



**EXHIBIT  
"A"**

**CITY OF ROUND ROCK  
CONTRACT FOR ENGINEERING SERVICES**

**FIRM:** PLUMMER AND ASSOCIATES, INC. ("Engineer")  
**ADDRESS:** 6300 La Calma Drive, Suite 400, Austin, TX 78752  
**PROJECT:** BCRWWS East Wastewater Treatment Plant Expansion to 40 MGD

**THE STATE OF TEXAS** §  
§  
**COUNTY OF WILLIAMSON** §

THIS CONTRACT FOR ENGINEERING SERVICES ("Contract") is made and entered into on this the \_\_\_\_ day of \_\_\_\_\_, 2023 by and between the CITY OF ROUND ROCK, a Texas home-rule municipal corporation, whose offices are located at 221 East Main Street, Round Rock, Texas 78664-5299, (hereinafter referred to as "City"), and Engineer, and such Contract is for the purpose of contracting for professional engineering services.

**RECITALS:**

WHEREAS, V.T.C.A., Government Code §2254.002(2)(A)(vii) under Subchapter A entitled "Professional Services Procurement Act" provides for the procurement by municipalities of services of professional engineers; and

WHEREAS, City and Engineer desire to contract for such professional engineering services; and

WHEREAS, City and Engineer wish to document their agreement concerning the requirements and respective obligations of the parties;

NOW, THEREFORE, WITNESSETH:

That for and in consideration of the mutual promises contained herein and other good and valuable considerations, and the covenants and agreements hereinafter contained to be kept and performed by the respective parties hereto, it is agreed as follows:

## **CONTRACT DOCUMENTS**

The Contract Documents consist of this Contract and any exhibits attached hereto (which exhibits are hereby incorporated into and made a part of this Contract) and all Supplemental Contracts (as defined herein in Article 13) which are subsequently issued. These form the entire contract, and all are as fully a part of this Contract as if attached to this Contract or repeated herein.

### **ARTICLE 1** **CITY SERVICES**

City shall perform or provide services as identified in Exhibit A entitled "City Services."

### **ARTICLE 2** **ENGINEERING SERVICES**

Engineer shall perform Engineering Services as identified in Exhibit B entitled "Engineering Services."

Engineer shall perform the Engineering Services in accordance with the Work Schedule as identified in Exhibit C entitled "Work Schedule." Such Work Schedule shall contain a complete schedule so that the Engineering Services under this Contract may be accomplished within the specified time and at the specified cost. The Work Schedule shall provide specific work sequences and definite review times by City and Engineer of all Engineering Services. Should the review times or Engineering Services take longer than shown on the Work Schedule, through no fault of Engineer, Engineer may submit a timely written request for additional time, which shall be subject to the approval of the City Manager.

### **ARTICLE 3** **CONTRACT TERM**

**(1) Term.** The Engineer is expected to complete the Engineering Services described herein in accordance with the above described Work Schedule. If Engineer does not perform the Engineering Services in accordance with the Work Schedule, then City shall have the right to terminate this Contract as set forth below in Article 20. So long as the City elects not to terminate this Contract, it shall continue from day to day until such time as the Engineering Services are completed. Any Engineering Services performed or costs incurred after the date of termination shall not be eligible for reimbursement. Engineer shall notify City in writing as soon as possible if he/she/it determines, or reasonably anticipates, that the Engineering Services will not be completed in accordance with the Work Schedule.

**(2) Work Schedule.** Engineer acknowledges that the Work Schedule is of critical importance, and agrees to undertake all necessary efforts to expedite the performance of Engineering Services required herein so that construction of the project will be commenced and completed as scheduled. In this regard, and subject to adjustments in the Work Schedule as provided in Article 2 herein, Engineer shall proceed with sufficient qualified personnel and consultants necessary to fully and timely accomplish all Engineering Services required under this Contract in a professional manner.

**(3) Notice to Proceed.** After execution of this Contract, Engineer shall not proceed with Engineering Services until authorized in writing by City to proceed as provided in Article 7.

#### **ARTICLE 4** **COMPENSATION**

City shall pay and Engineer agrees to accept the amount shown below as full compensation for all engineering services performed and to be performed under this Contract.

Engineer shall be paid on the basis of actual hours worked by employees performing work associated with this Contract, in accordance with the Fee Schedule attached hereto as Exhibit D. Payment of monies due for the Engineer's subconsultant's services shall be based on the actual amount billed to the Engineer by the subconsultant. Payment of monies due for direct cost expenses shall be based on the actual costs.

The maximum amount payable under this Contract, without modification of this Contract as provided herein, is the sum of Six Million Seventy-Two Thousand Eight Hundred Forty-Nine and No/100 Dollars, (\$6,072,849.00). Engineer shall prepare and submit to City monthly progress reports in sufficient detail to support the progress of the work and to support invoices requesting monthly payment. Any preferred format of City for such monthly progress reports shall be identified in Exhibit B entitled "Engineering Services". Satisfactory progress of work shall be an absolute condition of payment.

The maximum amount payable herein may be adjusted for additional work requested and performed only if approved by written Supplemental Agreement.

#### **ARTICLE 5** **METHOD OF PAYMENT**

Payments to Engineer shall be made while Engineering Services are in progress. Engineer shall prepare and submit to City, not more frequently than once per month, a progress report as referenced in Article 4 above. Such progress report shall state the percentage of completion of Engineering Services accomplished during that billing period and to date. Simultaneous with submission of such progress report, Engineer shall prepare and submit one (1) original and one (1) copy of a certified invoice in a form acceptable to City. This submittal shall also include a progress assessment report in a form acceptable to City.

Progress payments shall be made in proportion to the percentage of completion of Engineering Services identified in Exhibit D. Progress payments shall be made by City based upon Engineering Services actually provided and performed. Upon timely receipt and approval of each statement, City shall make a good faith effort to pay the amount which is due and payable within thirty (30) days. City reserves the right to withhold payment pending verification of satisfactory Engineering Services performed. Engineer has the responsibility to submit proof to City, adequate and sufficient in its determination, that tasks were completed.

The certified statements shall show the total amount earned to the date of submission and shall show the amount due and payable as of the date of the current statement. Final payment does not relieve

Engineer of the responsibility of correcting any errors and/or omissions resulting from his/her/its negligence.

## **ARTICLE 6**

### **PROMPT PAYMENT POLICY**

In accordance with Chapter 2251, V.T.C.A., Texas Government Code, payment to Engineer will be made within thirty (30) days of the day on which the performance of services was complete, or within thirty (30) days of the day on which City receives a correct invoice for services, whichever is later. Engineer may charge a late fee (fee shall not be greater than that which is permitted by Texas law) for payments not made in accordance with this prompt payment policy; however, this policy does not apply in the event:

- A. There is a bona fide dispute between City and Engineer concerning the supplies, materials, or equipment delivered or the services performed that causes the payment to be late; or
- B. The terms of a federal contract, grant, regulation, or statute prevent City from making a timely payment with federal funds; or
- C. There is a bona fide dispute between Engineer and a subcontractor or between a subcontractor and its supplier concerning supplies, materials, or equipment delivered or the Engineering Services performed which causes the payment to be late; or
- D. The invoice is not mailed to City in strict accordance with instructions, if any, on the purchase order, or this Contract or other such contractual agreement.

City shall document to Engineer the issues related to disputed invoices within ten (10) calendar days of receipt of such invoice. Any non-disputed invoices shall be considered correct and payable per the terms of Chapter 2251, V.T.C.A., Texas Government Code.

## **ARTICLE 7**

### **NOTICE TO PROCEED**

The Engineer shall not proceed with any task listed on Exhibit B until the City has issued a written Notice to Proceed regarding such task. The City shall not be responsible for work performed or costs incurred by Engineer related to any task for which a Notice to Proceed has not been issued.

## **ARTICLE 8**

### **PROJECT TEAM**

City's Designated Representative for purposes of this Contract is as follows:

Rebecca Vento, P.E.  
Project Manager  
3400 Sunrise Road  
Round Rock, TX 78665  
Telephone Number (512) 341-3129  
Fax Number N/A

Email Address [rvento@roundrocktexas.gov](mailto:rvento@roundrocktexas.gov)

City's Designated Representative shall be authorized to act on City's behalf with respect to this Contract. City or City's Designated Representative shall render decisions in a timely manner pertaining to documents submitted by Engineer in order to avoid unreasonable delay in the orderly and sequential progress of Engineering Services.

Engineer's Designated Representative for purposes of this Contract is as follows:

Perran Hutton, P. E.  
Project Manager  
6300 La Calma Drive, Suite 400  
Austin, TX 78752  
Telephone Number (512) 687-2170  
Fax Number N/A  
Email Address [phutton@plummer.com](mailto:phutton@plummer.com)

## **ARTICLE 9**

### **PROGRESS EVALUATION**

Engineer shall, from time to time during the progress of the Engineering Services, confer with City at City's election. Engineer shall prepare and present such information as may be pertinent and necessary, or as may be requested by City, in order for City to evaluate features of the Engineering Services. At the request of City or Engineer, conferences shall be provided at Engineer's office, the offices of City, or at other locations designated by City. When requested by City, such conferences shall also include evaluation of the Engineering Services.

Should City determine that the progress in Engineering Services does not satisfy the Work Schedule, then City shall review the Work Schedule with Engineer to determine corrective action required.

Engineer shall promptly advise City in writing of events which have or may have a significant impact upon the progress of the Engineering Services, including but not limited to the following:

- (1) Problems, delays, adverse conditions which may materially affect the ability to meet the objectives of the Work Schedule, or preclude the attainment of project Engineering Services units by established time periods; and such disclosure shall be accompanied by statement of actions taken or contemplated, and City assistance needed to resolve the situation, if any; and
- (2) Favorable developments or events which enable meeting the Work Schedule goals sooner than anticipated.

## **ARTICLE 10**

### **SUSPENSION**

Should City desire to suspend the Engineering Services, but not to terminate this Contract, then such suspension may be effected by City giving Engineer thirty (30) calendar days' verbal notification followed by written confirmation to that effect. Such thirty-day notice may be waived in writing by agreement and signature of both parties. The Engineering Services may be reinstated and resumed in full force and effect within sixty (60) days of receipt of written notice from City to resume the Engineering Services. Such sixty-day notice may be waived in writing by agreement and signature of both parties. If this Contract is suspended for more than thirty (30) days, Engineer shall have the option of terminating this Contract.

If City suspends the Engineering Services, the contract period as determined in Article 3, and the Work Schedule, shall be extended for a time period equal to the suspension period.

City assumes no liability for Engineering Services performed or costs incurred prior to the date authorized by City for Engineer to begin Engineering Services, and/or during periods when Engineering Services is suspended, and/or subsequent to the contract completion date.

## **ARTICLE 11**

### **ADDITIONAL ENGINEERING SERVICES**

If Engineer forms a reasonable opinion that any work he/she/it has been directed to perform is beyond the scope of this Contract and as such constitutes extra work, he/she/it shall promptly notify City in writing. In the event City finds that such work does constitute extra work and exceeds the maximum amount payable, City shall so advise Engineer and a written Supplemental Contract will be executed between the parties as provided in Article 13. Engineer shall not perform any proposed additional work nor incur any additional costs prior to the execution, by both parties, of a written Supplemental Contract. City shall not be responsible for actions by Engineer nor for any costs incurred by Engineer relating to additional work not directly associated with the performance of the Engineering Services authorized in this Contract or any amendments thereto.

## **ARTICLE 12**

### **CHANGES IN ENGINEERING SERVICES**

If City deems it necessary to request changes to previously satisfactorily completed Engineering Services or parts thereof which involve changes to the original Engineering Services or character of Engineering Services under this Contract, then Engineer shall make such revisions as requested and as directed by City. Such revisions shall be considered as additional Engineering Services and paid for as specified under Article 11.

Engineer shall make revisions to Engineering Services authorized hereunder as are necessary to correct errors appearing therein, when required to do so by City. No additional compensation shall be due for such Engineering Services.

### **ARTICLE 13**

#### **SUPPLEMENTAL CONTRACTS**

The terms of this Contract may be modified by written Supplemental Contract if City determines that there has been a significant change in (1) the scope, complexity or character of the Engineering Services, or (2) the duration of the Engineering Services. Any such Supplemental Contract must be duly authorized by the City. Engineer shall not proceed until the Supplemental Contract has been executed. Additional compensation, if appropriate, shall be identified as provided in Article 4.

It is understood and agreed by and between both parties that Engineer shall make no claim for extra work done or materials furnished until the City authorizes full execution of the written Supplemental Contract and authorization to proceed. City reserves the right to withhold payment pending verification of satisfactory Engineering Services performed.

### **ARTICLE 14**

#### **USE OF DOCUMENTS**

All documents, including but not limited to drawings, specifications and data or programs stored electronically, (hereinafter referred to as "Instruments of Service") prepared by Engineer and its subcontractors are related exclusively to the services described in this Contract and are intended to be used with respect to this Project. However, it is expressly understood and agreed by and between the parties hereto that all of Engineer's designs under this Contract (including but not limited to tracings, drawings, estimates, specifications, investigations, studies and other documents, completed or partially completed), shall be the property of City to be thereafter used in any lawful manner as City elects. Any such subsequent use made of documents by City shall be at City's sole risk and without liability to Engineer, and, to the extent permitted by law, City shall hold harmless Engineer from all claims, damages, losses and expenses, resulting therefrom. Any modification of the plans will be evidenced on the plans and be signed and sealed by a licensed professional prior to re-use of modified plans.

By execution of this Contract and in confirmation of the fee for services to be paid under this Contract, Engineer hereby conveys, transfers and assigns to City all rights under the Federal Copyright Act of 1976 (or any successor copyright statute), as amended, all common law copyrights and all other intellectual property rights acknowledged by law in the Project designs and work product developed under this Contract. Copies may be retained by Engineer. Engineer shall be liable to City for any loss or damage to any such documents while they are in the possession of or while being worked upon by Engineer or anyone connected with Engineer, including agents, employees, Engineers or subcontractors. All documents so lost or damaged shall be replaced or restored by Engineer without cost to City.

Upon execution of this Contract, Engineer grants to City permission to reproduce Engineer's work and documents for purposes of constructing, using and maintaining the Project, provided that City shall comply with its obligations, including prompt payment of all sums when due, under this Contract. Engineer shall obtain similar permission from Engineer's subcontractors consistent with this Contract. If and upon the date Engineer is adjudged in default of this Contract, City is permitted to authorize other similarly credentialed design professionals to reproduce and, where permitted by law, to make changes, corrections or additions to the work and documents for the purposes of completing, using and maintaining the Project.

City shall not assign, delegate, sublicense, pledge or otherwise transfer any permission granted herein to another party without the prior written contract of Engineer. However, City shall be permitted to authorize the contractor, subcontractors and material or equipment suppliers to reproduce applicable portions of the Instruments of Service appropriate to and for use in their execution of the Work. Submission or distribution of Instruments of Service to meet official regulatory requirements or for similar purposes in connection with the Project is permitted. Any unauthorized use of the Instruments of Service shall be at City's sole risk and without liability to Engineer and its Engineers.

Prior to Engineer providing to City any Instruments of Service in electronic form or City providing to Engineer any electronic data for incorporation into the Instruments of Service, City and Engineer shall by separate written contract set forth the specific conditions governing the format of such Instruments of Service or electronic data, including any special limitations not otherwise provided in this Contract. Any electronic files are provided by Engineer for the convenience of City, and use of them is at City's sole risk. In the case of any defects in electronic files or any discrepancies between them and any hardcopy of the same documents prepared by Engineer, the hardcopy shall prevail. Only printed copies of documents conveyed by Engineer shall be relied upon.

Engineer shall have no liability for changes made to the drawings by other engineers subsequent to the completion of the Project. Any such change shall be sealed by the engineer making that change and shall be appropriately marked to reflect what was changed or modified.

#### **ARTICLE 15** **PERSONNEL, EQUIPMENT AND MATERIAL**

Engineer shall furnish and maintain, at its own expense, quarters for the performance of all Engineering Services, and adequate and sufficient personnel and equipment to perform the Engineering Services as required. All employees of Engineer shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Engineer who, in the opinion of City, is incompetent or whose conduct becomes detrimental to the Engineering Services shall immediately be removed from association with the project when so instructed by City. Engineer certifies that it presently has adequate qualified personnel in its employment for performance of the Engineering Services required under this Contract, or will obtain such personnel from sources other than City. Engineer may not change the Project Manager without prior written consent of City.

#### **ARTICLE 16** **SUBCONTRACTING**

Engineer shall not assign, subcontract or transfer any portion of the Engineering Services under this Contract without prior written approval from City. All subcontracts shall include the provisions required in this Contract and shall be approved as to form, in writing, by City prior to Engineering Services being performed under the subcontract. No subcontract shall relieve Engineer of any responsibilities under this Contract.

**ARTICLE 17**  
**EVALUATION OF ENGINEERING SERVICES**

City, or any authorized representatives of it, shall have the right at all reasonable times to review or otherwise evaluate the Engineering Services performed or being performed hereunder and the premises on which it is being performed. If any review or evaluation is made on the premises of Engineer or a subcontractor, then Engineer shall provide and require its subcontractors to provide all reasonable facilities and assistance for the safety and convenience of City or other representatives in the performance of their duties.

**ARTICLE 18**  
**SUBMISSION OF REPORTS**

All applicable study reports shall be submitted in preliminary form for approval by City before any final report is issued. City's comments on Engineer's preliminary reports shall be addressed in any final report.

**ARTICLE 19**  
**VIOLATION OF CONTRACT TERMS/BREACH OF CONTRACT**

Violation of contract terms or breach of contract by Engineer shall be grounds for termination of this Contract, and any increased costs arising from Engineer's default, breach of contract, or violation of contract terms shall be paid by Engineer.

**ARTICLE 20**  
**TERMINATION**

This Contract may be terminated as set forth below.

- (1) By mutual agreement and consent, in writing, of both parties.
- (2) By City, by notice in writing to Engineer, as a consequence of failure by Engineer to perform the Engineering Services set forth herein in a satisfactory manner.
- (3) By either party, upon the failure of the other party to fulfill its obligations as set forth herein.
- (4) By City, for reasons of its own and not subject to the mutual consent of Engineer, upon not less than thirty (30) days' written notice to Engineer.
- (5) By satisfactory completion of all Engineering Services and obligations described herein.

Should City terminate this Contract as herein provided, no fees other than fees due and payable at the time of termination shall thereafter be paid to Engineer. In determining the value of the Engineering Services performed by Engineer prior to termination, City shall be the sole judge. Compensation for Engineering Services at termination will be based on a percentage of the Engineering Services completed

at that time. Should City terminate this Contract under Subsection (4) immediately above, then the amount charged during the thirty-day notice period shall not exceed the amount charged during the preceding thirty (30) days.

If Engineer defaults in the performance of this Contract or if City terminates this Contract for fault on the part of Engineer, then City shall give consideration to the actual costs incurred by Engineer in performing the Engineering Services to the date of default, the amount of Engineering Services required which was satisfactorily completed to date of default, the value of the Engineering Services which are usable to City, the reasonable and necessary cost to City of employing another firm to complete the Engineering Services required and the time required to do so, and other factors which affect the value to City of the Engineering Services performed at the time of default.

The termination of this Contract and payment of an amount in settlement as prescribed above shall extinguish all rights, duties, and obligations of City and Engineer under this Contract, except the obligations set forth herein in Article 21 entitled "Compliance with Laws." If the termination of this Contract is due to the failure of Engineer to fulfill his/her/its contractual obligations, then City may take over the project and prosecute the Engineering Services to completion. In such case, Engineer shall be liable to City for any additional and reasonable costs incurred by City.

Engineer shall be responsible for the settlement of all contractual and administrative issues arising out of any procurements made by Engineer in support of the Engineering Services under this Contract.

## **ARTICLE 21**

### **COMPLIANCE WITH LAWS**

**(1) Compliance.** Engineer shall comply with all applicable state, federal and local laws, statutes, codes, ordinances, rules and regulations, and the orders and decrees of any court, or administrative bodies or tribunals in any manner affecting the performance of this Contract, including without limitation, minimum/maximum salary and wage statutes and regulations, and licensing laws and regulations. Engineer shall furnish City with satisfactory proof of his/her/its compliance.

Engineer shall further obtain all permits and licenses required in the performance of the Engineering Services contracted for herein.

**(2)** As required by Chapter 2271, Government Code, Engineer hereby verifies that it does not boycott Israel and will not boycott Israel through the term of this Agreement. For purposes of this verification, "boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

**(3)** In accordance with 2274, Texas Government Code, a governmental entity may not enter into a contract with a company with at least ten (10) full-time employees for value of at least One Hundred Thousand and No/100 Dollars (\$100,000.00) unless the contract has a provision in the contract verifying that it: (1) does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and (2) will not discriminate during the term of the contract against a

firearm entity or firearm trade association. The signatory executing this Contract on behalf of the Engineer verifies Engineer does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association, and it will not discriminate during the term of this Contract against any firearm entity or firearm trade association.

(4) In accordance with 2274, Texas Government Code, a governmental entity may not enter into a contract with a company with at least ten (10) full-time employees for a value of at least One Hundred Thousand and No/100 Dollars (\$100,000.00) unless the contract has a provision in the contract verifying that it: (1) does not boycott energy companies; and (2) will not boycott energy companies during the term of this Contract. The signatory executing this Contract on behalf of Engineer verifies Engineer does not boycott energy companies, and it will not boycott energy companies during the term of this Contract.

(5) **Taxes.** Engineer will pay all taxes, if any, required by law arising by virtue of the Engineering Services performed hereunder. City is qualified for exemption pursuant to the provisions of Section 151.309 of the Texas Limited Sales, Excise, and Use Tax Act.

## **ARTICLE 22**

### **INDEMNIFICATION**

Engineer shall save and hold City harmless from all liability for damage to the extent that the damage is caused by or results from an act of negligence, intentional tort, intellectual property infringement, or failure to pay a subcontractor or supplier committed by Engineer, Engineer's agent, or another entity over which Engineer exercises control. Engineer shall also save and hold City harmless from any and all expenses, including but not limited to reasonable attorneys' fees which may be incurred by City in litigation or otherwise defending claims or liabilities which may be imposed on City to the extent resulting from such negligent activities by Engineer, its agents, or employees.

## **ARTICLE 23**

### **ENGINEER'S RESPONSIBILITIES**

Engineer shall be responsible for the accuracy of his/her/its Engineering Services and shall promptly make necessary revisions or corrections to its work product resulting from errors, omissions, or negligent acts, and same shall be done without compensation. City shall determine Engineer's responsibilities for all questions arising from design errors and/or omissions. Engineer shall not be relieved of responsibility for subsequent correction of any such errors or omissions in its work product, or for clarification of any ambiguities until after the construction phase of the project has been completed.

## **ARTICLE 24**

### **ENGINEER'S SEAL**

The responsible engineer shall sign, seal and date all appropriate engineering submissions to City in accordance with the Texas Engineering Practice Act and the rules of the State Board of Registration for Professional Engineers.

**ARTICLE 25**  
**NON-COLLUSION, FINANCIAL INTEREST PROHIBITED**

**(1) Non-collusion.** Engineer warrants that he/she/it has not employed or retained any company or persons, other than a bona fide employee working solely for Engineer, to solicit or secure this Contract, and that he/she/it has not paid or agreed to pay any company or engineer any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, City reserves and shall have the right to annul this Contract without liability or, in its discretion and at its sole election, to deduct from the contract price or compensation, or to otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

**(2) Financial Interest Prohibited.** Engineer covenants and represents that Engineer, his/her/its officers, employees, agents, consultants and subcontractors will have no financial interest, direct or indirect, in the purchase or sale of any product, materials or equipment that will be recommended or required for the construction of the project.

**ARTICLE 26**  
**INSURANCE**

**(1) Insurance.** Engineer, at Engineer's sole cost, shall purchase and maintain during the entire term while this Contract is in effect professional liability insurance coverage in the minimum amount of One Million Dollars per claim from a company authorized to do insurance business in Texas and otherwise acceptable to City. Engineer shall also notify City, within twenty-four (24) hours of receipt, of any notices of expiration, cancellation, non-renewal, or material change in coverage it receives from its insurer.

**(2) Subconsultant Insurance.** Without limiting any of the other obligations or liabilities of Engineer, Engineer shall require each subconsultant performing work under this Contract to maintain during the term of this Contract, at the subconsultant's own expense, the same stipulated minimum insurance required in Article 26, Section (1) above, including the required provisions and additional policy conditions as shown below in Article 26, Section (3).

Engineer shall obtain and monitor the certificates of insurance from each subconsultant in order to assure compliance with the insurance requirements. Engineer must retain the certificates of insurance for the duration of this Contract, and shall have the responsibility of enforcing these insurance requirements among its subconsultants. City shall be entitled, upon request and without expense, to receive copies of these certificates of insurance.

**(3) Insurance Policy Endorsements.** Each insurance policy shall include the following conditions by endorsement to the policy:

- (a) Engineer shall notify City thirty (30) days prior to the expiration, cancellation, non-renewal in coverage, and such notice thereof shall be given to City by certified mail to:

City Manager, City of Round Rock  
221 East Main Street  
Round Rock, Texas 78664

- (b) The policy clause "Other Insurance" shall not apply to any insurance coverage currently held by City, to any such future coverage, or to City's Self-Insured Retentions of whatever nature.

**(4) Cost of Insurance.** The cost of all insurance required herein to be secured and maintained by Engineer shall be borne solely by Engineer, with certificates of insurance evidencing such minimum coverage in force to be filed with City. Such Certificates of Insurance are evidenced as Exhibit E herein entitled "Certificates of Insurance."

## **ARTICLE 27**

### **COPYRIGHTS**

City shall have the royalty-free, nonexclusive and irrevocable right to reproduce, publish or otherwise use, and to authorize others to use, any reports developed by Engineer for governmental purposes.

## **ARTICLE 28**

### **SUCCESSORS AND ASSIGNS**

This Contract shall be binding upon and inure to the benefit of the parties hereto, their successors, lawful assigns, and legal representatives. Engineer may not assign, sublet or transfer any interest in this Contract, in whole or in part, by operation of law or otherwise, without obtaining the prior written consent of City.

## **ARTICLE 29**

### **SEVERABILITY**

In the event any one or more of the provisions contained in this Contract shall for any reason be held to be invalid, illegal or unenforceable in any respect, then such invalidity, illegality or unenforceability shall not affect any other provision thereof and this Contract shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

## **ARTICLE 30**

### **PRIOR AGREEMENTS SUPERSEDED**

This Contract constitutes the sole agreement of the parties hereto, and supersedes any prior understandings or written or oral contracts between the parties respecting the subject matter defined herein. This Contract may only be amended or supplemented by mutual agreement of the parties hereto in writing.

**ARTICLE 31**  
**ENGINEER'S ACCOUNTING RECORDS**

Records pertaining to the project, and records of accounts between City and Engineer, shall be kept on a generally recognized accounting basis and shall be available to City or its authorized representatives at mutually convenient times. The City reserves the right to review all records it deems relevant which are related to this Contract.

**ARTICLE 32**  
**NOTICES**

All notices to either party by the other required under this Contract shall be personally delivered or mailed to such party at the following respective addresses:

**City:**

City of Round Rock  
Attention: City Manager  
221 East Main Street  
Round Rock, TX 78664

and to:

Stephanie L. Sandre  
City Attorney  
309 East Main Street  
Round Rock, TX 78664

**Engineer:**

Perran Hutton, P. E.  
Project Manager  
6300 La Calma Drive, Suite 400  
Austin, TX 78752

**ARTICLE 33**  
**GENERAL PROVISIONS**

**(1) Time is of the Essence.** The Services shall be performed expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer. Engineer understands and agrees that time is of the essence and that any failure of Engineer to complete the Engineering Services for each phase of this Contract within the agreed Work Schedule may constitute a material breach of this Contract. Engineer shall be fully responsible for his/her/its delays or for failures to use his/her/its reasonable efforts in accordance with the terms of this Contract and the Engineer's standard of performance as defined herein. Where damage is caused to City due to Engineer's negligent failure to

perform City may accordingly withhold, to the extent of such damage, Engineer's payments hereunder without waiver of any of City's additional legal rights or remedies. Any determination to withhold or set off shall be made in good faith and with written notice to Engineer provided, however, Engineer shall have fourteen (14) calendar days from receipt of the notice to submit a plan for cure reasonably acceptable to City.

**(2) Force Majeure.** Neither City nor Engineer shall be deemed in violation of this Contract if prevented from performing any of their obligations hereunder by reasons for which they are not responsible or circumstances beyond their control. However, notice of such impediment or delay in performance must be timely given, and all reasonable efforts undertaken to mitigate its effects.

**(3) Enforcement and Venue.** This Contract shall be enforceable in Round Rock, Williamson County, Texas, and if legal action is necessary by either party with respect to the enforcement of any or all of the terms or conditions herein, exclusive venue for same shall lie in Williamson County, Texas. This Contract shall be governed by and construed in accordance with the laws and court decisions of the State of Texas.

**(4) Standard of Performance.** The standard of care for all professional engineering, consulting and related services performed or furnished by Engineer and its employees under this Contract will be the care and skill ordinarily used by members of Engineer's profession practicing under the same or similar circumstances at the same time and in the same locality. Excepting Articles 25 and 34 herein, Engineer makes no warranties, express or implied, under this Contract or otherwise, in connection with the Engineering Services.

**(5) Opinion of Probable Cost.** Any opinions of probable project cost or probable construction cost provided by Engineer are made on the basis of information available to Engineer and on the basis of Engineer's experience and qualifications and represents its judgment as an experienced and qualified professional engineer. However, since Engineer has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s') methods of determining prices, or over competitive bidding or market conditions, Engineer does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost Engineer prepares.

**(6) Opinions and Determinations.** Where the terms of this Contract provide for action to be based upon opinion, judgment, approval, review, or determination of either party hereto, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.

#### **ARTICLE 34** **SIGNATORY WARRANTY**

The undersigned signatory for Engineer hereby represents and warrants that the signatory is an officer of the organization for which he/she has executed this Contract and that he/she has full and complete authority to enter into this Contract on behalf of the firm. The above-stated representations and warranties are made for the purpose of inducing City to enter into this Contract.

**IN WITNESS WHEREOF**, the City of Round Rock has caused this Contract to be signed in its corporate name by its duly authorized City Manager or Mayor, as has Engineer, signing by and through its duly authorized representative(s), thereby binding the parties hereto, their successors, assigns and representatives for the faithful and full performance of the terms and provisions hereof.

*[signature pages follow]*

PLUMMER AND ASSOCIATES, INC.

By: Ellen McDonald  
Signature of Principal Ellen McDonald  
Printed Name: \_\_\_\_\_

CITY OF ROUND ROCK, TEXAS

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Craig Morgan, Mayor

\_\_\_\_\_  
Stephanie L. Sandre, City Attorney

**ATTEST:**

By: \_\_\_\_\_  
Meagan Spinks, City Clerk

**LIST OF EXHIBITS ATTACHED**

- |               |                           |
|---------------|---------------------------|
| (1) Exhibit A | City Services             |
| (2) Exhibit B | Engineering Services      |
| (3) Exhibit C | Work Schedule             |
| (4) Exhibit D | Fee Schedule              |
| (5) Exhibit E | Certificates of Insurance |



EXHIBIT A  
City Services

The City of Round Rock will furnish to the Engineer the following items/information:

- Attend kickoff meeting and progress meetings as needed.
- Designate a person to act as City's representative with respect to the services to be performed or furnished by the Engineer. This representation will have authority to transmit instructions, receive information, interpret, and define City's policies and decisions with respect to engineering services.
- Provide all criteria and full information as to City's requirements for the project, including objectives and constraints and furnish copies of all standards which City will require to be included in the project.
- Assist Engineer by placing all available information pertinent to the Project, including previous information and any other data relative to the Project at the ENGINEER's disposal.
- Provide digital design files or any records available which would assist in the completion of the project development.
- Timely review and comment on the draft Report, drawings and technical specifications.

## EXHIBIT B

### Engineering Services

Engineering Services to be provided:

#### Background

The Brushy Creek East Regional Wastewater Treatment Plant (Plant) is owned by the Brushy Creek Regional Wastewater System (BCRWWS), who are the Cities of Round Rock, Cedar Park, and Austin (Partners). The City of Leander will become a part owner on completion of the current 10 MGD expansion project to the Plant. The engineering team, led by Prime consultant Plummer Associates, consultants Freese & Nichols, and K. Friese & Associates (Engineer) designed the most recent 10 MGD expansion, which is currently in the construction phase.

The purpose of this scope of services is to initially prepare Scope 1: a preliminary engineering report (PER) focused on only specific items which will help inform the Partners on key design decisions prior to starting Scope 2: detailed design. The various treatment areas discussed in the PER will consider the existing capacities by using the new, lower, 2-hr peaking factor of 2.7. Then, following the PER, detailed design work can begin. Scope 2 covers the detailed design of up to 10 MGD (average flow) of additional treatment capacity, including general site improvements. There are also supplemental services which the Partners can choose to add as separately authorized scope/fee.

#### SCOPE 1 – Preliminary Engineering Report (PER)

Preliminary Engineering will include the following five tasks:

- Task 1: Facilitate Equipment Workshop
- Task 2: Data Gathering and Sampling Study
- Task 3: PER Development
- Task 4: Project Management and Meetings
- Task 5: Geotechnical Investigation (Supplemental Service)

##### Task 1: Facilitate Equipment Workshop

1. The Partners have a choice to sole source all equipment to match existing, or competitively bid. Review each item and decide at this stage prior to detailed design what is the best path forward.
2. Review equipment and input from operations team; what has worked well, what has not?
3. Some equipment selection the Partners have the option to investigate and discuss alternatives;
  - 3.1. Blowers – Multistage vs Single Stage. Updated system curves and price comparison of these two options for the expansion required process airflow.
  - 3.2. Pump type and selections for WAS pumps
  - 3.3. Mixers – adjust type of mixing.
  - 3.4. UV Equipment – mimic current expansion layout with inclined or different technology.
  - 3.5. Gravity Belt Filter Press Rehab vs New
4. Discuss pre-selection or pre-procurement methodology for this equipment (i.e. do we repeat the previous process or adjust it for the 2023/24 market).
5. Electrical, instrumentation, and controls impacts or inclusion within equipment selection – lead times discussion.

## Task 2: Data Gathering and Sampling Study

Engineer is recommending that the engineering team conduct a special sampling period of 2-weeks to help determine the influent strength that the 40 MGD facility will be designed for and verify the inconsistent and very high strength concentration data the City currently has for the Plant.

This would include all costs for the time and materials to collect, deliver, analyze and then present the sample data.

The analysis will include total suspended solids, BOD-5 day, ammonia and total phosphorus.

## Task 3: PER Development

The PER will include the evaluation for the expansion alternatives with details including re-rating, comparisons, options, calculations, layouts, costs and recommendations for the 10 MGD expansion.

*The PER will include the following sections:*

1. Review of key process data;
  - a. Validating BNR process based on constructed performance of the new trains (1 – 3) With the updated recommended loadings (from Master Plan effort)
  - b. Evaluate the ability for a duplicate secondary treatment train in size and dimensions to provide the required treatment – model will be adjusted based on size needed. Treatment system model work (in SUMO™).
  - c. Review solids loadings from 30 MGD – 40 MGD, impact on BFP run times required and existing storage capacity. Review impacts on these numbers with thickening project included.
  - d. Odor control capacity review based on startup field data, present options for increasing capacity within the existing system for Train 4, anaerobic zone tie in.
2. Hydraulic Profile - Updated hydraulic model of new train, plus modifications to filtration and disinfection flow split
3. Process Area Evaluation and Recommendations Evaluate blower selection (single vs multi-stage) and sizing. Load flow analysis for the Blower Building
4. Electrical & Instrumentation Control Summary and Load tables, Process Flow Diagrams,
5. Conceptual Facility Layouts  
Treatment Area Site Plan: Footprints for all new basins on updated site plans.  
Yard Piping: Key process piping corridors and any potential conflicts planned.
6. Plant Water Evaluation – determine overall capacity requirement for new plant water system, evaluate two possible locations and pumping arrangements (i.e., skid-mounted pumps vs. submersible pumps), and develop system curves for both options.
7. OPCC – Class 5 Estimate
8. Construction sequencing and preliminary construction schedule
9. Summary

## Task 4: Project Management, QC and Meetings

1. Project Management: Development of a Project Management Plan that includes scope, baseline schedule, resources, communications and quality control plans. Monitor project progress and coordination with Owner.
2. QC: Implement QC review of PER to follow Engineers Quality Management Manual
3. Meetings:
  - 3.1. Kickoff Meeting

- 3.2. Draft PER Workshop to review draft PER comments.
- 3.3. Final PER Workshop to finalize recommendations to progress to Final Design.

Task 5: Geotechnical Evaluation: Perform geotechnical investigation for proposed new structures.  
See attached scope and fee from Raba Kistner (exhibit)

***Deliverables:***

- Client kickoff meeting to review scope with Engineer Team present.
- Presentation of influent lab analysis data / results
- Workshop Presentations (2 total workshops) for Equipment items and draft PER.
  - Decision Log
- Electronic & five (5) printed copies of PER, Draft and Final (Sealed) including;
  - Preliminary PIDs
  - Conceptual layouts
  - OPCC tables
- Geotechnical Report (sealed and reviewed by Engineering Team)

***Exceptions / Assumptions:***

- Peak flow of 2.7 will be part of all future design (reduced from 3.0)
- Current permitted effluent limits of TSS, BOD<sub>5</sub>, Ammonia and TP will not change.
- Flow projection and influent design criteria will be taken from masterplan data / findings.
- Treatment technology for the trains shall be BNR in an A2O design 'mimicking' the existing trains 1 through 3, including clarifiers and RAS/WAS pumping.
- This PER assumes primary filtration is not something the Partners want to pursue currently and therefore Anaerobic Digestion is not possible for sludge disposal.
- Any alteration of the sludge handling treatment design, which differs to the thickening process previously designed under the 30 MGD expansion will be a separate project.
- The CITY directed CONSULTANT to base its design for the new 10 MGD treatment train and any electrical or supporting infrastructure to be constructed with a TOW or elevation 2' above an anticipated future effective flood plain of 651.81. [See next exception]
- The CITY understands that if the effective flood plain were to increase to any level above the existing 648.5 in the future, it would have impacts on existing treatment infrastructure (not part of this design effort) as well as the overall plant hydraulics. The CITY would need to engage the CONSULTANT in a separate study and design phase to fully analyze all impacts and proposed solutions. These could involve flood mitigation efforts within the catchment, protecting existing infrastructure by modifications, would likely result in the need for an effluent pumping station to resolve plant hydraulics, and protect upstream processes.

## SCOPE 2 – Detailed Design

The scope of this project is to provide detailed design services for the expansion of the Plant based on the Partner's decision from the PER phase. Design is based on the PER and previous master planning data and findings. Design services include Design and Bidding services for the following treatment areas.

### *Treatment Areas*

0 General: Provide general information about the project including site location, project and future site plan, soil boring locations, general construction notes, pipe materials and piping notes, abbreviations, instrumentation legend, process diagrams, treatment unit's summary, schematics, hydraulic profile, and P&IDs, 3D site plans and other plant-wide information.

100 Civil/Sitework and Yard Piping: Provide additional yard piping improvements as required for the new treatment facilities listed below. No offsite piping improvements are included.

Existing site grade modifications will be kept to a minimum and only modified to accommodate sheet flow around the new structures to the existing site berm network for drainage. An updated grading and erosion plan will be provided, along with the associated computations. Other landscaping or irrigation systems will be not provided.

Paving will be provided to access the new treatment areas from existing plant roadways. Pavement rehabilitation for other existing roads will not be provided.

200 Influent Lift Station: Design mechanical, electrical and control additions for Influent Lift Station 2, to increase the Plants average daily flow to 40 MGD, with a peak of 108 MGD. The pump station will utilize submersible pumps. No permanent lifting mechanism will be provided for pump removal.

300 Preliminary Treatment Unit: Design mechanical, electrical and control systems at the preliminary treatment unit to treat the peak flow of the plant. The structure is already sized for build out flow of 120 MGD (peak) so no additional structural design will be required. System will consist of:

- New pipe and flow metering from the additional influent pipe.
- (1) screen with ¾-inch opening mechanically operated with existing sluice conveyor, and (1) additional compactor. Review of the existing system's compaction sequence.
- (1) vortex grit removal basin structure and equipment.
- (1) recessed impeller grit pump, to pump grit slurry to (1) grit classifier.
- Additional flow control gates and monitoring to control flow leaving for new treatment train.
- Treatment channels and equipment will be covered and ducted to new odor control

It is assumed that the new preliminary treatment unit can be installed without conflict with existing structure or equipment and piping.

450 Aeration Basin Train 4: Design new aeration basins using the A2O biological phosphorus removal process for up to 10 MGD of design flow treatment capacity. System will consist of four (4) aeration basins, each with an anaerobic, anoxic, and aerobic zone. Basins will have submersible mixers in the anaerobic and anoxic zones, fine bubble diffusers in the aerobic zones, and internal recirculation pumps from the aerobic back to the anoxic zone. The internal recirculation pumps will include VFDs and will be controlled based on ORP sensors. Air to the aerobic zones will be controlled based on either dissolved oxygen or ammonia

sensors, and air flow will be controlled using a modulating valve. Odor control and covers will be provided for the anaerobic zones. Yard piping will include low pressure air flow split from the existing manifold at the expanded blower building.

500 Blower Building: Design up to (2) new blowers to be housed in the main blower building. Blowers will be connected to the existing blower air supply header. New blowers will meet the SCFM and pressure system requirements updated in the PER for the additional 10 MGD expansion. These will be either multistage centrifugal blowers or a single stage option. They will work with the existing blowers to supply the air required to the treatment system. Air supply will be controlled based on pressure in the air header. The existing blower control panel will either be modified or replaced based on PER recommendations.

550 Alum Feed System: Design an additional chemical storage tank in the concrete bulk containment area. Alum feed point will be provided at the end of the new aeration basin prior to the final clarifiers for polishing with additional dosing pumping.

600 Final Clarifiers (including scum pump stations): Design up to (2) new final clarifiers for the new secondary treatment train number 4. Clarifiers will be suction header style clarifiers similar to the equipment in the existing clarifiers. A scum removal pump station will be provided to pump scum to the sludge holding tanks.

650 RAS/WAS Pump Station: Design new RAS/WAS pump station for new secondary treatment train number 4. Pump station will be a below ground pump dry pit with RAS/WAS pumps associated with the two new clarifiers. A building will not be provided for the pump station. Related electrical facilities and controls will be located in the existing adjacent building. The design will generally mirror the RAS/WAS PS used in train 3 or with modification recommendations from the PER.

900 Effluent Filters: Design a new filtration system for the elevated trains 3 & 4, to filter this effluent separately from trains 1 & 2. Add up to (3) new cloth media filter units, design basis will be the Aqua Aerobics Megadisk. Design will include a concrete basin structure to house the mechanical equipment. Design includes auxiliary backwash pumping, electrical and equipment controls.

950 UV Disinfection: Design a new UV disinfection system for treating a peak flow of 54 MGD for Trains 3 & 4 only. The new UV system will include design for a concrete basin with at least 2 channels. The lamp arrangement and technology will be selected in the equipment selection workshop during the PER phase.

960 Post Aeration and Flow Recording: Design a new post aeration system utilizing removable fine bubble diffusers and PD blowers. A canopy will be provided over the post aeration blowers. The flow metering will be based on a Parshall flume arrangement.

860 Non-Potable Plant Water Improvements: Design of a new NPW pumping system, based on the selected method identified in the PER scope.

1100 Biosolids Handling Option A: Sludge Storage Option A: Dewatering Only. No design services required.

1100 Biosolids Handling Option A: Sludge Storage Option B: Thickening and Dewatering. Plummer may need to modify the existing unused design drawings for the thickening option based on As-builts from the current expansion project. Drawings will be copied over from the "old set" into the new set developed. If a new thickening belt is required, design adjustments will be required in a "lighter effort" of design.

1300 Biosolids Handling Option B: Sludge Storage Option to include thickening.

1400 Odor Control: Pending PER assessment; no design or additional equipment improvements / upgrades are required for Train 4 anaerobic zone additional capacity. Design for connecting new ductwork into the existing system is included in this scope. If after PER review by Engineer the Owner decides, upgrades are required to the OCU treatment equipment, an amendment for the design effort will be needed.

1500 Chlorine & Dichlorination System: Assumed no additional capacity is required.

1600 Electrical Buildings: Design electrical buildings to support the new treatment facilities, including architectural, HVAC, structural and electrical design. A maximum of (1) new electrical buildings will be designed for the new UV/Filtration Area.

1900 Standard Details: Provide standard construction details for treatment facilities listed above.

Electrical: Expand electrical infrastructure off the existing dual power feed with transformers to accommodate the increased electrical load associated with the 40 MGD.

Instrumentation: Provide instrumentation to support the new and modified treatment facilities listed above. Existing instruments in areas of the plant not being modified will not be changed.

The existing Ignition system will have new screens added for operation and alarming of the new process equipment, including modifications to the PTU, Train 4 BNR, instrumentation, and modifications to the blower control system. Two new PLC aeration control panels will be added with Train 4 to bring in instrumentation signals and controls for the mixers and return pumping. A new PLC control panel will be included in the new RAS/WAS pump station and scum pump controls will be added. Tie-ins will be made to the new UV equipment, post-aeration blowers and the flow metering system.

#### **Tasks:**

The scope of work is further defined in eight tasks including:

- Task 1. Project Management
- Task 2. Design
- Task 3. Equipment Preselection
- Task 4. Field Surveys
- Task 5. State and Local Approvals
- Task 6. OPCC and Construction Schedule
- Task 7. Quality Review
- Task 8. Bidding Assistance
- Task 9. Supplemental Services

#### ***Task 1. Project Management***

CONSULTANT shall manage the services required to complete the Project tasks from start of the design phase through the end of Bidding services. Project management consists of project administration, coordination and supervision of the project team and other internal resources, external project coordination and quality management for project milestones and deliverables to meet the project schedule and budget.

#### ***1.1. Project Execution Plan and Kickoff Meeting***

***Project Management Planning:*** The purpose of this task is to prepare the detailed Project Management

Plan (PMP) that will be used during the execution of this PROJECT. The PMP will consist of;

- Project scope
- Project schedule
- Deliverables
- Identify team member roles, responsibilities, and lines of communication
- List the members of Project team management and Review Team with email addresses and telephone numbers.

Key PMP definitions and details include;

1. Project Instructions: Define PARTNERS and CONSULTANT team organization, communication, cost control procedures, document control, health and safety considerations, change management and other PROJECT management requirements.
2. Schedule: CONSULTANT shall submit a Project design schedule in .pdf for PARTNERS PROJECT MANAGER's review and approval before the kick-off meeting. Initially, the schedule shall reflect the durations agreed upon during the Project scoping/fee proposal meeting. CONSULTANT shall finalize the baseline schedule after the kick-off meeting and submit to PARTNERS PROJECT MANAGER for final review. CONSULTANT shall update the schedule monthly.
3. CAD Standards: Define CAD software standards, graphic standards, file naming conventions and standards, revision/iteration control and other graphic standards.
4. Quality Management Plan: CONSULTANT will use its standard continuous quality control process. The QMP will define the quality control process as customized for this PROJECT.
5. Project Health and Safety Plan: CONSULTANT will develop a health and safety plan to apply to CONSULTANT employees working on this PROJECT. It will address safety in the office and during site visits and include PARTNERS requirements.

**Kickoff Meeting:** CONSULTANT shall facilitate a kickoff meeting with project team task leaders and PARTNERS. CONSULTANT shall submit the meeting agenda for PARTNERS review at least three (3) days prior to the meeting and distribute the approved agenda and sign-in sheet at the meeting. CONSULTANT shall prepare meeting notes within five (5) work days after the meeting date and provide a draft to PARTNERS PROJECT MANAGER electronically for review. After incorporating PARTNERS comments, CONSULTANT shall submit the final notes electronically to PARTNERS PROJECT MANAGER within three (3) work days. Draft becomes final if no comments are provided.

Project kick-off meeting agenda will include:

- Introductions;
- Project objectives, goals and expectations (success factors);
- Lines of communication;
- Project design and construction schedule;
- Design criteria and standards, equipment preferences, information needs by CONSULTANT
- Other items related to the Project.

A field visit shall be arranged by PARTNERS PROJECT MANAGER before or after the kick-off meeting.

**Meetings: Project kickoff meeting/site visit**

**Deliverables: Baseline schedule, kickoff meeting materials and notes.**

### **1.2. Monthly Monitoring, Administration and Status Reporting**

The CONSULTANT will establish internal PROJECT controls to monitor PROJECT status, budget, staffing, and schedule on an on-going basis. Budget and schedule status will be reviewed by the CONSULTANT weekly. The CONSULTANT will prepare monthly status reports within 10 working days after the close of the

CONSULTANT's accounting month.

Monthly status reports and invoice will be submitted electronically to PARTNERS. CONSULTANT shall submit monthly invoices in the approved format for PARTNERS review and approval. Each invoice package shall comply with the requirements of the Contract.

The Project Progress report shall include the following elements:

- Invoice
- Project progress update (previous, current and following month)
- Financial progress
- Outstanding issues/concerns requiring discussion or resolution
- Decision log
- Project scope elements added/removed
- Project schedule

***Meetings: N/A***

***Deliverables: Progress Report in pdf format***

### **1.3. Subconsultant Management**

CONSULTANT shall manage, coordinate, and be responsible for efforts of its subconsultants participating in the Project. This includes distribution and coordination of work among the subconsultants, coordination of meetings/workshops and site visits, review and payment of monthly billing, and quality assurance and control of the work and documents submitted by the subconsultants.

The following are the subconsultants involved in the Project and their area of responsibility:

Subconsultant Services

KFA

1. 100 Site/civil and Yard Piping
2. 200 Influent lift station
3. 800 UV disinfection
4. 840 Post aeration & Parshall Flume

FNI

1. Architectural
2. HVAC/Plumbing
3. Structural
4. Electrical

Raba Kistner - Geotechnical

TBD – Topographic Survey

TBD - Subsurface Utility Survey (as supplemental services)

***Meetings: Internal Task Kickoff meetings, Internal design coordination meetings***

***Deliverables: N/A***

### **1.4. Coordination with Other Projects**

Elements of the Project may be affected by the decisions made on PARTNERS projects currently under evaluation, design or construction. CONSULTANT shall participate in one design coordination meeting for each project to review design information and incorporate the appropriate design element(s) of the Project into this Project.

At this time the following projects are anticipated for coordination:

- Reuse Water Storage Tank
- Reuse high service pumps and second utility lines (conveyance coordination etc.)
- Filter addition project

The Entrance Road is understood to not require any additional, design adjustment.

Other PARTNERS and non-PARTNERS projects may require coordination at the site and will require supplemental services.

If and when notified by PARTNERS PROJECT MANAGER, CONSULTANT shall attend meeting(s) for coordination of work with these other ongoing PARTNERS projects. Three meetings are assumed for this coordination task. If additional meetings are requested, then supplemental services shall apply.

***Meetings: Two coordination meetings***

***Deliverables: Meeting materials and notes***

### **1.5. Progress Meetings**

Team shall conduct progress meetings with the partner agencies and separate coordination meetings with operations staff. Two operations meetings will be held for each design phase of work prior to 100% design (i.e. 30%, 60%, 90%). These meetings are in addition to the workshops and meetings referenced in other tasks.

***Meetings: 12 progress/operations meetings***

***Deliverables: Meeting materials and notes***

## **Task 2. Design**

Design Task includes 30%, 60%, 90% and 100% design subtasks. OPCC and Quality Review are separate tasks.

### **2.1. 30% Design**

30% design includes preliminary discipline design tasks. The focus of the 30% design set will be finalization of process details, treatment unit sizing, equipment sizing, and controls concepts. The purpose of this task is to use the data and guidelines developed in the Preliminary Engineering Report, and further develop the approved design concepts, develop the PROJECT design to achieve a true “design freeze” at the conclusion of 30% Design. The end products from this task will consist of 30% Discipline Design Basis of Memoranda with a set of drawings which will provide sufficient information for PARTNERS and agency review and design team coordination and review. Specific work activities and deliverables from this task are as identified below.

#### **2.1.1. Civil and Site Development**

30% Design work will consist of the following activities.

- Coordinate with disciplines and confirm the following (1) structure size, location, and orientation; (2) layout roadways/truck access corridors and define maneuvering requirements (design vehicle); (3) size

and locate parking lots for employees and visitors to the facility; (4) determine emergency vehicle access requirements. (4) locate utility and piping corridors (horizontal and vertical).

- Set initial finished floor levels for new structures. Establish initial finished grades for overall major surfaces and road profiles.
- Locate storm water management facilities.
  1. Develop initial erosion control plan for the PROJECT. Prepare initial storm water calculations. Develop initial storm water control concepts (swales, curb, and gutter).
- Prepare cover sheet and vicinity/location map; list of drawings; design criteria sheet; pipe materials schedule; and abbreviations and symbols.
- Coordinate with topographic and 3D surveyors; define surveyors' scope of work; Field survey will be conducted for the plant site to locate new infrastructure and existing tie-in elevations for the hydraulic model and design.
- Coordinate with geotechnical engineer on boring locations; record boring locations on site drawings.
- Review concepts and draft work products with and seek approval from quality control reviewer.

#### **2.1.2. Architectural**

30% Design work for architectural will consist of the following activities:

- Perform a code review of existing facilities that require retrofit/rehabilitation to identify areas where the facilities do not meet current codes. Develop a plan to bring existing facilities into code compliance where necessary.
- Establish initial room sizes. Identify the adjacencies and functional requirements of each space. Establish architectural theme for exterior of building. Select interior and exterior construction materials for each building. Select roof type, slope, and roof support system for each building.
- Assign code classification to each building.
- Coordinate with other disciplines to resolve code compliance issues specific to these disciplines (e.g., National Electrical Code and National Fire Protection Association 820 issues).
- Coordinate with other disciplines on building materials and design R-values.
- Prepare initial building layouts (including plans, sections, and elevations).
- Review concepts and draft work products with and seek approval from quality control reviewer.

#### **2.1.3. HVAC**

30% Design for HVAC will consist of the following.

- Review HVAC criteria and code requirements;
- Develop calculation for initial process building/structures

- HVAC modifications required due to new equipment.
- Select type of ventilation system to be used in process buildings including hazardous material areas (inlet air tempered with both inlet and outlet fans, simple exhaust fan system).
- Select type of heating system to be used (hot water boiler, hot air furnace, space heaters). Identify fuel (gas, oil, or other fuel) for heating buildings and identify local fuel storage requirements, if any.
- Select type of air conditioning system to be used in personnel spaces (variable air volume system, zoned constant air volume system).
- Coordinate with the architectural discipline to establish design R-values for exterior walls.
- Coordinate with Process Mechanical to determine overall odor control requirements for the PROJECT. Confirm adequate air changes provided for equipment/occupied spaces and use of existing facilities.
- Review concepts and draft work products with and seek approval from quality control reviewer.

#### **2.1.4. Process Mechanical**

30% Design for process mechanical will consist of the following:

- Modelling
  1. Update hydraulic profile calculation and prepare hydraulic profile for process flow and side streams. Establish maximum and minimum water surface elevations for process tanks.
  2. Update odor model prior to equipment preselection to verify sizing of equipment and off-site impacts.
  3. Computer Process Model Task
    - i) Update the process model with any changes made during design.
    - ii) Prepare technical memorandum summarizing model assumptions, methods, and results including recommendations for design, process optimization, and operations costs savings.
- Select equipment type and determine size/capacity/redundancy of treatment unit processes and ancillary systems.
- Select process mechanical piping, sizes and materials.
- Review capacity of existing processes and equipment to remain in service. Assign capacity to existing processes.
- Coordinate with I&C to prepare process flow diagrams and P&IDs.
- Prepare solids balance.
- Update process flow diagrams for liquid treatment process and solids treatment process.
- Develop process control narratives.

- Develop schematics for plant water system, potable water system, drain system, and odor control system.
- Develop system curves for the following pumping/blower applications prior to equipment preselection:
  1. Influent lift station 2
  2. Grit Pumps
  3. Aeration Basin Internal Recirculation Pumps
  4. Return Activated Sludge Pumps
  5. Waste Activated Sludge Pumps
  6. Aeration Basin Blowers
  7. Post-Aeration Blowers
- Compile list of chemicals and amounts to be used.
- Develop process mechanical criteria and code requirements;
- Develop process mechanical building/structure plans and sections.
- Update equipment list with sizing for major equipment. Coordinate with the PARTNERS on preferences of equipment manufacturer and processes.
- Prepare equipment arrangements.
- Review concepts and draft work products with and seek approval from quality control reviewer.

#### **2.1.5. Structural**

30% Design work for structural will consist of the following activities.

- Perform a structural evaluation of existing facilities that require retrofit/rehabilitation to identify areas where the facilities may need additional reinforcement or modifications.
- Develop initial structural demolition plans.
- Coordinate with architectural discipline on the selection of building concepts. Consult with lead process mechanical engineer on building/structure layouts.
- Select design concepts and materials for canopies, handrails, stairs, and gratings
- Develop building foundation and structure concepts based on schematic building layouts.
- Review concepts and draft work products with and seek approval from quality control reviewer.

#### **2.1.6. Geotechnical**

30% Design work for geotechnical will consist of the following:

- Review Geotechnical Report for site specific geotechnical subsurface conditions for each facility and structure.

- Review Geotechnical Report for specific foundation requirements.
- Using results of investigations, prepare foundation and corrosion control recommendations.
- Review concepts and draft work products with and seek approval from quality control reviewer.

#### **2.1.7. Electrical**

30% Design work for electrical will consist of the following.

- Coordinate Utility service entrance site layout for utility metering cabinets.
- Prepare overall one-line diagram and individual one-line diagrams for each switchboard and motor control center for proposed facilities.
- Determine quantity and locations of electrical distribution equipment, including motor control centers, switchboards and panelboards.
- Coordinate with lead process mechanical engineers to size equipment motors.
- Prepare load calculations.
- Size electrical rooms. Prepare a preliminary layout of the major electrical equipment located in each electrical room. Determine equipment and instruments requiring uninterruptable power supplies (UPS) and locations of UPS equipment. Coordinate with I&C discipline to determine space requirements and locations for control equipment. Locate major I/O termination panels, TJB's, and control panels.
- Determine redundancy requirements for critical process mechanical equipment and power distribution per client preferences and TCEQ requirements.
- Establish preferred voltages for power distribution and utilization equipment.
- Prepare electrical site plan
- Coordinate with other disciplines (architectural, process/mechanical) to resolve code compliance issues specific to these disciplines.
- Develop schedule of hazardous and corrosive locations.
- Review concepts and draft work products with and seek approval from quality control reviewer.

#### **2.1.8. Instrumentation and Control**

30% Design work for the instrumentation and control will consist of the following activities.

- Document and develop the existing controls system architecture, include fiber optic routing, network configuration, the location of PLCs, computers, etc.
- Document existing control system panel layout, including input/output terminal locations, panel door mounted control stations and internally mounted field instruments.
- Document and develop existing PLC I/O listing

- Document existing Round Rock Lift Stations for inclusion into a communication system to the plant.
- Determine and generally locate future control system panels.
- Determine and generally develop a control system architecture that includes the existing and proposed control system panels, including routing of a fiber-optic network.
- Determine, based upon the preliminary engineering report those existing control system panels that will either be removed or modified during the expansion project.
- Document and develop Process & Instrumentation Diagrams (P&IDs) of the existing processes that will remain in service. For those modified processes the P&IDs will reflect the modifications, including new instrumentation and equipment.

#### **2.1.9. Construction Sequencing**

- Develop construction sequencing option for the project.
  - Equipment relocation/modification areas;
    - ILS2 new pumps and raw sewage feed to PTU
    - Tie-ins for preliminary treatment to new treatment train
    - LPA tie-in at blower building for new train 4
    - Effluent tie in for modifications to trains 3 & 4 effluent

#### **2.1.10. 30% Design Document Completion**

- Prepare 30% Discipline Design Basis Memoranda (including drawings).
- Complete 30% OPCC – See Task 6.
- Complete 30% quality review – See Task 7.

#### **2.1.11. 30% Design Workshop**

CONSULTANT will conduct a half-day workshop with the PARTNERS's personnel to review the work products from subtasks 1.1.1 through 1.1.11, as defined above. The workshop will be held at the Plant. Final notes from the workshop and the work products as defined above will be assembled in the 30% Design report and submitted to the PARTNERS.

##### ***Meetings: 30% Design Review Workshop***

***Deliverables: Meeting materials and notes and 30% Discipline Design Basis Memoranda including Drawings (electronic & five [5] printed copies), Process Modelling Technical Memorandum***

#### **2.2. 60% Design**

The purpose of this task is to use the data and guidelines developed in the 30% Design Report and Drawings, and further develop the approved design concepts, develop the PROJECT design to achieve a true “design freeze” at the conclusion of 60% Design. The focus of the 60% design information will be major architectural concepts, structural development, major electrical arrangements, concepts, and additional refinement of the civil and Process Mechanical designs. The designs of individual treatment units will be tailored around the equipment selected in the equipment preselection process. The end products from this task will consist of 60% drawings which will provide sufficient information for PARTNERS and agency review and design team coordination and review. Specific work activities and deliverables from this task are as identified below.

##### **2.2.1. Civil and Site Development**

- Structures, vaults, road, and major site element horizontal locations are finalized. Structure floor/control levels and finished grades are finalized.
- Define demolition requirements and limits. Define CONTRACTOR staging, storage, access, and off-site access corridors.
- Prepare site grading drawings.
- Download survey data to create site-drawing files for final design.
- Set final building and structure elevations.
- Develop yard piping and plant drain layouts. Identify corridors for smaller piping and other utilities. Coordinate with electrical duct bank layout and odor piping layout.
- Show storm water control concepts (swales, curb, and gutter) on the Design drawings.
- Incorporate corrosion control recommendations into design.
- Prepare first draft of technical specifications not already included in the pre-selection process.
- Review 60% Design and draft work products with and seek approval from quality control reviewer.

#### **2.2.2. Architectural**

- Develop 3-D electronic models, building floor plans and elevations for buildings.
- Coordinate with I&C and electrical disciplines to size and locate electrical and control rooms.
- Coordinate with the Process Mechanical discipline to select the type of HVAC equipment, locate HVAC equipment rooms, determine space requirements and routing for ductwork if required, and establish design R-values for exterior walls, ceilings and roofs.
- Coordinate with structural engineer to define the structural design concepts for the facilities.
- Establish applicable codes for buildings/structures with local code officials and fire marshal. Complete building and fire code analysis.
- Prepare first draft of technical specifications not already included in the pre-selection process.
- Review Design and draft work products with and seek approval from quality control reviewer.

#### **2.2.3. HVAC**

- Prepare sizing calculations for HVAC equipment based on energy code requirements and selected building construction materials. Prepare HVAC equipment data sheets and cut sheets.
- Create ventilation concept drawing (louver locations, fan locations, type of equipment, air flows).
- Identify routing or right-of-way for major duct runs. Locate major air handling equipment. Confirm size of mechanical equipment rooms.

- Prepare HVAC system block diagrams. Define HVAC system control philosophy.
- Prepare first draft of technical specifications not already included in the pre-selection process.
- Review Design and draft work products with and seek approval from quality control reviewer.

#### **2.2.4. Process Mechanical**

- Finalize major equipment sizing calculations.
- Finalize the hydraulic profile for major gravity process pipelines and hydraulic structures. Finalize maximum and minimum water surface elevations for process tanks.
- Coordinate with I&C on completion of P&IDs.
- Coordinate with I&C on development of process control narratives.
- Prepare 3-D electronic models, building and structure layouts (plans and major section(s)).
- Prepare preliminary mechanical equipment demolition plans.
- Assemble catalog cuts for major process equipment. Complete equipment data sheets or equipment list on major equipment items.
- Incorporate corrosion control recommendations into design.
- Coordinate with I&C in the finalization of P&IDs
- Final ancillary equipment sizing and line sizing calculations.
- Final equipment selection (type, size, weight, arrangement).
- Select piping materials.
- Prepare first draft of technical specifications not already included in the pre-selection process.
- Review 60% Design and draft work products with and seek approval from quality control reviewer.

#### **2.2.5. Structural**

- Coordinate with geotechnical engineer to establish foundation design criteria for proposed facilities. Review geotechnical report and discuss foundation design approach with geotechnical engineer and senior structural reviewer.
- Document structural design concept for each building (room by room) and structure. Finalize materials of construction (cast-in-place versus precast concrete, roof structures, etc).
- Preliminary framing plan for buildings and other structures.

- Incorporate corrosion control recommendations into design.
- Prepare 3-D electronic models, preliminary floor plan for major structures.
- Prepare first draft of technical specifications not already included in the pre-selection process.
- Review 60% Design and draft work products with and seek approval from quality control reviewer.

#### **2.2.6. *Electrical***

- Prepare detailed electrical load calculations.
- Identify rights-of-way and routing methods for electrical conduit and cable tray. Lay out duct bank system (major runs/manholes). Locate manholes and hand holes. Coordinate with civil yard piping
- Prepare preliminary site lighting layout.
- Prepare electrical site plan
- Prepare electrical utility coordination
- Prepare ductbank details
- Prepare power systems study
- Prepare short circuit analysis
- Analyze motor starting and voltage/frequency response
- Design a preliminary interior lighting layout.
- Define hazardous locations (NFPA 820) and document. Define corrosive locations and document.
- Prepare first draft of technical specifications not already included in the pre-selection process.
- Review 60% Design and draft work products with and seek approval from quality control reviewer.

#### **2.2.7. *Instrumentation and Control***

- Finalize the of control system architecture that includes the existing and proposed control system panels, including routing of a fiber-optic network.
- Finalize the modifications the existing control system panels, including the removal of panel door-mounted control stations and internally, mounted field instruments
- Finalize the PLC input/output list for existing control system panels.
- Develop PLC input/output list for proposed control system panels.
- Develop P&IDs for proposed processes, including instruments, equipment, panel fronts and input/outputs into PLC.

- Develop a CCTV system architecture.
- Develop plans for modifying existing control room and network equipment.
- Develop documents for communication to offsite lift stations.
- Develop modifications to existing starters and VFDs caused by the removal of the control system panel door mounted devices.
- Develop I&C specifications
- Develop and discuss selection/procurement of system integrator.

#### **2.2.8. 60% Design Document Completion**

- Draft project specific Division 0 and 1 documents including draft bid forms, bidder requirements, temporary field office, temporary utilities, testing, site security requirements.
- Prepare 60% Design drawings (using the same disciplines as shown in Task 2.1).
- Prepare draft technical specifications.
- Prepare revised calculations.
- Complete 60% OPCC – See Task 6.
- Complete 60% quality review – See Task 7.

#### **2.2.9. 60% Design Workshop**

CONSULTANT will conduct a 1/2-day workshop with the PARTNERS's personnel to review the work products from subtasks 1.2.1 through 1.2.10 defined above. The workshop will be held at the Plant. Final notes from the workshop and the work products as defined above will be assembled in the 60% Design report and submitted to the PARTNERS.

##### ***Meetings: 60% Design Review Workshop***

***Deliverables: Meeting materials and notes, and 60% Design Drawings (electronic & five [5] printed copies), and Specifications & DBMs (electronic).***

#### **2.3. 90% Design**

The purpose of this task is to utilize the conceptual decisions of the PROJECT that were made during 60% and to complete and finalize the Design preliminary calculations and progress design to approximately 90% completion. Structures, equipment, major plant piping, process, site plan are finalized to allow final detailing during 90% Design. Specific activities, and work products from this phase are described in the following subtasks:

##### **2.3.1. Civil and Site Development**

- Finalize site drawings
- Finalize road and piping plans, profiles and details

- Finalize landscape and irrigation plans
- Prepare miscellaneous civil drawings, details and standard details
- Finalize technical specifications

#### **2.3.2. Architectural**

- Finalize models, plans and sections
- Finalize elevations
- Prepare details and standard details
- Finalize technical specifications

#### **2.3.3. HVAC**

- Finalize models, plans and sections
- Prepare details and standard details
- Prepare final HVAC equipment list
- Finalize technical specifications

#### **2.3.4. Process Mechanical**

- Finalize calculations
- Update hydraulic calculations to design confirm early design assumptions.
- Finalize plans and sections
- Prepare details and standard details
- Prepare final equipment schedules
- Finalize technical specifications

#### **2.3.5. Structural**

- Finalize models, plans and sections
- Prepare details and standard details
- Finalize calculations
- Finalize technical specifications

**2.3.6. Electrical**

- Finalize project electrical drawings
- Finalize area electrical drawings
- Develop miscellaneous electrical drawings, details and standard details
- Prepare final electrical schedules
- Finalize technical specifications

**2.3.7. Instrumentation and Control**

- Develop data sheets for field mount instrumentations
- Develop interconnection termination diagram drawings
- Develop conduit and wiring drawings
- Develop control strategies for HMI/PLC configuration

**2.3.8. Construction Sequencing**

- Revise and finalize construction sequencing for modified and relocated facilities.
- Develop process recommendations for the Contractor's use.

**2.3.9. 90% Design Document Completion**

- Finalize specification front-end documents, including General Conditions, General Requirements, bidding documents, bonds, and Instruction to Bidders. PARTNERS input is required at this point to determine construction contract requirements and insurance requirements.
- Prepare 90% Design drawings (using the same disciplines as shown in Task 2.2).
- Prepare draft technical specifications.
- Prepare final calculations.
- Complete 90% OPCC – See Task 6.
- Complete 90% quality review – See Task 7.

**2.3.10. 90% Design Workshop**

CONSULTANT will conduct half-day design workshop to review the work products with the PARTNERS's staff. The workshop will be held at the Plant.

Final workshop notes, documenting key decisions and the work products produced through subtasks above will be submitted to the PARTNERS.

**Meetings: 90% Design Review Workshop**

***Deliverables: Meeting materials and notes and 90% Design Drawings and Specifications (electronic & five [5] printed copies) , Final Design Basis Memoranda (electronic & five [5] printed copies)***

#### **2.4. 100% Design**

The purpose of this task is to develop the final contract drawings, specifications, and schedules for competitive bidding as well as the Final Design Report summarizing the design criteria and assumptions. Key activities will consist of:

##### **2.4.1. Final Contract Document Completion**

CONSULTANT will modify the contract documents to reflect agreed upon final review comments from the PARTNERS, applicable regulatory agencies and CONSULTANT's quality control review team. The final documents will then be submitted to the PARTNERS.

- Prepare final construction drawings (using the same disciplines as shown in Task 2.3).
- Prepare final technical specifications.

##### **2.4.2. Final Design Report Completion**

The Design Report will be finalized based on updates made during the design process. Draft and Final Design Reports will be submitted. As this is not part of the contract documents, it will be submitted after conformed documents are submitted.

***Meetings: N/A***

***Deliverables: 100% Signed and Sealed Design Drawings and Specifications (electronic & five [5] printed copies)***

#### **Task 3. Equipment Preselection**

Equipment preselection task will include development of one equipment preselection package. The task will be kicked off with an Equipment Identification effort following by developing front-end documents and technical specifications and supporting drawings, as well as bidding assistance. The equipment preselection package will likely include the following equipment. This list will be finalized in Task 3.1:

- Influent pumps x 2
- Screens x 1
- Screening Compacter x1
- Vortex Grit system x 1
- Grit pumps x 1
- Grit classifier x 1
- Anerobic and Anoxic mixers x16
- IMLR Pumps x4
- Fine bubble diffusers for aeration basins
- Process Blowers x 2
- Clarifier mechanism x 2
- RAS pumps x 5
- WAS pumps x 2
- Cloth filters (sole sourced to Aqua Aerobics)
- UV disinfection
- Post aeration blowers (PD or other blower type as determined to be appropriate)

- Sludge thickening equipment

Equipment preselection kickoff meeting will be held with operations, maintenance, electrical and I&C staff.

### **3.1. Preselection Equipment Identification**

Prepare an Equipment Preselection Identification Memorandum listing equipment needed for the project as identified in the Design Basis Memoranda. Review the equipment needs for the project with the Partners to develop a list of equipment recommended for pre-selection. Meet with project partners to finalize the list of equipment.

### **3.2. Preselection Front Ends**

Develop front-end documents for one equipment preselection package in conjunction with the Partners for obtaining equipment bids. The front-end documents will identify the method to be used for equipment selection; low equipment cost versus best value. The benefits of each will be discussed with the partners in a meeting.

### **3.3. Preselection Specifications**

Develop equipment specifications for above equipment items. Develop performance requirements and information necessary for evaluating bids with Partner's input. Specifications will identify acceptable manufacturers based on project experience and needs. Blowers, Influent Lift Station pumps, RAS Pumps and UV disinfection equipment will be evaluated based on experience, reliability, operation and maintenance requirements, power usage, as well as equipment and construction costs, and other non-cost factors as part of a life cycle cost evaluation. Up to three suppliers will be evaluated for each piece of equipment

### **3.4. Preselection Drawings**

Develop supporting drawings for the equipment pre-selection package. Drawings will include process and instrumentation diagrams as well as site layouts. The drawings are intended to provide suppliers with information concerning the environment in which their equipment will be placed and the role that the equipment will play in the overall treatment process.

### **3.5. Preselection Bidding Assistance**

- 3.5.1. Assist the Partners during advertisement for equipment proposals. Respond to requests for information and prepare addendum items.
- 3.5.2. Attend pre-bid meeting and proposal evaluation meeting with the Partners.
- 3.5.3. Perform proposal reviews for conformance to the specifications and contract documents.
- 3.5.4. Prepare proposal review summary memorandum and selection recommendation letters for each equipment item.

**Meetings: Preselection Workshop 1 – Task Kickoff and Package definition; Preselection Workshop 2 – Front Ends; Preselection Workshop 3 – Draft Preselection Document Review, Preselection Pre-bid meeting, Preselection Package Bid Opening.**

**Deliverables: Meeting materials and notes, Draft and Final Equipment Preselection Identification Memorandum, Draft and Final Preselection Package Documents, Proposal Review Memorandum, Selection Recommendation Letters.**

### **Task 4. Field Surveys**

Field Survey shall be conducted to further define the existing conditions. Field surveys include topographic survey, geotechnical survey and SUE survey.

#### **4.1. Topographic Survey**

Prepare a topographic survey, which will be used to complete the design of the site plan. The topographic survey will be based on an on-the-ground survey and will be produced at a one (1)-foot interval. A point cloud survey will be conducted of existing facilities that require modification. The results will be incorporated in the engineering construction plans.

Using the survey information, prepare an existing conditions site map to identify above ground features and utilities that will play a part in the design of the project. These features could include electrical manholes, pull boxes, overhead electrical power poles, any junction boxes or above grade structures where new infrastructure shall be directly connecting.

4.1.1. Primary control will be based on existing control points set along the PROJECT area.

4.1.2. Any new control points required will be one-half inch iron rods set with an aluminum cap stamped with unique alpha-numeric identifier.

4.1.3. All surveys, control points and key project points will reference the Texas State Plane Coordinate System, South Central Zone, NAD 83/93 HARN, horizontal datum, and NAVD 88, vertical datum.

4.1.4. A data sheet or ASCII file will be provided for the project site and for each primary control point set, providing geographic coordinates, recovery direction and Texas State Plane, South Central Zone coordinates. A code description legend shall be provided to explain the ASCII point list.

**Meetings: Site Visits**

**Deliverables: N/A**

#### **4.2. Geotechnical**

CONSULTANT shall perform field investigations/testing to determine the existing site conditions and proper methods of demolition and construction. CONSULTANT shall provide geotechnical investigation services to characterize the subsurface soils for the areas affected by the Project. The results shall be formalized in a report and sealed by a registered professional engineer.

CONSULTANT shall submit an electronic copy of the report to PARTNERS PROJECT MANAGER. The Geotechnical Data Report supplied by the Geotechnical sub-consultant will be reviewed and evaluated.

From this basis, CONSULTANT will prepare a Geotechnical Design Report for the specific focus of application of trenchless technologies. This document interprets the geotechnical data for specific application to the methods of underground trenchless pipe installations and will be provided for inclusion in the Bid Documents for the pipeline.

Geotechnical borings shall include the following:

[Multiple sites in the area intended for new treatment train and disinfection – per PER layouts]

**Meetings: Site Drilling Coordination Meeting**

**Deliverables: Final Geotechnical Report**

#### **Task 5. State and Local Approvals**

State and Local Approvals activities are assumed to be minimal and limited to correspondence with TCEQ and City of Round Rock regarding design review and permission to construct.

##### **5.1. TCEQ**

5.1.1. Correspondence with TCEQ regarding a Letter of Summary Transmittal (217 Letter).

## **5.2. City of Round Rock**

City of Round Rock project manager will take the lead on City permitting. Additional permitting support will require additional services.

***Meetings: 1 meeting with TCEQ***

***Deliverables: Meeting materials and notes, Construction Letter to TCEQ.***

## **Task 6. OPCC and Construction Schedule**

The Opinions of Probable Construction Cost (OPCC) for this Scope of Work will be prepared in accordance with the cost estimate classes defined by the Association for the Advancement of Cost Engineering. Construction schedule will be estimated at the same time and include results of the Construction Sequencing task. Estimates will be developed according to the following:

***6.1. Equipment Preselection – “Class 3” level estimate***

***6.2. 30% Design – “Class 4” level estimate***

***6.3. 60% Design – “Class 3” level estimate***

***6.4. 90% Design – “Class 2” level estimate***

***6.5. 100% Design – “Class 2” level estimate***

The OPCC developed for the 100% design will be the CONSULTANT’s final estimate of project construction cost prior to project Bid Advertisement.

***Meetings: N/A***

***Deliverables: Equipment Preselection, 30%, 60%, 90%, and 100% OPCC***

## **Task 7. Quality Review**

The objective of this task is to develop and implement procedures to obtain the highest quality deliverables. The majority of the quality control review and approval will occur prior to the finalization of the work products from each design task. Each of the subtasks below is performed following development of the technical deliverables. The relevant review points are listed under each of the subtasks. A Quality Assurance Audit Log will be used to track progress of reviews.

### **7.1. Technical Review**

A Quality Team will be established by the CONSULTANT consisting of three experienced engineers familiar with similar projects. An internal meeting will be held at the end of 30%, 60%, 90% Design and prior to completion of the 100% documents. The purpose of these reviews is to confirm that the design will accomplish the PROJECT objectives.

### **7.2. Intradiscipline Review**

Detailed intradiscipline review will be conducted at the completion of 30%, 60%, 90% and prior to the completion of 100% Design. These reviews will be conducted for each discipline by a person not involved in preparing the plans or specifications for this PROJECT.

### **7.3. Interdiscipline Review**

Interdiscipline checking will be conducted at completion of 60%, 90% and prior to the completion of 100% for agreement and coordination among the design disciplines and the specifications.

### **7.4. Constructability Review**

Constructability reviews will be conducted at the completion of 30%, 60%, 90% and prior to the completion of 100% Design for facility constructability.

#### **7.5. Operability Review**

Operability reviews will be conducted simultaneously with the interdisciplinary reviews for consistency with the PARTNERS's operations practices.

#### **7.6. OPCC Review**

The Engineer's Opinions of Probable Construction Cost will be reviewed by the Project Engineers and Project Manager to confirm that the cost estimating team understood the work and conditions associated with the portions of the PROJECT. The cost estimates will be reviewed at the end of 30%, 60%, 90% and prior to 100% Design.

#### **7.7. Final Back Check**

The Construction Document proof set will be checked to confirm that internal and external comments have been appropriately addressed and incorporated.

***Meetings: Internal Quality Review meetings for 30%, 60%, 90% Design***  
***Deliverables: Quality Assurance Audit Log***

#### **Task 8. Bidding Assistance**

Bidding assistance including contractor prequalification, bid opening/recommendation and conformed document development will be provided.

##### **8.1. Contractor Prequalification**

- 8.1.1. Develop Prequalification requirements to include in RFQ and use as the basis for scoring criteria.
- 8.1.2. Prepare Contractor RFQ advertisement notice.
- 8.1.3. Prepare Contractor RFQ documents.
- 8.1.4. Perform evaluation of submittals and summarize scoring along with Partner's scores and meet to review Contractor Qualifications Evaluation Memorandum.

***Meetings: Contractor Prequalification Workshop 1, Contractor Prequalification Workshop 2***  
***Deliverables: Draft and Final RFQ Advertisement Notice; Draft and Final Contractor Request for Qualifications, Contractor Qualifications Evaluation Memorandum***

##### **8.2. Advertisement**

- 8.2.1. The Partner's purchasing department will advertise for bids. Consultant shall provide technical information required for advertisement.
- 8.2.2. Participate in pre-bid conferences.
- 8.2.3. Provide technical response to bidder's technical questions and prepare addenda for Partners to issue. Partners shall provide responses to non-technical questions.

***Meetings: Prebid Meeting***  
***Deliverables: Responses to Bidders' technical questions; Addenda***

##### **8.3. Bid Opening/Recommendation**

- 8.3.1. Assist the Partners in opening, tabulation, and analyses of the proposals received for the project and
- 8.3.2. Furnish recommendations on the award or the appropriate actions to be taken by the Partners.

8.3.3. Participate in proposal review and assessment meetings.

***Meetings: Proposal Review Meeting***

***Deliverables: Award Recommendation Letter***

#### **8.4. Conformed Documents Preparation**

Prepare conformed specifications and drawings for each project based upon addenda issued during advertisement.

***Meetings: N/A***

***Deliverables: Furnish Partners two (2) full-size (22" x 34") sets, five half-size (11" x 17") sets of "conformed" plans and specifications, and one electronic copy.***

#### **Task 9. Supplemental Services**

##### **9.1 SUE**

CONSULTANT shall provide underground utility investigation services for the accuracy of the design and minimizing change orders/work directives during construction. CONSULTANT shall provide Quality Service Level A and B subsurface utility exploration (SUE) services to identify the location and depth of existing utilities.

- **Quality Level D** – Records Research / Data Collection – Information derived from existing records or oral recollections. Included in design tasks.
- **Quality Level C** – Above ground survey – Information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to Quality Level D. Included in design tasks.
- **Quality Level B** – Utility Designation – Utility Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities. Supplemental Services as approved.
- **Quality Level A** – Test Hole / Pot Holing – Precise horizontal and vertical location of utilities obtained by the actual exposure and subsequent measurement of subsurface utilities, usually at a specific point. Physically locating the actual utility. Supplemental Services as approved.

SUE Supplemental Services scope of work includes 20 hours of type B explorations and Ten (10) type A explorations.

***Meetings: N/A***

***Deliverables: N/A***

##### **9.2 Geotech Supplemental 2 additional bores and analysis**

#### **LIST OF ASSUMPTIONS**

The following assumptions were used when developing the scope of service and estimating the compensation to CONSULTANT. These assumptions are in addition to the scope and additional services set forth in the scope of work.

1. The next Discharge Permit issued by TCEQ is assumed to be for Final Phase 40 MGD with an average daily 0.4 mg/L Total Phosphorous and the existing average daily TSS (15mg/L), BOD<sub>5</sub> (7mg/L) and NH<sub>3</sub> (2mg/L) limits. Changes to these limits will require an amendment to the contract with the CONSULTANT to cover additional engineering evaluation and redesign.
2. The CITY informed CONSULTANT that a study is currently underway that is anticipated to result in the FEMA 100-year flood plain being raised in the vicinity of the wastewater plant at some point in the future.

However, as the timing and ultimate results of the study are not currently finalized, the CITY directed CONSULTANT to base its hydraulic design on the current FEMA 100-year flood elevation of 648.50. All new treatment train and supporting infrastructure (such as electrical buildings, transformers and control panels) should be protected with a TOW or elevation 2-feet above 651.81. Should the study result in a change to the effective flood plain before the plans are sealed, a change in the scope of CONSULTANT'S services will be required to address the changed conditions.

3. If the flood plain is raised after the plans for this design expansion project are sealed, the City understands that additional flood protection measures will be required as a separate project to protect existing infrastructure not part of this 10 MGD expansion, and to correct issues with plant hydraulics. These could involve flood mitigation efforts within the catchment, protecting existing infrastructure by civil or other modifications, would likely result in the need for an effluent pumping station to resolve plant hydraulics, and protect upstream processes.
4. City of Round Rock will process City permits and may use progress sets at the identified design levels to support permit applications. CONSULTANT is not providing any additional "permit sets" or permit applications. Consultant will meet with code officials as detailed in the scope to identify and review code requirements.
5. The design will be based on the federal, state, and local codes and standards in effect on the effective date of the authorization to proceed. Changes in these codes may necessitate a change in scope.
6. The design work on this PROJECT will last 15 months from authorization to proceed and be completed prior to a bidding period, which is assumed to be 3-4 months.
7. CONSULTANT's design delivery process will be employed. With the exception of the final review, the PROJECT team will not stop during formal reviews of submittals.
8. The design documents will be prepared for a single construction contract.
9. PARTNERS specifications will be used as the basis for the Division 0 specifications. CONSULTANT master specifications will be used as the basis for other technical specifications and Division 1 documents.
10. The drawings will follow CONSULTANT CAE/CAD standards. AutoCAD will be used to develop the drawings (models will be produced using 3D software capabilities of AutoCAD, section and plan view sheets shall be printed from the models). Other software may be used by the CONSULTANT with the ability to convert the outputs to an AutoCAD compatible format.

11. Investigation and remediation of possible hazardous waste, asbestos, lead paint or other types of contamination will be conducted by others if needed.
12. No existing buildings, equipment, treatment units, or facilities will be modified except as specifically noted above.
13. Equipment described as being relocated is assumed to be in fully functional and not requiring any modifications to operate except required rewiring and replumbing for installation in the new location.
14. Power coordination/Arc Flash Study is not included in the Scope of Work.
15. Existing clarifier rerating is not included in this scope of work.

The following assumptions are technical in nature:

#### *Civil/Geotechnical*

1. Legal, easement or plat surveys of the existing site will not be required.
2. Site drawings will only be prepared for those areas of the plant where new facilities are to be constructed or involving significant disturbance to existing grading.
3. The only new roadway work required is in immediate area of new and modified facilities and existing road rehabilitation.

#### *Structural/Architectural/Geotechnical*

1. Conventional spread foundations will be required for new facilities. Over excavation, preload, piles, or underdrain systems are not required. Uplift due to high groundwater levels, if any, will be addressed with thickened base slabs or pressure relief valves in slabs. No underdrain systems or tension systems will be required.

#### *Process/ Mechanical*

1. Only hydraulic assessments required for design of the new or modified facilities are included.
2. The necessary process design, liquids/solids balance and energy balance calculations will be performed.
3. Design concerning "plant-wide" utility systems such as basin drainage, water, and in-plant waste collection/disposal will be limited to extensions and/or changes in existing piping. No new structures or equipment will be needed.
4. No corrosion control provisions will be required other than materials selection and coatings.
5. Air sweep hopper system will be based on a pilot design. If during piloting, it is found to require redesign, then additional services will be required.

#### *HVAC and Plumbing*

1. N/A

#### *Electrical and Instrumentation & Controls Systems*

1. The new instrumentation and control system will be based on the use of programmable logic controllers. Monitoring of the plant status will be by The existing Ignition HMI system. New screens will be added for the new process equipment. There will be several new PLC panels that will receive programming during the construction phase. The existing Master Blower Control Panel will require upgrades by Howden.
2. CONSULTANT will not perform the work of developing process control system software for either the PLC or the PC interface as part of the design phase services.

#### **PARTNERS PROVIDED SERVICES**

1. PARTNERS will provide to CONSULTANT all data in PARTNERS's possession relating to CONSULTANT's services on the Project. CONSULTANT will reasonably rely upon the accuracy, timeliness, and completeness of the information provided by the PARTNERS.
2. PARTNERS will make its facilities accessible to CONSULTANT for performance of its services and will provide labor and safety equipment for such access. PARTNERS will perform, at no cost to CONSULTANT, such tests of equipment, machinery, pipelines, and other components of PARTNERS's facilities as may be required in connection with CONSULTANT's services.
3. PARTNERS will give prompt notice to CONSULTANT whenever PARTNERS observe or become aware of development that affects the scope or timing of CONSULTANT's services, or of defect in the work of CONSULTANT or the CONTRACTOR.
4. The PARTNERS shall examine information submitted by CONSULTANT and provide comments in writing and provide decisions in a timely manner.
5. The PARTNERS shall furnish required information and approvals in a timely manner.
6. The PARTNERS shall cause all agreements with the CONTRACTOR to be consistent with CONSULTANT's Agreement.

List of Meetings and Deliverables			
Task		Meetings	Deliverables
Preliminary Design Report	Project 1	<ul style="list-style-type: none"> <li>Kickoff call</li> </ul>	Report
		<ul style="list-style-type: none"> <li>Equipment Workshop</li> </ul>	
		<ul style="list-style-type: none"> <li>Draft PER workshop</li> </ul>	
1. Project Management	1.1 PMP and Kickoff	<ul style="list-style-type: none"> <li>Project kickoff meeting/site visit</li> </ul>	<ul style="list-style-type: none"> <li>Baseline schedule</li> <li>Kickoff meeting materials and notes</li> </ul>
	1.2 Monthly Monitoring	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Progress Report in pdf format</li> </ul>
	1.3 Subconsultant Management	<ul style="list-style-type: none"> <li>Internal Task Kickoff meetings,</li> <li>Internal design coordination meetings</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
	1.4 Coordination with Other Projects	<ul style="list-style-type: none"> <li>2 coordination meetings</li> </ul>	<ul style="list-style-type: none"> <li>Meeting materials and notes</li> </ul>
	1.5 Progress Meetings	<ul style="list-style-type: none"> <li>12 progress/operations meetings</li> </ul>	<ul style="list-style-type: none"> <li>Meeting materials and notes</li> </ul>
2. Design	2.1 30% Design	<ul style="list-style-type: none"> <li>30% Design Review Workshop</li> </ul>	<ul style="list-style-type: none"> <li>Meeting materials and notes</li> <li>30% Discipline Design Basis Memoranda including Drawings (electronic)</li> <li>Process Modelling TM</li> </ul>
	2.2 60% Design	<ul style="list-style-type: none"> <li>60% Design Review Workshop</li> </ul>	<ul style="list-style-type: none"> <li>Meeting materials and notes</li> <li>60% Design Drawings and Specifications (electronic)</li> </ul>
	2.3 90% Design	<ul style="list-style-type: none"> <li>90% Design Review Workshop</li> </ul>	<ul style="list-style-type: none"> <li>Meeting materials and notes</li> <li>90% Design Drawings and Specifications (electronic)</li> <li>Final Design Basis Memoranda (electronic)</li> </ul>
	2.4 100% Design	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>100% Signed and Sealed Design Drawings and Specifications (electronic)</li> </ul>
3. Equipment Preselection	3.1 Equipment Preselection	<ul style="list-style-type: none"> <li>Preselection Workshop 1 – Task Kickoff and Package definition;</li> <li>Preselection Workshop 2 – Front Ends;</li> <li>Preselection Workshop 3 –</li> <li>Draft Preselection Document Review,</li> <li>Preselection Pre-bid meeting,</li> <li>Preselection Package Bid Opening</li> </ul>	<ul style="list-style-type: none"> <li>Meeting materials and notes</li> <li>Draft and Final Equipment Preselection Identification Memorandum</li> <li>Draft and Final Preselection Package Documents</li> <li>Proposal Review Memorandum</li> <li>Selection Recommendation Letters</li> </ul>
4. Final	4.1 Topographic	<ul style="list-style-type: none"> <li>Site Visits</li> </ul>	<ul style="list-style-type: none"> <li>N/A</li> </ul>

		Survey	
		4.2 Geotechnical	<ul style="list-style-type: none"> <li>Site Drilling Coordination Meeting</li> <li>Final Geotechnical Report</li> </ul>
Task		Meetings	Deliverables
5. State and Local Approvals	5.1 State and Local Approvals	<ul style="list-style-type: none"> <li>1 meeting with TCEQ</li> </ul>	<ul style="list-style-type: none"> <li>Meeting materials and notes,</li> <li>Construction Letter to TCEQ;</li> </ul>
6. OPCC	6.1 OPCC	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Equipment Preselection</li> <li>30% OPCC</li> <li>60% OPCC</li> <li>90% OPCC</li> <li>100% OPCC</li> </ul>
7. Quality Review	7.1 Quality Review	<ul style="list-style-type: none"> <li>Internal Quality Review meetings for 30%, 60%, 90% Design</li> </ul>	<ul style="list-style-type: none"> <li>Quality Assurance Audit Log</li> </ul>
8. Bidding Assistance	8.1 Contractor Prequalification	<ul style="list-style-type: none"> <li>Contractor Prequalification Workshop 1,</li> <li>Contractor Prequalification Workshop 2</li> </ul>	<ul style="list-style-type: none"> <li>Draft and Final RFQ Advertisement Notice</li> <li>Draft and Final Contractor Request for Qualifications</li> <li>Contractor Qualifications Evaluation Memorandum</li> </ul>
	8.2 Advertisement	<ul style="list-style-type: none"> <li>Prebid Meeting</li> </ul>	<ul style="list-style-type: none"> <li>Responses to Bidders' technical questions</li> <li>Addenda</li> </ul>
	8.3 Bid Opening/Recommendation	<ul style="list-style-type: none"> <li>Proposal Review Meeting</li> </ul>	<ul style="list-style-type: none"> <li>Award Recommendation Letter</li> </ul>
	8.4 Conformed Documents Preparation	<ul style="list-style-type: none"> <li>N/A</li> </ul>	<ul style="list-style-type: none"> <li>Conformed Documents</li> </ul>

## EXHIBIT C

### Work Schedule

Attached Behind This Page

BRUSHY CREEK EAST PLANT - EXPANSION TO 40 MGD  
PER & DETAILED DESIGN

Name	Duration	Units	Start	Finish
<div><div></div>Stand in Project</div>	657.00	days	10/23/2023	8/10/2025
<div><div></div>Preliminary Engineering Report</div>	155.00	days	10/23/2023	3/26/2024
<div><div></div>Equipment Workshop</div>	0.71	weeks	10/31/2023	11/5/2023
<div><div></div>Data Gathering and Sample Study</div>	4.00	weeks	10/24/2023	11/21/2023
<div><div></div>PER Development</div>	126.00	days	11/21/2023	3/26/2024
<div><div></div>Project Management &amp; Meetings</div>	18.43	weeks	10/23/2023	2/29/2024
<div><div></div>Geotechnical Investigation</div>	7.14	weeks	12/3/2023	1/22/2024
<div><div></div>Detailed Design Services</div>	567.00	days	1/21/2024	8/10/2025
<div><div></div>Project Management</div>	34.57	weeks	3/26/2024	11/23/2024
<div><div></div>Design Phases</div>	420.00	days	3/31/2024	5/25/2025
<div><div></div>30% Design</div>	112.00	days	3/31/2024	7/21/2024
<div><div></div>60% Design</div>	112.00	days	7/21/2024	11/10/2024
<div><div></div>90% Design</div>	112.00	days	11/10/2024	3/2/2025
<div><div></div>100% Design</div>	84.00	days	3/2/2025	5/25/2025
<div><div></div>Equipment Selection</div>	84.00	days	3/26/2024	6/18/2024
<div><div></div>Design Effort</div>	7.00	weeks	3/26/2024	5/14/2024
<div><div></div>Bidding Phase</div>	3.00	weeks	5/28/2024	6/18/2024
<div><div></div>Field Survey</div>	93.00	days	1/21/2024	4/23/2024
<div><div></div>State &amp; Local Approvals</div>	42.00	days	3/2/2025	4/13/2025
<div><div></div>OPCC and Cost Schedule</div>	355.00	days	5/14/2024	5/4/2025
<div><div></div>Quality Review</div>	341.00	days	5/14/2024	4/20/2025
<div><div></div>Bidding Assistance</div>	112.00	days	4/20/2025	8/10/2025
<div><div></div>Supplemental Services</div>	392.00	days	2/18/2024	3/16/2025

## EXHIBIT D

### Fee Schedule

Attached Behind This Page

City of Round Rock  
Brushy Creek East Expansion to 40 MGD PER 8 Detailed Design

	Principal (hrs)	Sr. Elec Eng. (hrs)	Proj Mgr (hrs)	Proj Engr (hrs)	EIT (hrs)	Technician (hrs)	Clerical (hrs)	Total Labor		Sub consultant (\$)		Total Fee (\$)	Percent of Total Fee
								Hours	Fee (\$)	KFA	FNI		
	528	1,190	2,775	3,734	4,152	2,044	678	15,101	\$ 2,737,180	\$ 1,077,758	\$ 2,090,783		100.0%
1 Preliminary Engineering Report	86	166	284	266	382	118	30	1,312	\$ 255,220	\$ 154,209	\$ 179,915	\$ 592,344	9.4%
1.1 Facilities Equipment Workshop	8	8	16	16	8	0	4	60	\$ 12,800	\$ 2,288	\$ 4,498	\$ 19,668	0.5%
1.2 Data Gathering and Sampling Study	8	0	28	70	118	0	0	224	\$ 37,090	\$ -	\$ -	\$ 37,090	1.4%
1.3 PER Development	26	128	160	148	188	110	12	772	\$ 152,480	\$ 123,948	\$ 155,176	\$ 431,604	5.6%
1.4 Project Management & Meetings	36	30	64	16	24	0	12	182	\$ 42,270	\$ 27,973	\$ 17,992	\$ 88,235	1.5%
1.5 Geotechnical Investigation	8	0	16	16	24	8	2	74	\$ 13,500	\$ -	\$ 2,250	\$ 15,750	0.5%
2 Detailed Design	442	1,024	2,491	3,468	3,790	1,928	648	13,789	\$ 2,478,960	\$ 923,649	\$ 1,910,868	\$ 5,313,377	90.9%
2.1 Project Management	128	20	880	420	264	0	300	2,012	\$ 369,480	\$ 54,318	\$ -	\$ 423,798	13.5%
2.2 Design Phase	0	730	1,011	2,062	2,114	1,466	212	7,595	\$ 1,339,480	\$ 682,986	\$ 1,774,552	\$ 3,776,528	48.9%
2.2.1 30% Design	0	140	324	660	650	400	80	2,254	\$ 385,600	\$ 224,389	\$ 239,424	\$ 849,413	14.1%
2.2.2 60% Design	0	140	286	660	680	500	60	2,336	\$ 397,000	\$ 233,530	\$ 624,305	\$ 1,254,835	14.5%
2.2.3 90% Design	0	210	200	524	608	410	56	2,008	\$ 352,730	\$ 156,559	\$ 573,243	\$ 1,082,932	12.5%
2.2.4 100% Design	0	240	191	218	176	156	16	997	\$ 204,150	\$ 47,718	\$ 337,560	\$ 589,448	7.5%
2.3 Equipment Prescription	32	56	110	480	720	400	0	1,798	\$ 295,860	\$ 136,884	\$ 51,966	\$ 484,730	10.8%
2.4 Field Survey	0	0	48	0	76	60	0	184	\$ 28,240	\$ -	\$ -	\$ 28,240	1.1%
2.5 State and Local Approvals	18	0	62	42	0	0	0	122	\$ 25,870	\$ -	\$ -	\$ 25,870	0.9%
2.6 OPCC and Const Schedule	0	102	88	280	424	0	0	894	\$ 165,110	\$ 25,729	\$ -	\$ 184,839	5.8%
2.7 Quality Review	152	76	120	0	0	0	40	386	\$ 104,760	\$ 17,083	\$ -	\$ 121,863	3.8%
2.8 Bidding Assistance	112	40	156	184	160	0	96	748	\$ 147,440	\$ 26,839	\$ 84,350	\$ 258,729	5.4%
2.9 Supplemental Services	0	0	16	0	32	0	0	48	\$ 7,680	\$ -	\$ -	\$ 7,680	0.3%
TOTAL LABOR	528	1,190	2,775	3,734	4,152	2,044	678	15,101					
Total Labor Hours													
Labor Rates per Hour													
Total Amounts by Labor Category	\$340	\$325	\$200	\$175	\$140	\$150	\$110						
Labor Category Percent of Total Labor	\$ 179,520 6.6%	\$ 386,750 14.1%	\$ 555,000 20.3%	\$ 653,450 23.9%	\$ 581,280 21.2%	\$ 306,600 11.2%	\$ 74,580 2.7%		\$ 2,737,180 46%	\$ 1,077,758	\$ 2,090,783	\$ 5,905,721	
TOTAL EXPENSES (See breakdown below)													
Total Subconsultants									\$ 3,250,464				
Total Reimbursables									\$ 85,205				
GRAND TOTAL -									\$ 6,072,849	[FEE IS BASED ON A LUMP SUM AMOUNT]			

SUBCONSULTANT EXPENSES

Code	Description	Budget (\$)	Markup	Fee (\$\$)
CA	Architect Consultant	\$ -	1:10	\$ -
CC	Civil Engr Consultant	\$ -	1:10	\$ -
CE	Electrical Consultant	\$ -	1:10	\$ -
CG	Geotechnical Consultant	\$ 20,500	1:10	\$ 22,550
CM	Mechanical Consultant	\$ -	1:10	\$ -
CO	Other Consultant	\$ -	1:10	\$ -
CS	Structural Consultant	\$ -	1:10	\$ -
CY	Surveying Consultant	\$ -	1:10	\$ -
C1	FNI - Additional Sales	\$ 18,975	1:10	\$ 20,873
C2	SUE - (Supplemental)	\$ 35,000	1:10	\$ 38,500
C3		\$ -	1:10	\$ -
C4		\$ -	1:10	\$ -
C5		\$ -	1:10	\$ -
C6		\$ -	1:10	\$ -
TOTAL SUBCONSULTANT EXPENSES		\$ 74,475		\$ 81,923

REIMBURSABLE EXPENSES

Code	Budget (\$\$)	Markup	Fee (\$\$)
RA	\$ 8,700	1:15	\$ 10,005
RC	\$ 20,000	1:00	\$ 20,000
RH		1:15	\$ -
RI		1:15	\$ -
RL		1:15	\$ -
RM	\$ 15,000	1:15	\$ 17,250
RO	\$ 20,000	1:15	\$ 23,000
RP		1:15	\$ -
RR	\$ 5,000	1:15	\$ 5,750
RS		1:15	\$ -
RT	\$ 8,000	1:15	\$ 9,200
RU		1:00	\$ -
R1		1:15	\$ -
R2		1:15	\$ -
TOTAL REIMBURSABLE EXPENSES	\$ 76,700		\$ 85,205

## EXHIBIT E

Certificates of Insurance

Attached Behind This Page



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

7/27/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an **ADDITIONAL INSURED**, the policy(ies) must have **ADDITIONAL INSURED** provisions or be endorsed. If **SUBROGATION** IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Risk Strategies 12801 North Central Expy. Suite 1725 Dallas, TX 75243	<b>CONTACT NAME:</b> Joe Bryant <b>PHONE (A/C, No. Ext):</b> (214) 323-4602 <b>FAX (A/C, No):</b> (214) 503-8899 <b>E-MAIL ADDRESS:</b> RSCcertrequest@risk-strategies.com														
<b>INSURED</b> Plummer Associates, Inc. 1320 South University Drive Ste. 300 Fort Worth TX 76107	<table><tr><th>INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr><tr><td>INSURER A: XL Specialty Insurance Company</td><td>37885</td></tr><tr><td>INSURER B: Hartford Underwriters Insurance Company</td><td>30104</td></tr><tr><td>INSURER C: Hartford Accident and Indemnity Company</td><td>22357</td></tr><tr><td>INSURER D: Twin City Fire Insurance Company</td><td>29459</td></tr><tr><td>INSURER E:</td><td></td></tr><tr><td>INSURER F:</td><td></td></tr></table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A: XL Specialty Insurance Company	37885	INSURER B: Hartford Underwriters Insurance Company	30104	INSURER C: Hartford Accident and Indemnity Company	22357	INSURER D: Twin City Fire Insurance Company	29459	INSURER E:		INSURER F:	
INSURER(S) AFFORDING COVERAGE	NAIC #														
INSURER A: XL Specialty Insurance Company	37885														
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INSURER C: Hartford Accident and Indemnity Company	22357														
INSURER D: Twin City Fire Insurance Company	29459														
INSURER E:															
INSURER F:															

**COVERAGES****CERTIFICATE NUMBER:** 75500624**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
B	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> XCU Coverage <input checked="" type="checkbox"/> Contractual Liability GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	84SBWAH8X07	9/30/2022	9/30/2023	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS - COMP/OP AGG \$2,000,000 Valuable Papers \$500,000
C	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	84UEGAC4597	9/30/2022	9/30/2023	COMBINED SINGLE LIMIT (Ea accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
B	<input checked="" type="checkbox"/> <b>UMBRELLA LIAB</b> <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED <input checked="" type="checkbox"/> RETENTION \$10,000	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	84SBWAH8X07	9/30/2022	9/30/2023	EACH OCCURRENCE \$5,000,000 AGGREGATE \$5,000,000 \$
D	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	84WEGAS4E8D	5/13/2023	5/13/2024	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
A	Professional Liability Pollution Liability	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DPR5012945	5/9/2023	5/9/2024	Per Claim \$3,000,000 Annual Aggregate \$3,000,000

**DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES** (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The claims made professional liability coverage is the total aggregate limit for all claims presented within the annual policy period and is subject to a deductible. Thirty (30) day notice of cancellation in favor of certificate holder on all policies.  
Re: Plummer #0982-018-01, Round Rock BCRWS East Plant Expansion to 40 MGD.

**CERTIFICATE HOLDER**

City of Round Rock  
221 East Main Street  
Round Rock TX 78664

**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Joe Bryant

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ACORD 25 (2016/03)

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