kickoff meeting. Due to the amount of information to be covered, it is anticipated that Quality Control (QC) review meetings will be separate meetings. However, progress meetings planned near the time of the QC review meetings may be abbreviated to eliminate coverage of repetitive topics.

Deliverables:

- Draft and Final Meeting Notes

Task 4 – Meeting with OWNER's Customer Advisor Committee (CAC)

1. Prepare for and participate in presentation/review meeting with ONWER's CAC.
 - a. Submittal: Three (3) hard copies and one (1) electronic copy (pdf) of the PDR marked "DRAFT" for the CAC's review and comment. The OWNER will forward the copies to the CAC prior to the meeting. The information will include the latest updated project schedule and OPCC.

- b. Meet with the OWNER and CAC to review the PDR.
 - c. Provide a written record of CAC comments and the ENGINEER's responses.
2. Finalize PDR based on comments received during the CAC review meeting.

Deliverables:

- PDR marked DRAFT
- PDR marked FINAL

ACTIVITY B – HYDRAULIC EVALUATION

Task 1 – Data Collection

OWNER to provide:

1. Ultimate flow demands for SHPS
2. Pump curves for high service pumps at TRWTP
3. Existing Innowyze InfoWater hydraulic model

Task 2 – Update Hydraulic Model

- A. ENGINEER will perform a hydraulic evaluation on the pumping, transmission and storage system between the TRWTP high service pump station and the SHPS. The hydraulic evaluation will include updating the OWNER's Innowyze InfoWater software hydraulic model. The model will include the high service pumping system headers and piping, transmission piping, and storage tanks at the SHPS.
- B. The model will be calibrated and tested using historical data for flow rates, pressures and tank levels from the existing system, to be provided by OWNER. The calibration will be performed using an extended period simulation so that system conditions (e.g. tank levels/flows/pressures) can be tracked over time.
- C. The calibrated hydraulic model will be modified to incorporate future system flows/demands and anticipated future operational conditions to be provided by OWNER. An extended period simulation for this future system model will be used to evaluate:
 1. Pipeline sizing requirements
 2. Configuration and sizing of storage tanks at the SHPS. The storage evaluation will consider configurations that optimize operations and minimize energy consumption, to the extent feasible.

Task 3 – Hydraulic Evaluation Technical Memorandum

- A. Prepare Hydraulic Evaluation technical memorandum
- B. Participate in Hydraulic Evaluation quality control review meeting with the OWNER.
 1. Submittal: Three (3) hard copies and one (1) electronic copy (pdf) of the Hydraulic Evaluation memo marked "DRAFT" for the OWNER's review and comment. The memo will be provided to the OWNER 7 days prior to the meeting.
 2. Meet with the OWNER to review OWNER's comments.
 3. Provide a written record of OWNER comments and the ENGINEER's responses.
- C. Finalize Hydraulic Evaluation technical memorandum based on comments received during the review meeting.

Deliverable:

- Hydraulic Evaluation technical memorandum marked DRAFT
- Hydraulic Evaluation technical memorandum marked FINAL
- Updated Hydraulic Model

ACTIVITY C – PIPELINE ALIGNMENT STUDY

Task 1 – Alignment Study

- A. Alignment Study will generally follow the 48-inch pipeline from the TRWTP to SHPS
- B. Consider pipeline route option between Fox Hembry Cemetery and I-35E provided to OWNER separately as Figure 1.
- C. Consider pipeline route option between McGee and Garden Ridge provided to OWNER separately as Figure 2.
- D. Develop risk analysis and evaluate open-trench options to trenchless technologies option for:
 1. Section north of Valley Ridge Blvd at Kealy St
 2. Section crossing Dakota Business Park at Mill St
 3. Section across Summit Ridge Apartment
 4. Section across the 30-foot strip of land owned by the District east of SHPS property
- E. Evaluate the need to acquire additional permanent easements along the alignment
- F. Evaluate the need to acquire temporary easements for construction along the alignment
- G. Identify needed utility crossing permits
- H. Identify City of Lewisville permits/easements needed for street crossings and across Daffodil Park
- I. Routing option to connect the parallel pipeline to the high service pump station at TRWTP
- J. Conduct haul route study to evaluate the need for additional construction easements and access easements.
- K. Prepare Pipeline Alignment Study technical memorandum
- L. Participate in Pipeline Alignment Study quality control review meeting with the OWNER.
 1. Submittal: Three (3) hard copies and one (1) electronic copy (pdf) of the Pipeline Alignment Study memo marked "DRAFT" for the OWNER's review and comment. The memo will be provided to the OWNER 7 days prior to the meeting.
 2. Meet with the OWNER to review OWNER's comments.
 3. Provide a written record of OWNER comments and the ENGINEER's responses.
- M. Finalize Pipeline Alignment Study technical memorandum based on comments received during the review meeting.

Deliverable:

- Pipeline Alignment Study Technical Memorandum marked DRAFT
- Pipeline Alignment Study Technical Memorandum marked FINAL

Task 2 – Level I Opinion of Probable Construction Cost (OPCC)

Based on the Pipeline Alignment Study, ENGINEER shall develop the Preliminary Opinion of Probable Construction Cost (OPCC) for the OWNER's use in budgeting the project.

Deliverable:

- Preliminary OPCC

ACTIVITY D – ENGINEERING FEASIBILITY REPORT

Task 1 – Prepare Texas Water Development Board (TWDB) Engineering Feasibility Report (EFR)

- A. The EFR will include:
1. Background and overview of the OWNER, ENGINEER, existing transmission system, historical operations, future needs and a description of the proposed improvements.
 2. The alternatives considered showing the cost effectiveness of the project. Detailed cost-effectiveness analysis, if required, will be provided as an ADDITIONAL SERVICE.
 3. Analysis of alternate delivery methods
 4. Estimated total project cost and identify phasing of the cost in accordance with TWDB Document TWDB-0555.
 5. Detailed project schedule including project phasing
 6. Prepare full environmental review. Archeological Phase I survey, if required by TWDB, will be provided as an additional service.
 7. Any meetings with TWDB will be provided as an additional service.
- B. Submit three (3) hard copies and one (1) electronic copy (pdf) of the EFR marked "DRAFT" for the OWNER's review and comment.
- C. Based on comments received by OWNER, update the EFR and submit three (3) hard copies and one (1) electronic copy (pdf) sealed by Texas registered professional engineer responsible for the design of the project.

Deliverables:

- Engineering Feasibility Report

ACTIVITY E – PRELIMINARY DESIGN

Task 1 –Preliminary Design Report (PDR)

The Preliminary Design Report will include:

- A. Hydraulic Evaluation developed in Activity B as an appendix
- B. Pipeline Alignment Study developed in Activity C as an appendix
- C. The Project includes the crossing of KCS Railway, DCTA rail, I-35E, city streets, commercial parking lots, apartment complex parking lot, and residential property. The ENGINEER will evaluate trenchless options to be considered at these crossings.
 1. Meet with City of Lewisville Engineering Department to discuss crossing of City Streets and Daffodil Park
 2. Meet with KCS Railway for crossing or gaining permit for working within ROW requirements
 3. Meet with DCTA for crossing requirements
 4. Meet with TxDOT for I-35E crossing requirements
- D. ENGINEER will consider trench design for the parallel pipeline. Based on Geotechnical Investigation and SUE provided as SPECIAL SERVICES:

1. Develop typical trench design for the parallel pipeline when the pipe OD separation is a minimum of 5 feet
 2. Trench design for the parallel pipeline when the pipe OD separation is less than 5 feet
 3. Maintaining the integrity of the 48-inch pipeline during construction, develop a loading table when working over the 48-inch pipe.
- E. Review OWNER's standards for air valve assemblies, air valve vaults, and blow-off assemblies. Receive input from OWNER's operations staff for potential revisions to the standards.
- F. Identify the benefits and cost of interconnecting the new parallel pipeline to the existing 48-inch. Identify locations and valving arrangements.
- G. Preliminary steel pipe specification.
- H. Cathodic protection recommendations based on Corrosion Engineering Analysis
- I. Evaluate alternate delivery by Design Bid Build (DBB), Competitive Sealed Proposals (CSP) and Construction Manager at Risk (CMR).
- J. Based on hydraulic evaluation, update SHPS site master plan to include additional ground storage, with consideration to the connection to the suction header at the pump station.
- K. Prepare PDR
- L. Participate in PDR quality control review meeting with OWNER.
1. Submittal: Three (3) hard copies and one (1) electronic copy (pdf) of the PDR marked "DRAFT" for the OWNER's review and comment. The PDR will be provided to the OWNER 7 days prior to the meeting.
 2. Meet with the OWNER to review OWNER's comments.
 3. Provide a written record of OWNER comments and the ENGINEER's responses.
- M. Finalize PDR based on comments received during the review meeting.
- N. Based on SUE and Topographical Survey, and recommendations from the alignment study, develop Preliminary Plan and Profile (P&P) sheets at the scale of 1" =100'
1. Show proposed temporary construction easements
 2. Show proposed temporary access easements
 3. Show proposed new permanent easements
 4. Show proposed bore pit locations
 5. Show proposed locations for air release assemblies
 6. Show proposed locations for blow-off assemblies
- O. Prepare for and conduct a workshop with the OWNER to review the Preliminary P&P sheets.
1. Submittal: Three (3) hard copies and one (1) electronic copy (pdf) of the Preliminary P&P sheets.
 2. During the workshop receive OWNER's comments.
 3. Provide a written record of OWNER comments and the ENGINEER's responses.

Deliverables:

- PDR marked DRAFT
- PDR marked FINAL
- Preliminary P&P sheets

Task 2 – Opinion of Probable Construction Cost (OPCC) Development

- A. ENGINEER will update the OPCC for review by the OWNER in conjunction with the PDR.

Deliverables:

- Updated OPCC based on PDR

3.0 SPECIAL SERVICES

SPECIAL SERVICES are those services known to be required for completion of the project that the OWNER agrees are to be furnished by the ENGINEER or by a subconsultant that cannot be defined sufficiently at this time to establish the maximum compensation. The services are not included in the scope of work of BASIC SERVICES or the amount of compensation for BASIC SERVICES. SPECIAL SERVICES for this assignment are described as follows:

B. Topographic Survey

1. Survey – Surveying will be conducted after Land Agents obtain right-of-entry (ROE), survey scope of work will include the following tasks:
 - a. Utility coordination. Prior to commencing any topographic fieldwork, surveyor will coordinate with, collect and review available public and private utility records within the project limits. The surveyor will submit a utility locate request for the project limits to Texas 811.
 - b. Right-of-Way and Property. Survey will locate and tie existing ROW, property lines and easements including type, size, volume and page, where applicable.
 - c. Survey will horizontally and vertically pick up surface features; drainage features; building locations; fences/retaining walls; trees and/or tree lines; roadways; railways; and city, county and franchise utilities (as provided by Texas 811 utility locate request) within the project area to the following limits:
 - d. Up to 19,000 LF of pipeline alignment mapping to support the design of parallel pipeline project.
 - e. Survey swath shall be approximately 100 feet wide along pipeline alignment corridor.
 - f. Set control points every 1000 linear feet.
 - g. The survey of trees shall include caliper size trunks approximately 6-in and larger. Based on the judgement of the ENGINEER the edge (tree line) of groups of trees or shrubs may be substituted for the survey of all trees within heavily wooded areas. In such areas the ENGINEER shall survey trees that exceed 6-in caliper size. Identification of tree species beyond that provided herein shall be provided as an Additional Service.
 - h. Methods and precision. Survey coordinates will be reported on the Texas State Plane Coordinate System, NAD83 (+/- 0.01 feet) with vertical coordinates reported in the NAVD 88 Vertical System (+/- 0.01 feet). Horizontal and vertical control will be set using post-processed GPS static methods. Data will be collected using RTK GPS and robotic total stations for the majority of the survey.
 - i. All survey data collected will also be submitted in GIS format per project spatial data management and procedures with appropriate ground to grid conversion.
 - j. ENGINEER will prepare up to 35 metes and bounds description of permanent and temporary construction easements, with accompanying exhibits. Extra exhibits shall be provided as an ADDITIONAL SERVICE.
2. Deliverables:
 - a. An electronic abstract report with supporting documents for the parent tract on each proposed instrument.
 - b. Up to 35 Metes and bounds description with accompanying exhibit.
 - c. One electronic executed PDF of the complete instrument for each parcel.
 - d. Three (3) original hard copies of the complete instrument for each parcel.
 - e. Parcel map.

C. Geotechnical Engineering – The geotechnical investigation will occur on parcels where ROE has been obtained at the selected sites. Soil borings will be advanced in selected locations based on surface conditions, pre-existing geotechnical data and other factors. When possible, soil borings will be placed on public ROW. Samples will be acquired, and laboratory tests will be conducted to provide engineering data necessary for the design.

1. Laboratory tests for each sample collected are anticipated to include:
 - a. Dry, saturated, buoyant and total unit weight
 - b. Cohesion
 - c. Particle size and gradation
 - d. Atterburg's limits
 - e. Unified Soil Classification
 - f. Internal soil friction angle
 - g. Void ratio
 - h. Elastic modulus
 - i. Resistivity
 - j. pH
 - k. oxidation-reduction potential
 - l. sulfides
 - m. moisture content
2. The geotechnical budget allowance is based on 20 soil borings up to 30 feet total depth (TD) and 10 borings up to 20 feet total depth. The borings will be backfilled using cuttings and bentonite chips. Actual work required will be refined as the PROJECT progresses. Billing will be based on actual work performed by the geotechnical subcontractor.
3. Deliverables:
 - a. Certified Laboratory Report Copies
 - b. Draft Geotechnical Report
 - c. Final Geotechnical Report

D. Corrosion Engineering Services

1. Testing Phase
 - a. Prior to design we will perform a soil resistivity survey over the length of the pipeline ROW. Soil resistivity will be measured using the Emag system (MK31), supplemented by 4-pin Wenner measurements at critical points. In conjunction with soil chemistry measurements from the soil borings, this will form the basis of the cathodic protection (CP) design.
2. Report/Design Phase
 - a. Once pipeline design is established and soils results are available, a corrosivity report will be provided containing a conceptual galvanic CP system design. Design will include galvanic anodes, test stations, electrical isolation and pipeline electrical bonding. If appropriate, sources of stray interference current will be investigated and mitigative measures evaluated.

E. Subsurface Utility Engineering (SUE) –The ENGINEER shall:

1. Perform up to seventy (70) nondestructive SUE Quality Level A (QL-A) "locates" of up to 15 feet deep for use within project construction limits. This shall be done using vacuum excavation or another appropriate nondestructive technique.
2. Collect and employ SUE Quality Level B (QL-B), Quality Level C (QL-C) and Quality Level D (QL-D) data as necessary to assist in locating the utilities.
3. Coordinate collection of SUE Quality Level C (QL-C) data in conjunction with the project survey including use of applicable parties including utility owners and one call locates.

4. Coordinate collection and incorporation of SUE Quality Level D (QL-D) data from available record information and sources.
5. Document SUE information on the design plans.

F. Right-of-Way Services

1. Right of Entry estimated for up to 35 parcels.
 - a. Research tax appraisal district data.
 - b. Drafted Notice of Project letters and Right-of-Entry documents
 - c. Contact owners to obtain rights of entry for surveying, geotechnical analysis, environmental investigations and appraisals.

4.0 ADDITIONAL SERVICES

ADDITIONAL SERVICES are activities not currently anticipated as part of this project, but which the OWNER may request. The ENGINEER will perform ADDITIONAL SERVICES only as authorized in writing by the OWNER.

- A. Appearing before regulatory agencies arising from the development or construction of the project, including the preparation of engineering data and reports for assistance to the OWNER.
- B. Archeological Phase I Survey.
- C. Attending meetings in addition to those specified in BASIC SERVICES.
- D. Developing design plans
- E. Developing bid packages for construction of sections of pipeline
- F. Providing construction phase services
- G. Preparing for and meeting with property owners to discuss potential impact during construction of the project
- H. Supporting the OWNER during condemnation proceedings

5.0 COMPENSATION

Basic Services:

Owner shall pay compensation to ENGINEER for services provided based on the actual labor hours and expenses incurred in performing the work, in accordance with Exhibit A. The following is the budget allocation described in BASIC SERVICES:

Items A-E \$ 422,165

Special Services:

Compensation by the OWNER to the ENGINEER for any of the Special Services enumerated in Task Order No. 1 will be based on the actual labor hours and expenses incurred in performing the work, in accordance with Exhibit A. The following are budget allocations for each item described in Special Services:

Item A	\$ <u>151,912</u>
Item B	\$ <u>48,282</u>
Item C	\$ <u>61,227</u>
Item D	\$ <u>156,249</u>
Item E	\$ <u>35,262</u>

Additional Services:

Compensation by the OWNER to the ENGINEER for any of the Additional Services enumerated in Task Order No. 1 will be based on the actual labor hours and expenses incurred in performing the work, in accordance with Exhibit A. No work will be performed under this item without prior written authorization of the OWNER. The budget allocation for Additional Services for Task Order No. 1 is \$25,000.

Compensation Summary:

Basic Services Subtotal	\$ <u>422,165</u>
Special Services Subtotal	\$ <u>452,932</u>
Additional Services Subtotal	\$ <u>25,000</u>
TOTAL	\$ <u>900,097</u>

For the OWNER, UPPER TRINITY REGIONAL WATER DISTRICT dated this _____ day
of _____, 2018.

By: _____

Name Title

For the ENGINEER ALAN PLUMMER ASSOCIATES, INC dated this _____ day
of _____, 2018.

By: _____

Alan R. Tucker, P.E., Principal
Name Title