



**DATA SHEET**  
**Agenda No. 14.**

**Meeting Date: October 4, 2018**

**Agenda Item:**

Consider approval of Task Order No. 3 to existing contract with Alan Plummer Associates, Inc. for professional services related to amending the Texas Pollutant Discharge Elimination System (TPDES) permits at the Riverbend and Doe Branch Water Reclamation Plants to address continued growth in the area.

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

**Background:**

The existing Texas Pollutant Discharge Elimination System (TPDES) permits, issued by the Texas Commission on Environmental Quality (TCEQ) for the Riverbend and Doe Branch Plants have maximum discharge limits of 5.7 mgd and 5.225 mgd, respectively. The construction project to expand the Riverbend Plant to 4 mgd is nearing completion, and the project to bring the Doe Branch Plant from 2 mgd to 4 mgd is under design. Due to anticipated continuing rapid growth in both these service areas, there is a need to amend the TPDES permits beyond the initially permitted discharge limits.

Proposed Task Order No. 3 with Alan Plummer Associates, Inc. (APAI) will provide professional services to conduct modeling and evaluate options from the initial TPDES permits at these wastewater treatment facilities. The evaluations are intended to identify maximum flows that can be discharged from each plant site, with practical (achievable) effluent limits. Once these flows and effluent limits are determined, APAI will assist staff in preparation of the permit applications and any additional analyses required to support the applications -- and to assist the District throughout the TCEQ technical review process to ensure that the permit renewals are secured timely and on favorable terms.

Proposed Task Order No. 3 is enclosed, and provides detailed information related to scope of work and the proposed fee. APAI has demonstrated experience with the District in achieving timely approval of such permits at other District treatment facilities. APAI has developed good insights on District operations and a sound reputation with the regulatory agencies.

**Financial:**

Proposed Engineering Task Order No. 3 is \$109,400. Funds are available in the current Capital Budget for the Northeast Water Reclamation System.

**Recommendation:**

Staff recommends approval of proposed Task Order No. 3.

**Enclosures:**

Draft Task Order No. 3.

Submitted By:   
Jody Zabolio, Director of Operations

Date: September 28, 2018

ALAN PLUMMER ASSOCIATES, INC.

ATTACHMENT A-1

TASK ORDER NO. 3

This Task Order is part of the AGREEMENT between Alan Plummer Associates, Inc. (ENGINEER), and Upper Trinity Regional Water District (OWNER), for a project generally described as:

**REGIONAL WATER RECLAMATION SYSTEMS REGULATORY SUPPORT**

The purposes of this Task Order are as follows:

The Upper Trinity Regional Water District (OWNER) currently has Texas Pollutant Discharge Elimination System (TPDES) permits issued by the Texas Commission on Environmental Quality (TCEQ) for the Doe Branch Regional Water Reclamation Plant (DBRWRP) and the Riverbend Regional Water Reclamation Plant (RRWRP). Currently, the OWNER anticipates the need to amend the DBRWRP and RRWRP to add capacity at each plant. In addition, there may be need from time to time for regulatory support.

Alan Plummer Associates, Inc., (ENGINEER) has agreed to prepare amendment applications for the DBRWRP and RRWRP and to assist the OWNER in securing amended TPDES permits for these facilities. ENGINEER will also provide support to the OWNER on an on-call basis for other water quality and regulatory related services.

**ARTICLE I  
SCOPE OF SERVICES**

The Scope of Services includes Basic Engineering Services and Additional Engineering Services. Basic Engineering Services includes those that are reasonably assured to be necessary to accomplish the goals of obtaining amended TPDES permits for DBRWRP and RRWRP. Additional Engineering Services includes services that may be needed to complete the permitting efforts.

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

**BASIC ENGINEERING SERVICES**

The tasks described as Basic Engineering Services are as follows:

- Task I Prepare Permit Application for Major Amendment of Doe Branch Regional Water Reclamation Plant.
- Task II Assist with Permit Application Processing and Review of Draft Permit Documents for Doe Branch Regional Water Reclamation Plant.
- Task III Perform Water Quality Modeling and Provide Documentation to Support Permit Amendment Request for Doe Branch Regional Water Reclamation Plant.

Task IV Prepare Permit Application for Major Amendment of Riverbend Regional Water Reclamation Plant.

Task V Assist with Permit Application Processing and Review of Draft Permit Documents for Riverbend Regional Water Reclamation Plant.

Task VI Perform Water Quality Modeling and Provide Documentation to Support Permit Amendment Request for Riverbend Regional Water Reclamation Plant.

Each Basic Services task has specific activities that are described in the following sections.

Task I – Prepare Permit Application for Major Amendment of Doe Branch Regional Water Reclamation Plant

ENGINEER will prepare an application for a major amendment of the TPDES permit for the DBRWRP. Application forms will be completed. Appropriate attachments to the application forms will be prepared. Copies of the draft application will be provided to OWNER and OWNER's attorney for review. Copies of the final application will be provided for submittal to the TCEQ.

A. Gather Appropriate Information

ENGINEER will review the information available from the previous permit application for the DBRWRP. The ENGINEER will determine what additional information is needed. The OWNER will be provided with a list of the additional information, and the appropriate format for presenting the additional information necessary for the ENGINEER to complete the administrative and technical reports, and associated worksheets that comprise the TPDES permit application.

ENGINEER will request from OWNER information and data regarding design calculations and locations for existing and planned treatment unit expansions, as well as population projection data to justify the expanded flow. ENGINEER assumes that this information will be developed by OWNER's design engineer. If it becomes necessary for ENGINEER to develop the above-listed information, ENGINEER will be entitled to additional reimbursement.

B. Review Analytical Data

ENGINEER will review existing analytical data. A list of any additional analyses that are needed and the associated required sampling protocols will be provided to the OWNER. The OWNER will provide the necessary analytical data. The ENGINEER will verify that the data meet TCEQ requirements.

As part of the TCEQ process to develop permit limits, a TEXTOX calculation report (TCEQ program) is prepared. The TEXTOX calculation report identifies the allowable discharge concentrations for the toxic parameters regulated by the Texas Surface Water Quality Standards. TCEQ will compare the allowable concentrations to the effluent quality data submitted with the permit application to determine if a permit monitoring requirement or limit is required to be included in the permit for any of the toxic parameters.

ENGINEER will prepare a TEXTOX calculation report for the final phase flow for the WWTP. The calculation results will be compared to the effluent data assembled for submittal with the permit application to determine if further evaluations are needed with respect to any of the parameters. If needed, further evaluations may be performed to determine whether the reported data are representative of actual conditions.

C. Prepare Permit Application Documents

The ENGINEER will complete the application forms and assemble the necessary worksheets. The information required may include, but not be limited to, the following: description of the existing facilities, listing of the major treatment units with dimensions of each unit for each phase of the project, design calculations for each phase, process flow schematic diagrams for each phase, facility site plan for each phase, buffer zone map, adjacent landowner maps, location maps, results of pollutant analyses of treated effluent, and discussion regarding the requested permit amendment and continued need for unbuilt phase(s).

The ENGINEER will provide two draft copies and one electronic copy of all permit application documents for OWNER review. One additional draft copy will be provided to the OWNER's attorney. Comments from the OWNER and OWNER's attorney will be appropriately incorporated into the application. Seven copies of the final application document will be provided to the OWNER. Two copies are for the OWNER's files, one copy is for public display, and four copies are for submittal to the TCEQ.

D. Participate in Meetings with OWNER

ENGINEER will prepare for, and participate in, one meeting with the OWNER. The meeting may be held with the OWNER to discuss the permit application and obtain

data, to review the data developed, or to review the permit application. The budget prepared for this activity assumes the meeting will be in Lewisville. If ENGINEER, after receiving prior written approval, attends more than one meeting in Lewisville pursuant to this task, the ENGINEER will be entitled to additional reimbursement.

Task II – Assist with Permit Application Processing and Review of Draft Permit Documents for Doe Branch Regional Water Reclamation Plant.

Pursuant to this task, the ENGINEER will provide services as requested by the OWNER during the processing of the TPDES permit documents for DBRWRP. It is not possible to predict in advance the specific services that will be required. The services that will be provided by the ENGINEER may include but are not limited to, the following:

A. Assist with Responding to Review Comments

ENGINEER will assist the OWNER to respond to TCEQ requests for additional information during the administrative and technical reviews. The ENGINEER also will assist the OWNER in tracking the application through the permitting process by periodically contacting TCEQ staff responsible for developing the permit. During the permitting process, the permittee is required to publish two public notices and to make the permit application, draft permit, and applicable correspondence available for public viewing. The ENGINEER will provide a copy of the permit application and copies of applicable correspondence to the OWNER for this purpose. The OWNER will be responsible for publishing the notices and paying the costs of the publishing. The OWNER will also be responsible for placing the permit application, draft permit, and related correspondence in a suitable location for public viewing.

B. Review and Comment on Draft TPDES Permit

ENGINEER will review up to three drafts of the TPDES permit. ENGINEER will assist the OWNER to draft letters that provide requested changes and supporting information to TCEQ. Draft letters will be provided to the OWNER's attorney for review prior to submitting to TCEQ.

C. Participate in Meetings with TCEQ

ENGINEER will prepare for, and participate in, one meeting with the OWNER and TCEQ. A meeting may be held with TCEQ to discuss proposed permit provisions. The budget prepared for this activity assumes this meeting will be held in Austin. If ENGINEER attends more than one meeting, ENGINEER will be entitled to additional reimbursement.

Task III – Perform Water Quality Modeling and Provide Documentation to Support Permit Amendment Request for Doe Branch Regional Water Reclamation Plant.

ENGINEER will conduct an evaluation of the existing water quality models for the DBRWRP discharge and prepare a technical memorandum that presents the findings of the water quality model evaluation. The activities involved with this task are as follows:

- Request and review latest water quality models and associated information (e.g. memos, reports, and data) from TCEQ.
- Identify any changes to model parameters and inputs since last permit renewal
- Identify practical, seasonal permit limits for future plant expansions.
- Identify the critical factors/conditions causing limitations for the permit limits. If there are deficiencies to the information related to conditions/ assumptions used in the models, ENGINEER will identify the deficiencies and present recommendations to obtain the additional information.

The level of effort required to complete water quality modeling evaluations varies significantly. For this reason, it is important to clarify that although ENGINEER believes the Basic Services budget will be sufficient to complete this task, it is possible that more effort than anticipated will be necessary. Should additional efforts be necessary, ENGINEER will inform the OWNER of the need for additional efforts to complete the modeling efforts and may request authorization to perform Additional Services.

#### Task IV – Prepare Permit Application for Major Amendment of Riverbend Regional Water Reclamation Plant.

ENGINEER will prepare an application for a major amendment of the TPDES permit for the RRWRP. Application forms will be completed. Appropriate attachments to the application forms will be prepared. Copies of the draft application will be provided to OWNER and OWNER's attorney for review. Copies of the final application will be provided for submittal to the TCEQ.

##### A. Gather Appropriate Information

ENGINEER will review the information available from the previous permit application for the RRWRP. The ENGINEER will determine what additional information is needed. The OWNER will be provided with a list of the additional information, and the appropriate format for presenting the additional information necessary for the ENGINEER to complete the administrative and technical reports, and associated worksheets that comprise the TPDES permit application.

ENGINEER will request from OWNER information and data regarding design calculations and locations for existing and planned treatment unit expansions, as well as population projection data to justify the expanded flow. ENGINEER assumes that this information will be developed by OWNER's design engineer. If it becomes

necessary for ENGINEER to develop the above-listed information, ENGINEER will be entitled to additional reimbursement.

##### B. Review Analytical Data

ENGINEER will review existing analytical data. A list of any additional analyses that are needed and the associated required sampling protocols will be provided to the OWNER. The OWNER will provide the necessary analytical data. The ENGINEER will verify that the data meet TCEQ requirements.

As part of the TCEQ process to develop permit limits, a TEXTOX calculation report (TCEQ program) is prepared. The TEXTOX calculation report identifies the allowable discharge concentrations for the toxic parameters regulated by the Texas Surface Water Quality Standards. TCEQ will compare the allowable concentrations to the effluent quality data submitted with the permit application to determine if a permit monitoring requirement or limit is required to be included in the permit for any of the toxic parameters.

ENGINEER will prepare a TEXTOX calculation report for the final phase flow for the WWTP. The calculation results will be compared to the effluent data assembled for submittal with the permit application to determine if further evaluations are needed with respect to any of the parameters. If needed, further evaluations may be performed to determine whether the reported data are representative of actual conditions.

##### C. Prepare Permit Application Documents

The ENGINEER will complete the application forms and assemble the necessary worksheets. The information required may include, but not be limited to, the following: description of the existing facilities, listing of the major treatment units with dimensions of each unit for each phase of the project, design calculations for each phase, process flow schematic diagrams for each phase, facility site plan for each phase, buffer zone map, adjacent landowner maps, location maps, results of pollutant analyses of treated effluent, and discussion regarding the requested permit amendment and continued need for unbuild phase(s).

The ENGINEER will provide two draft copies and one electronic copy of all permit application documents for OWNER review. One additional draft copy will be provided to the OWNER's attorney. Comments from the OWNER and OWNER's attorney will be appropriately incorporated into the application. Seven copies of the final application document will be provided to the OWNER. Two copies are for the OWNER's files, one copy is for public display, and four copies are for submittal to the TCEQ.

D. Participate in Meetings with OWNER

ENGINEER will prepare for, and participate in, one meeting with the OWNER. The meeting may be held with the OWNER to discuss the permit application and obtain data, to review the data developed, or to review the permit application. The budget prepared for this activity assumes the meeting will be in Lewisville. If ENGINEER, after receiving prior written approval, attends more than one meeting in Lewisville pursuant to this task, the ENGINEER will be entitled to additional reimbursement.

Task V – Assist with Permit Application Processing and Review of Draft Permit Documents for Riverbend Regional Water Reclamation Plant.

Pursuant to this task, the ENGINEER will provide services as requested by the OWNER during the processing of the TPDES permit documents for RRWRP. It is not possible to predict in advance the specific services that will be required. The services that will be provided by the ENGINEER may include, but are not limited to, the following:

A. Assist with Responding to Review Comments

ENGINEER will assist the OWNER to respond to TCEQ requests for additional information during the administrative and technical reviews. The ENGINEER also will assist the OWNER in tracking the application through the permitting process by periodically contacting TCEQ staff responsible for developing the permit. During the permitting process, the permittee is required to publish two public notices and to make the permit application, draft permit, and applicable correspondence available for public viewing. The ENGINEER will provide a copy of the permit application and copies of applicable correspondence to the OWNER for this purpose. The OWNER will be responsible for publishing the notices and paying the costs of the publishing. The OWNER will also be responsible for placing the permit application, draft permit, and related correspondence in a suitable location for public viewing.

B. Review and Comment on Draft TPDES Permit

ENGINEER will review up to three drafts of the TPDES permit. ENGINEER will assist the OWNER to draft letters that provide requested changes and supporting information to TCEQ. Draft letters will be provided to the OWNER’s attorney for review prior to submitting to TCEQ.

C. Participate in Meetings with TCEQ

ENGINEER will prepare for, and participate in, one meeting with the OWNER and TCEQ. A meeting may be held with TCEQ to discuss proposed permit provisions. The budget prepared for this activity assumes this meeting will be held in Austin. If ENGINEER attends more than one meeting, ENGINEER will be entitled to additional reimbursement.

Task VI – Perform Water Quality Modeling and Provide Documentation to Support Permit Amendment Request for Riverbend Regional Water Reclamation Plant.

ENGINEER will conduct an evaluation of the existing water quality models for the RRWRP discharge and prepare a technical memorandum that presents the findings of the water quality model evaluation. The activities involved with this task are as follows:

- Request and review latest water quality models and associated information (e.g. memos, reports, and data) from TCEQ.
- Identify any changes to model parameters and inputs since last permit renewal
- Identify practical, seasonal permit limits for future plant expansions.
- Identify the critical factors/conditions causing limitations for the permit limits. If there are deficiencies to the information related to conditions/ assumptions used in the models, ENGINEER will identify the deficiencies and present recommendations to obtain the additional information.

The level of effort required to complete water quality modeling evaluations varies significantly. For this reason, it is important to clarify that although ENGINEER believes the Basic Services budget will be sufficient to complete this task, it is possible that more effort than anticipated will be necessary. Should additional efforts be necessary, ENGINEER will inform the OWNER of the need for additional efforts to complete the modeling efforts and may request authorization to perform Additional Services.

**ADDITIONAL ENGINEERING SERVICES**

Additional Engineering Services are activities not currently anticipated as part of Basic Engineering Services for this project, but which the OWNER may request. ENGINEER will perform Additional Engineering Services only as authorized to do so by the OWNER. For any Additional Engineering Services requested by the OWNER, the ENGINEER will first prepare a scope and budget for the services for approval by the OWNER. The following tasks are examples of what may become necessary or desired in the future as part of Additional Engineering Services:

Task VII – Perform Additional Permitting and Modeling Support Services for the Doe Branch Regional Water Reclamation Plant.

If necessary, this task provides for additional permitting and water quality modeling support services to complete the RRWRP application for the amendment, water quality modeling, routine support for the processing of the application, or review of additional draft permits. The ENGINEER will inform the OWNER of the need to implement this task and, if

requested, will provide additional scope and budget for such services.

Task VIII – Perform Additional Permitting and Modeling Support Services for the Riverbend Regional Water Reclamation Plant.

If necessary, this task provides for additional permitting and water quality modeling support services to complete the RRWRP application for the amendment, water quality modeling, routine support for the processing of the application, or review of additional draft permits. The ENGINEER will inform the OWNER of the need to implement this task and, if requested, will provide additional scope and budget for such services.

Task IX – Provide on-call regulatory support for issues relating to the Doe Branch Regional Water Reclamation Plant.

ENGINEER will, at the request of the OWNER, provide other on-call services related to the DBRWRP. ENGINEER will provide a scope, budget, and schedule for any such services requested.

Task X – Provide on-call regulatory support for issues relating to the Riverbend Regional Water Reclamation Plant.

ENGINEER will, at the request of the OWNER, provide other on-call services related to the RRWRP. ENGINEER will provide a scope, budget, and schedule for any such services requested.

Other potential Additional Engineering Services may include but are not limited to the following:

- Preparation for, and attendance at, additional meetings to discuss the project, beyond that described in BASIC SERVICES.
- Field reconnaissance to collect data or information not available or otherwise provided by OWNER.
- Preparation to serve or serve as an expert witness on behalf of OWNER.
- Provide technical or procedural support if proposed permit is protested.
- Provide supplemental information during TCEQ review of the permit application beyond that which is provided pursuant to BASIC SERVICES.
- Conduct research or studies on technical or regulatory topics relevant to the TPDES permit, and summarize the findings in a letter or memorandum.
- Review draft permit in addition to those reviewed pursuant to BASIC SERVICES.
- Revise permit application documents due to changes in proposed amendments to the permit after preparation of application has begun.

**ARTICLE II  
COMPENSATION**

The OWNER shall pay compensation to the ENGINEER for services provided on a time and materials basis not to exceed the following amounts:

**Basic Engineering Services**

Task I Preparation of DBRWRP Amendment Application	\$20,000
Task II Processing of DBRWRP Amendment Application	\$12,000
Task III Modeling associated with the DBRWRP Amendment Application	\$20,400
Task IV Preparation of RRWRP Amendment Application	\$21,000
Task V Processing of RRWRP Amendment Application	\$12,000
Task VI Modeling associated with the RRWRP Amendment Application	\$24,000
<b>BASIC SERVICES TOTAL</b>	<b>\$109,400</b>

The ENGINEER will not provide services, the value of which exceeds the Total Fee authorized, unless the OWNER authorizes additional funds. Personnel time will be billed at the rates presented in Exhibit A. Expenses will be billed at actual cost. Mileage will be billed at the IRS allowable reimbursement rate for business miles.

**Additional Engineering Services**

Additional Engineering Services, which may be required by the OWNER, shall be based on the actual hours and costs in accordance with Exhibit A. A budget allowance of \$25,000.00 has been made for this item and will not be exceeded without written authorization of the OWNER. No work will be undertaken without specific written authorization from the OWNER.

**OTHER PROVISIONS**

The following provision shall apply to this Task Order:

The ENGINEER's compensation is based on immediate authorization to proceed and timely completion of the project. If the project timing deviates from the assumed schedule for causes beyond the ENGINEER's control, the ENGINEER reserves the right to request renegotiation of those portions of the Task Order affected by the time change.

This Task Order will become part of the referenced AGREEMENT when executed by both parties.

IN WITNESS WHEREOF, the parties execute below:

For the OWNER, Upper Trinity Regional Water District dated this \_\_\_ day of \_\_\_\_\_, 2018.

By: \_\_\_\_\_

Title: \_\_\_\_\_

For the ENGINEER, Alan Plummer Associates, Inc. dated this \_\_\_ day of \_\_\_\_\_, 2018.

By: \_\_\_\_\_

Title: \_\_\_\_\_

DRAFT

**EXHIBIT A**  
**ALAN PLUMMER ASSOCIATES, INC.**  
**HOURLY FEE SCHEDULE**  
**2018**

Staff Description	Staff Code	Range of Billing Rates
Admin Staff	A1-A3	\$ 70.00 - \$ 85.00
Senior Admin Staff	A4	\$ 90.00 - \$110.00
Designer/Technician	C1-C2	\$ 70.00 - \$100.00
Designer/Technician III	C3	\$ 90.00 - \$115.00
Senior Designer/Technician	C4	\$100.00 - \$145.00
Electrical Engineer	E1	\$105.00 - \$150.00
Senior Electrical Engineer	E2	\$175.00 - \$250.00
Engineer/Scientist Intern	ES0	\$ 50.00 - \$ 75.00
Engineer-in-Training/Scientist-in-Training	ES1-ES2	\$ 70.00 - \$100.00
Engineer-in-Training/Scientist-in-Training III	ES3	\$ 85.00 - \$120.00
Project Engineer/Scientist	ES4	\$110.00 - \$135.00
Senior Project Engineer/Scientist	ES5	\$120.00 - \$165.00
Project Manager	ES6	\$150.00 - \$205.00
Senior Project Manager	ES7	\$175.00 - \$240.00
Principal I	ES8	\$220.00 - \$275.00
Principal II	ES9	\$250.00 - \$300.00

Billing rates are based on "salary cost" times a multiplier of 3.0.

Range of billing rates shown may be adjusted by up to 4 percent annually (at the beginning of each calendar year) during the term of this agreement. The multipliers shown will not be adjusted.

A multiplier of 1.10 will be applied to all direct expenses.

A technology charge will be billed at \$4.25 per labor hour.