PROFESSIONAL SERVICES AGREEMENT FOR CITY OF PFLUGERVILLE WILBARGER CREEK WWTF PLANNING, DESIGN, BIDDING AND CONSTRUCTION PHASE SERVICES

STATE OF TEXAS § SCOUNTY OF TRAVIS §

This Agreement is entered into by and between the City of Pflugerville, a Texas Municipal Corporation ("City"), acting by and through its City Manager, and Garver, LLC ("Consultant"), both of which may be referred to herein singularly as "Party" or collectively as the "Parties."

The Parties hereto severally and collectively agree, and by the execution hereof are bound, to the mutual obligations herein contained and to the performance and accomplishment of the tasks hereinafter described.

I. DEFINITIONS

As used in this Agreement, the following terms shall have meanings as set out below:

"City" is defined in the preamble of this Agreement and includes its successors and assigns.

"Consultant" is defined in the preamble of this Agreement and includes its successors.

"City Manager" shall mean the City Manager and/or his designee.

II. TERM

2.1 This Agreement shall become effective upon execution by the City and shall remain in effect until satisfactory completion of the Scope of Work unless terminated as provided for in this Agreement.

2.2 If funding for the entire Agreement is not appropriated at the time this Agreement is entered into, City retains the right to terminate this Agreement at the expiration of each of City's budget periods, and any subsequent contract period is subject to and contingent upon such appropriation.

III. SCOPE OF SERVICES

Consultant agrees to provide the services described in this Article III entitled Scope of Services in exchange for the compensation described in Article IV. Compensation. Scope of Services are detailed in Appendix A – Scope of Services which are incorporated by reference as if written and copied herein.

All work performed by Consultant hereunder shall be performed to the satisfaction of the City Manager. The determination made by City Manager shall be final, binding and conclusive on all Parties hereto. City shall be under no obligation to pay for any work performed by Consultant, which is not satisfactory to City Manager. City shall have the right to terminate this Agreement, in accordance with Article VII. Termination, in whole or in part, should Consultant's

work not be satisfactory to City Manager; however, City shall have no obligation to terminate and may withhold payment for any unsatisfactory work, as stated herein, even should City elect not to terminate.

IV. COMPENSATION TO CONSULTANT

4.1 In consideration of Consultant's performance in a satisfactory and efficient manner, as determined solely by City Manager, of all services and activities set forth in this Agreement, City agrees to pay Consultant an amount not to exceed one million six hundred fifty thousand one hundred and ninety-two dollars (\$1,650,192.00) as total compensation, to be paid to Consultant as further detailed in Appendix B – Fee .

4.2 No additional fees or expenses of Consultant shall be charged by Consultant nor be payable by City. The parties hereby agree that all compensable expenses of Consultant have been provided for in the total payment to Consultant as specified in section 4.1 above. Total payments to Consultant cannot exceed that amount set forth in section 4.1 above, without prior approval and agreement of all parties, evidenced in writing and approved by the City.

4.3 Final acceptance of work products and services require written approval by City. The approval official shall be the City Manager. Payment will be made to Consultant following written approval of the final work products and services by the City Manager. City shall not be obligated or liable under this Agreement to any party, other than Consultant, for the payment of any monies or the provision of any goods or services.

V. OWNERSHIP OF DOCUMENTS

5.1 Any and all writings, documents or information in whatsoever form and character produced by Consultant pursuant to the provisions of this Agreement is the exclusive property of City; and no such writing, document or information shall be the subject of any copyright or proprietary claim by Consultant.

5.2 Consultant understands and acknowledges that as the exclusive owner of any and all such writings, documents and information, City has the right to use all such writings, documents and information as City desires, without restriction. Any use of such writings, documents and information on extensions of this project or on any other project without specific adaptation by Consultant shall be at the City's sole risk and without liability to the Consultant.

VI. RECORDS RETENTION

6.1 Consultant and its subcontractors, if any, shall properly, accurately and completely maintain all documents, papers, and records, and other evidence pertaining to the services rendered hereunder (hereafter referred to as "documents"), and shall make such materials available to the City at their respective offices, at all reasonable times and as often as City may deem necessary during the Agreement period, including any extension or renewal hereof, and the record retention period established herein, for purposes of audit, inspection, examination, and making excerpts or copies of same by City and any of its authorized representatives.

6.2 Consultant shall retain any and all documents produced as a result of services provided hereunder for a period of four (4) years (hereafter referred to as "retention period") from the date of termination of the Agreement. If, at the end of the retention period, there is litigation or other

questions arising from, involving or concerning this documentation or the services provided hereunder, Consultant shall retain the records until the resolution of such litigation or other such questions. Consultant acknowledges and agrees that City shall have access to any and all such documents at any and all times, as deemed necessary by City, during said retention period. City may, at its election, require Consultant to return said documents to City prior to or at the conclusion of said retention.

6.3 Consultant shall notify City, immediately, in the event Consultant receives any requests for information from a third party, which pertain to the documentation and records referenced herein. Consultant understands and agrees that City will process and handle all such requests.

VII. TERMINATION

7.1 For purposes of this Agreement, "termination" of this Agreement shall mean termination by expiration of the Agreement term as stated in Article II. Term, or earlier termination pursuant to any of the provisions hereof.

7.2 *Termination Without Cause*. This Agreement may be terminated by either Party upon 15 calendar days' written notice, which notice shall be provided in accordance with Article VIII. Notice.

7.3 *Termination For Cause.* Upon written notice, which notice shall be provided in accordance with Article VIII. Notice, City may terminate this Agreement as of the date provided in the notice, in whole or in part, upon the occurrence of one (1) or more of the following events, each of which shall constitute an Event for Cause under this Agreement:

7.3.1 The sale, transfer, pledge, conveyance or assignment of this Agreement without prior approval, as provided in Article XII. Assignment and Subcontracting.

7.4 Defaults With Opportunity for Cure. Should Consultant default in the performance of this Agreement in a manner stated in this section 7.4 below, same shall be considered an event of default. City shall deliver written notice of said default specifying such matter(s) in default. Consultant shall have fifteen (15) calendar days after receipt of the written notice, in accordance with Article VIII. Notice, to cure such default. If Consultant fails to cure the default within such fifteen-day cure period, City shall have the right, without further notice, to terminate this Agreement in whole or in part as City deems appropriate, and to contract with another consultant to complete the work required in this Agreement. City shall also have the right to offset the cost of said new Agreement with a new consultant against Consultant's future or unpaid invoice(s), subject to the duty on the part of City to mitigate its losses to the extent required by law.

- 7.4.1 Bankruptcy or selling substantially all of company's assets
- 7.4.2 Failing to perform or failing to comply with any covenant herein required
- 7.4.3 Performing unsatisfactorily

7.5 *Termination By Law.* If any state or federal law or regulation is enacted or promulgated which prohibits the performance of any of the duties herein, or, if any law is interpreted to prohibit such performance, this Agreement shall automatically terminate as of the effective date of such prohibition.

7.6 Regardless of how this Agreement is terminated, Consultant shall affect an orderly transfer to City or to such person(s) or firm(s) as the City may designate, at no additional cost to City, all completed or partially completed documents, papers, records, charts, reports, and any other materials or information produced as a result of or pertaining to the services rendered by Consultant, or provided to Consultant, hereunder, regardless of storage medium, if so requested by City, or shall otherwise be retained by Consultant in accordance with Article VI. Records Retention. Any record transfer shall be completed within thirty (30) calendar days of a written request by City and shall be completed at Consultant's sole cost and expense. Payment of compensation due or to become due to Consultant is conditioned upon delivery of all such documents, if requested.

7.7 Within forty-five (45) calendar days of the effective date of completion, or termination or expiration of this Agreement, Consultant shall submit to City its claims, in detail, for the monies owed by City for services performed under this Agreement through the effective date of termination. Failure by Consultant to submit its claims within said forty-five (45) calendar days shall negate any liability on the part of City and constitute a **Waiver** by Consultant of any and all right or claims to collect monies that Consultant may rightfully be otherwise entitled to for services performed pursuant to this Agreement.

7.8 Upon the effective date of expiration or termination of this Agreement, Consultant shall cease all operations of work being performed by Consultant or any of its subcontractors pursuant to this Agreement.

7.9 *Termination not sole remedy.* In no event shall City's action of terminating this Agreement, whether for cause or otherwise, be deemed an election of City's remedies, nor shall such termination limit, in any way, at law or at equity, City's right to seek damages from or otherwise pursue Consultant for any default hereunder or other action.

VIII. NOTICE

Except where the terms of this Agreement expressly provide otherwise, any election, notice or communication required or permitted to be given under this Agreement shall be in writing and deemed to have been duly given if and when delivered personally (with receipt acknowledged), or three (3) days after depositing same in the U.S. mail, first class, with proper postage prepaid, or upon receipt if sending the same by certified mail, return receipt requested, or upon receipt when sent by a commercial courier service (such as Federal Express or DHL Worldwide Express) for expedited delivery to be confirmed in writing by such courier, at the addresses set forth below or to such other address as either Party may from time to time designate in writing.

If intended for City, to:	City of Pflugerville Attn: Patricia Davis, P.E. City Engineer P.O. Box 589 Pflugerville, Texas 78691
If intended for Consultant, to:	Garver, LLC Attn: Greg Swoboda Project Manager

3755 S. Capital of Texas Highway Suite 325 Austin, TX 78704

IX. INSURANCE

9.1 Prior to the commencement of any work under this Agreement, Consultant shall furnish copies of all required endorsements and an original completed Certificate(s) of Insurance to the City, which shall be clearly labeled "Pflugerville Wilbarger Creek WWTF" in the Description of Operations block of the Certificate. The original Certificate(s) shall be completed by an agent and signed by a person authorized by that insurer to bind coverage on its behalf. The City will not accept Memorandum of Insurance or Binders as proof of insurance. The original certificate(s) or form must have the agent's original signature, including the signer's company affiliation, title and phone number, and be mailed, with copies of all applicable endorsements, directly from the insurer's authorized representative to the City. The City shall have no duty to pay or perform under this Agreement until such certificate and endorsements have been received and approved by the City. No officer or employee, other than the City Attorney, shall have authority to waive this requirement.

9.2 The City reserves the right to review the insurance requirements of this Article during the effective period of this Agreement and any extension or renewal hereof and to modify insurance coverages and their limits when deemed necessary and prudent by City Attorney based upon changes in statutory law, court decisions, or circumstances surrounding this Agreement. In no instance will City allow modification whereupon City may incur increased risk.

9.3 A Consultant's financial integrity is of interest to the City; therefore, subject to Consultant's right to maintain reasonable deductibles in such amounts as are approved by the City, Consultant shall obtain and maintain in full force and effect for the duration of this Agreement, and any extension hereof, at Consultant's sole expense, insurance coverage written on an occurrence basis, with the exception of Professional Liability insurance coverages which may be on a claims made basis, by companies authorized and admitted to do business in the State of Texas and with an A.M Best's rating of no less than A- (VII), in the following types and for the amounts listed below:

City of Pflugerville

Insurance Requirements

Consultant performing work on City property or public right-of-way for the City of Pflugerville shall provide the City a certificate of insurance evidencing the coverage provisions identified herein. Consultant shall provide the City evidence that all subcontractors performing work on the project have the same types and amounts of coverage as required herein or that the subcontractors are included under the contractor's policy. The City, at its own discretion, may require a certified copy of the policy.

All insurance companies and coverage must be authorized by the Texas Department of Insurance to transact business in the State of Texas and must be acceptable to the City of Pflugerville.

Listed below are the types and amounts of insurance required. The City reserves the right to amend or require additional types and amounts of coverage or provisions depending on the nature of the work.

Type of Insurance	Amount of Insurance	Provisions
Commercial General (Public) Liability to include coverage for:	1,000,000 per occurrence, 2,000,000 general aggregate	City to be listed as additional insured and provide 30 days' notice of cancellation or
Premises/Operations	Or	material change in coverage
Products/ Completed	2,000,000 combined single coverage limit	City to be provided a waiver of subrogation
Operations		City prefers that insurer be
Independent Contractors Personal Injury		rated B+V1 or higher by A.M. Best or A or higher by Standard & Poors
Contractual Liability		Standard & 1 0018
Business Auto Liability	1,000,000 combined single limit	City to be provided a waiver of subrogation
Workers' Compensation &	Statutory Limits	City to be provided a waiver
Employers Liability	1,000,000 each accident	of subrogation
Professional Liability	1,000,000 each claim	

Questions regarding this insurance should be directed to the City of Pflugerville (512) 990-6100 A contract will not be issued without evidence of Insurance. City will only accept the ACORD 25 or ISO certificate of insurance forms.

9.4 The City shall be entitled, upon request and without expense, to receive copies of the policies, declaration page and all endorsements thereto as they apply to the limits required by the City, and may require the deletion, revision, or modification of particular policy terms, conditions, limitations or exclusions (except where policy provisions are established by law or regulation binding upon either of the Parties hereto or the underwriter of any such policies). Consultant shall be required to comply with any such requests and shall submit a copy of the replacement certificate of insurance to City at the address provided below within 10 days of the requested change. Consultant shall pay any costs incurred resulting from said changes.

City of Pflugerville Capital Improvement Program P.O. Box 589 Pflugerville, Texas 78691-0589

9.5 Consultant agrees that with respect to the above required insurance, all insurance policies are to contain or be endorsed to contain, or Consultant shall provide notice of the following provisions:

• Name the City, its officers, officials, employees, volunteers, and elected representatives as *additional insured by endorsement under terms satisfactory to the City*, as respects operations and activities of, or on behalf of, the named insured performed under contract with the City, with the exception of the workers' compensation and professional liability policies;

- Provide for an endorsement that the "other insurance" clause shall not apply to the City of Pflugerville where the City is an additional insured shown on the policy;
- Workers' compensation and employers' liability policies will provide a waiver of subrogation in favor of the City.
- Provide thirty (30) calendar days advance written notice directly to City of any suspension, cancellation, non-renewal or material change in coverage, and not less than ten (10) calendar days advance notice for nonpayment of premium.

9.6 Within five (5) calendar days of a suspension, cancellation or non-renewal of coverage, Consultant shall provide a replacement Certificate of Insurance and applicable endorsements to City. City shall have the option to suspend Consultant's performance should there be a lapse in coverage at any time during this Agreement. Failure to provide and to maintain the required insurance shall constitute a material breach of this Agreement.

9.7 In addition to any other remedies the City may have upon Consultant's failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the City shall have the right to order Consultant to stop work hereunder, and/or withhold any payment(s) which become due to Consultant hereunder until Consultant demonstrates compliance with the requirements hereof.

9.8 Nothing herein contained shall be construed as limiting in any way the extent to which Consultant may be held responsible for payments of damages to persons or property resulting from Consultant's or its subcontractors' performance of the work covered under this Agreement.

9.9 It is agreed that, excepting Professional Liability, Consultant's insurance shall be deemed primary and non-contributory with respect to any insurance or self-insurance carried by the City of Pflugerville for liability arising out of operations under this Agreement.

9.10 It is understood and agreed that the insurance required is in addition to and separate from any other obligation contained in this Agreement.

9.11 Consultant and any of its Subcontractors are responsible for all damage to their own equipment and/or property.

X. INDEMNIFICATION

10.1 CONSULTANT covenants and agrees to INDEMNIFY and HOLD HARMLESS, the CITY and the elected officials, employees, officers, directors, volunteers and representatives of the CITY, individually and collectively, from and against any and all costs, claims, liens, damages, losses, expenses, fees, fines, penalties, proceedings, actions, demands, causes of action, or liability for damages caused by or resulting from an act of negligence, intentional tort, intellectual property infringement, or failure to pay a subcontractor or supplier committed by the CONSULTANT or the CONSULTANT's agent, CONSULTANT under contract, or another entity over which the CONSULTANT exercises control. Such acts may include personal or bodily injury, death and property damage, made upon the CITY directly or indirectly arising out of, resulting from or related to CONSULTANT'S activities under this Agreement, including any negligent or intentional

acts or omissions of CONSULTANT, any agent, officer, director, representative, employee, consultant or subcontractor of CONSULTANT, and their respective officers, agents employees, directors and representatives while in the exercise of the rights or performance of the duties under this Agreement. The indemnity provided for in this paragraph shall not apply to any liability resulting from the negligence of CITY, its elected officials, employees, officers, directors, volunteers and representatives, in instances where such negligence causes personal injury, death, or property damage. In no event shall the indemnification obligation extend beyond the date with when the institution of legal or equitable proceedings for the professional negligence would be barred by any applicable statute of repose or statute of limitations.

10.2 The provisions of this INDEMNITY are solely for the benefit of the Parties hereto and not intended to create or grant any rights, contractual or otherwise, to any other person or entity. CONSULTANT shall advise the CITY in writing within 24 hours of any claim or demand against the CITY or CONSULTANT known to CONSULTANT related to or arising out of CONSULTANT's activities under this AGREEMENT.

10.3 Duty to Defend – Consultant covenants and agrees to hold a DUTY TO DEFEND the CITY and the elected officials, employees, officers, directors, volunteers and representatives of the CITY, individually and collectively, from and against any and all claims, liens, proceedings, actions or causes of action, other than claims based wholly or partly on the negligence of, fault of, or breach of contract by the CITY, the CITY'S agent, the CITY'S employee or other entity, excluding the CONSULTANT or the CONSULTANT'S agent, employee or sub-consultant, over which the CITY exercises control. CONSULTANT is required under this provision and fully satisfies this provision by naming the CITY and those representatives listed above as additional insured under the CONSULTANT'S general liability insurance policy and providing any defense provided by the policy upon demand by CITY.

10.4 CONSULTANT is required to perform services to the City under the standard of care provided for in Texas Local Government Code § 271.904 (d)(1-2).

10.5 Employee Litigation – In any and all claims against any Party indemnified hereunder by any employee of CONSULTANT, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation herein provided shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for CONSULTANT or any subcontractor under worker's compensation or other employee benefit acts.

10.6 Force Majeure - City agrees that the CONSULTANT is not responsible for damages arising from any circumstances such as strikes or other labor disputes; severe weather disruptions, natural disasters, fire or other acts of God; riots, war or other emergencies; or failure of any third party governmental agency to act in timely manner not caused or contributed to by CONSULTANT.

XI. ASSIGNMENT AND SUBCONTRACTING

11.1 Consultant shall supply qualified personnel as may be necessary to complete the work to be performed under this Agreement. Persons retained to perform work pursuant to this Agreement shall be the employees or subcontractors of Consultant. Consultant, its employees or its subcontractors shall perform all necessary work.

11.2 It is City's understanding and this Agreement is made in reliance thereon, that Consultant intends to use the following subcontractors in the performance of this Agreement: Terracon, AmaTerra, Inland Geodetics, K Friese, Gupta & Associates and Adisa. Any deviation from this subcontractor list, whether in the form of deletions, additions or substitutions shall be approved by City prior to the provision of any services by said subcontractor.

11.3 Any work or services approved for subcontracting hereunder shall be subcontracted only by written contract and, unless specific waiver is granted in writing by the City, shall be subject by its terms to each and every provision of this Agreement. Compliance by subcontractors with this Agreement shall be the responsibility of Consultant. City shall in no event be obligated to any third party, including any subcontractor of Consultant, for performance of services or payment of fees. Any references in this Agreement to an assignee, transferee, or subcontractor, indicate only such an entity as has been approved by the City.

11.4 Except as otherwise stated herein, Consultant may not sell, assign, pledge, transfer or convey any interest in this Agreement, nor delegate the performance of any duties hereunder, by transfer, by subcontracting or any other means, without the consent of the City Council, as evidenced by passage of an ordinance. As a condition of such consent, if such consent is granted, Consultant shall remain liable for completion of the services outlined in this Agreement in the event of default by the successor Consultant, assignee, transferee or subcontractor.

11.5 Any attempt to transfer, pledge or otherwise assign this Agreement without said written approval, shall be void ab initio and shall confer no rights upon any third person. Should Consultant assign, transfer, convey, delegate, or otherwise dispose of any part of all or any part of its right, title or interest in this Agreement, City may, at its option, cancel this Agreement and all rights, titles and interest of Consultant shall thereupon cease and terminate, in accordance with Article VII. Termination, notwithstanding any other remedy available to City under this Agreement. The violation of this provision by Consultant shall in no event release Consultant from any obligation under the terms of this Agreement, nor shall it relieve or release Consultant from the payment of any damages to City, which City sustains as a result of such violation.

XII. INDEPENDENT CONTRACTOR

Consultant covenants and agrees that he or she is an independent contractor and not an officer, agent, servant or employee of City; that Consultant shall have exclusive control of and exclusive right to control the details of the work performed hereunder and all persons performing same, and shall be responsible for the acts and omissions of its officers, agents, employees, contractors, subcontractors and consultants; that the doctrine of respondent superior shall not apply as between City and Consultant, its officers, agents, employees, contractors, subcontractors and consultants, and nothing herein shall be construed as creating the relationship of employer-employee, principal-agent, partners or joint ventures between City and Consultant. The Parties hereto understand and agree that the City shall not be liable for any claims which may be asserted by any third party occurring in connection with the services to be performed by the Consultant under this Agreement and that the Consultant has no authority to bind the City.

XIII. CONFLICT OF INTEREST

13.1 Consultant acknowledges that it is informed that the Charter of the City of Pflugerville and its Ethics Code prohibit a City officer or employee, as those terms are defined in Section 11.06 of the Ethics Code, from having a financial interest in any contract with the City or

any City agency such as city owned utilities. An officer or employee has a "prohibited financial interest" in a contract with the City or in the sale to the City of land, materials, supplies or service, if any of the following individual(s) or entities is a Party to the contract or sale: a City officer or employee; his parent, child or spouse; a business entity in which the officer or employee, or his parent, child or spouse owns ten (10) percent or more of the voting stock or shares of the business entity, or ten (10) percent or more of the fair market value of the business entity; a business entity in which any individual or entity above listed is a subcontractor on a City contract, a partner or a parent or subsidiary business entity.

13.2 Pursuant to the subsection above, Consultant warrants and certifies, and this Agreement is made in reliance thereon, that it, its officers, employees and agents are neither officers nor employees of the City. Consultant further warrants and certifies that it will comply with the City's Ethics Code.

13.3 Certificate of Interested Parties (TEC Form 1295). For contracts needing City Council approval, or any subsequent changes thereto requiring City Council approval, the City may not accept or enter into a contract until it has received from the Consultant a completed, signed, and notarized TEC Form 1295 complete with a certificate number assigned by the Texas Ethics Commission ("TEC"), pursuant to Texas Government Code § 2252.908 and the rules promulgated thereunder by the TEC. The Consultant understands that failure to provide said form complete with a certificate number assigned by the TEC may prohibit the City from entering into this Agreement. Pursuant to the rules prescribed by the TEC, the TEC Form 1295 must be completed online through the TEC's website, assigned a certificate number, printed, signed and notarized, and provided to the City. The TEC Form 1295 must be provided to the City prior to the award of the contract. The City does not have the ability to verify the information included in a TEC Form 1295, and does not have an obligation or undertake responsibility for advising Consultant with respect to the proper completion of the TEC Form 1295.

XIV. AMENDMENTS

Except where the terms of this Agreement expressly provide otherwise, any alterations, additions, or deletions to the terms hereof, shall be effected by amendment, in writing, executed by both City and Consultant, and, if applicable, subject to formal approval by the City Council.

XV. SEVERABILITY

If any clause or provision of this Agreement is held invalid, illegal or unenforceable under present or future federal, state or local laws, including but not limited to the City Charter, City Code, or ordinances of the City of Pflugerville, Texas, then and in that event it is the intention of the Parties hereto that such invalidity, illegality or unenforceability shall not affect any other clause or provision hereof and that the remainder of this Agreement shall be construed as if such invalid, illegal or unenforceable clause or provision was never contained herein; it is also the intention of the Parties hereto that in lieu of each clause or provision of this Agreement that is invalid, illegal, or unenforceable, there be added as a part of the Agreement a clause or provision as similar in terms to such invalid, illegal or unenforceable clause or provision as may be possible, legal, valid and enforceable.

XVI. LICENSES/CERTIFICATIONS

Consultant warrants and certifies that Consultant and any other person designated to provide services hereunder has the requisite training, license and/or certification to provide said services,

and meets all competence standards promulgated by all other authoritative bodies, as applicable to the services provided herein.

XVII. COMPLIANCE

Consultant shall provide and perform all services required under this Agreement in compliance with all applicable federal, state and local laws, rules and regulations.

XVIII. NONWAIVER OF PERFORMANCE

Unless otherwise specifically provided for in this Agreement, a waiver by either Party of a breach of any of the terms, conditions, covenants or guarantees of this Agreement shall not be construed or held to be a waiver of any succeeding or preceding breach of the same or any other term, condition, covenant or guarantee herein contained. Further, any failure of either Party to insist in any one or more cases upon the strict performance of any of the covenants of this Agreement, or to exercise any option herein contained, shall in no event be construed as a waiver or relinquishment for the future of such covenant or option. In fact, no waiver, change, modification or discharge by either Party hereto of any provision of this Agreement shall be deemed to have been made or shall be effective unless expressed in writing and signed by the Party to be charged. In case of City, such changes must be approved by the City Council, as described in Article XVI. Amendments. No act or omission by a Party shall in any manner impair or prejudice any right, power, privilege, or remedy available to that Party hereunder or by law or in equity, such rights, powers, privileges, or remedies to be always specifically preserved hereby.

XIX. LAW APPLICABLE

19.1 THIS AGREEMENT SHALL BE CONSTRUED UNDER AND IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND ALL OBLIGATIONS OF THE PARTIES CREATED HEREUNDER ARE PERFORMABLE IN TRAVIS COUNTY, TEXAS.

19.2 Venue for any legal action or proceeding brought or maintained, directly or indirectly, as a result of this Agreement shall be heard and determined in a court of competent jurisdiction in Travis County, Texas.

XX. LEGAL AUTHORITY

The signer of this Agreement for Consultant represents, warrants, assures and guarantees that he has full legal authority to execute this Agreement on behalf of Consultant and to bind Consultant to all of the terms, conditions, provisions and obligations herein contained.

XXI. PARTIES BOUND

This Agreement shall be binding on and inure to the benefit of the Parties hereto and their respective heirs, executors, administrators, legal representatives, and successors and assigns, except as otherwise expressly provided for herein.

XXII. CAPTIONS

The captions contained in this Agreement are for convenience of reference only, and in no way limit or enlarge the terms and/or conditions of this Agreement.

XXIII. INCORPORATION OF EXHIBITS

Each of the Exhibits listed below is an essential part of the Agreement, which governs the rights and duties of the Parties, and shall be incorporated herein for all purposes:

Attachment "A" - Scope of Services, including Project Description/Scope of Services; Fee Summary for Professional Services and Proposed Project Schedule

XXIV. ENTIRE AGREEMENT

This Agreement, together with its authorizing ordinance and its exhibits, if any, constitute the final and entire agreement between the Parties hereto and contain all of the terms and conditions agreed upon. No other agreements, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or to bind the Parties hereto, unless same be in writing, dated subsequent to the date hereto, and duly executed by the Parties, in accordance with Article XIV. Amendments.

XXV. MISCELLANEOUS CITY CODE PROVISIONS

25.1 **Representations and Warranties by Consultant.** If Consultant is a corporation, partnership or a limited liability company, Consultant warrants, represents, covenants, and agrees that it is duly organized, validly existing and in good standing under the laws of the state of its incorporation or organization and is duly authorized and in good standing to conduct business in the State of Texas.

25.2 **Franchise Tax Certification.** A corporate or limited liability company Consultant certifies that it is not currently delinquent in the payment of any Franchise Taxes due under Chapter 171 of the *Texas Tax Code*, or that the corporation or limited liability company is exempt from the payment of such taxes, or that the corporation or limited liability company is an out-of-state corporation or limited liability company that is not subject to the Texas Franchise Tax, whichever is applicable.

25.3 **Eligibility Certification.** Consultant certifies that the individual or business entity named in the Agreement is not ineligible to receive payments under the Agreement and acknowledges that the Agreement may be terminated and payment withheld if this certification is inaccurate.

25.4 **Payment of Debt or Delinquency to the State or Political Subdivision of the State.** Pursuant to Chapter 38, *City of Pflugerville Code of Ordinances*, Consultant agrees that any payments owing to Consultant under the Agreement may be applied directly toward any debt or delinquency that Consultant owes the City of Pflugerville, State of Texas or any political subdivision of the State of Texas regardless of when it arises, until such debt or delinquency is paid in full.

25.5 **Texas Family Code Child Support Certification.** Consultant certifies that they are not delinquent in child support obligations and therefore is not ineligible to receive payments under the Agreement and acknowledges that the Agreement may be terminated and payment may be withheld if this certification is inaccurate.

25.6 **Texas Government Code Mandatory Provision**. The City of Pflugerville may not enter into a contract with a company for goods and services unless the contract contains a written verification from the company that it; (i) does not boycott Israel; and (ii) will not boycott Israel during the term of the contract. (Texas Government Code, Chapter 2270.002) by accepting this rider, the Consultant hereby verifies that it does not boycott Israel, and agrees that, during the term of this agreement, will not boycott Israel as that term is defined in the Texas Government Code, Section 808.001, as amended. Further, the Consultant hereby certifies that it is not a company identified under Texas Government Code, Section 2252.152 as a company engaged in business with Iran, Sudan, or Foreign Terrorist Organization.

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

CITY OF PFLUGERVILLE

GARVER, LLC

All. CI

()	Signature)		Signature)
Printed Name:	Sereniah Breland	Printed Name:	Jeff Sober, P.E.
Title:	City Manager	Title:	Vice President
Date:		Date:	October 15th, 2020

APPROVED AS TO FORM:

Charles E. Zech City Attorney DENTON NAVARRO ROCHA BERNAL & ZECH, P.C.

APPENDIX A – CITY OF PFLUGERVILLE WILBARGER CREEK WWTF SCOPE OF SERVICES CONCEPTUAL DESIGN PHASE

General

Generally, the Scope of Services includes professional services necessary for the conceptual design phase services for the City of Pflugerville Wilbarger Creek Wastewater Treatment Facility (WWTF). The Owner and Client is the City of Pflugerville (City) and represented by CP&Y, the Owner's Representative (OR).

The scope assumes all virtual meetings and electronic submittals unless required by agencies and specifically identified in scope. All deliverables to be provided via searchable and bookmarked PDF documents, unless identified otherwise.

The Scope of Services includes professional services necessary for the conceptual design of a new, greenfield 8 MGD WWTF. This conceptual design includes significant master planning and site development work, including environmental assessments, hydrologic and hydrology studies, geotechnical engineering, survey, collection system planning, site master planning to 24 MGD, modeling, phasing analysis, population and flow projections, and conceptual design of the WWTF.

The scope includes conceptual design and preliminary design phase for the entire 8 MGD site plan, with implementation of a 4-8 MGD initial phase and site planning to facilitate future expansion up to 24 MGD. The planned capital improvements include new facilities to meet the targeted capacity and treatment criteria for the permitted site.

The scope of services includes conceptual design of the following elements, which may change during the conceptual planning phase:

- Hydraulic capacity of the WWTF Annual Average Design of 8 MGD.
- Hydraulic capacity of the WWTF Peak Flow of 32 MGD.
- Planning for identified future regulations including phosphorus removal.
- New site civil considerations, such as yard piping, site utilities (drains, water distribution), paving, drainage, flood protection berm, landscaping, site access and security as required.
- New influent pump station.
- New headworks facility with fine screening and grit removal with screenings and grit processing with loading.
- New influent foul air facility.
- New aerobic digester (designed for future conversion to primary clarifier) -- not included in initial phase.
- New digester transfer pump stations (designed for future conversion to primary sludge pump station) -- not included in initial phase.
- New secondary treatment splitter structures.
- New conventional activated sludge basins reduced size/capacity in initial phase.
- New mixed liquor splitter box.
- New secondary clarifiers.
- New RAS/WAS pump station.
- New tertiary filter facility.
- New Ultraviolet disinfection facility.
- New effluent facility.

- New chemical storage and feed facilities.
- New non-potable plant water system.
- New aerated solids holding tank.
- New sludge drying beds/composting facilities.
- New solids thickening facilities.
- New solids dewatering facilities.
- New dewatering facility foul air facility.
- New operations and laboratory building.
- New maintenance building.
- New electrical service facilities and electrical distribution facilities.
- New backup power generator system.
- New SCADA system.

TASK I: Project Management and Quality Assurance

This task is for the anticipated conceptual design phase only and is anticipated to be 6 months long. Garver (Engineer) will provide and develop project control tools including progress reports, action items log, decision log, design team meetings, workshops, and schedule and invoicing. Garver shall provide professional services in this Task as follows:

1.1 Prepare a Project Work Plan, a document to be used by all participants to ensure communication on understanding of project goals, scope, and tasks. This project plan will serve through the current and future design phases.

It will address, but is not limited to:

- Project schedule.
- Project budget.
- Quality Management Plan.
- Change Management Plan.
- Communications Plan.
- 1.2 Schedule and direct regular coordination meetings with design team to coordinate task assignments, action items, and to prepare for progress meetings with the City/OR. Garver will maintain an Action Item Log and Decision Log to monitor activity. Coordinate with subconsultants to confirm all project elements are compatible, integrated. Coordinate with the City/OR as needed.
- 1.3 Schedule and conduct up to six progress meetings with the City/OR. In addition to reviewing progress at each meeting, review project deliverable status, current schedule, outstanding action items, project bottlenecks that could impact schedule, budget status, and decisions made. Prepare agenda and meeting materials, direct and document meetings to review progress, and facilitate the exchange of ideas and information. Prepare draft meeting minutes to include action lists, decision lists, within ten business days to submit to the City/OR for review and approval. Final minutes will be issued after receipt of review comments. The first progress meeting will include a project start up meeting to confirm project scope, personnel, lines of communication, security protocols, change management, and schedule.
- 1.4 Prepare monthly Project Summary Reports and submit with monthly invoice.

The report shall contain the following elements:

• Summary of work completed to date.

- Budget summary.
- Schedule.
- Summary of actions and decisions needed.
- Upcoming activities
- Potential changes in scope, costs, or schedule.
- 1.5 Quality Assurance (QA): Provide QA/Quality Control (QC) Plan.
- 1.6 Risk Register

Garver will maintain a risk register, outlining existing or anticipated risks and a proposed course of action to mitigate each risk.

Deliverables:

- Meeting Agendas Agendas to be submitted 1 week in advance of meetings.
- Meeting minutes.
- Monthly status reports.
- Monthly schedule updates.

Extra Work/Assumptions:

The following items are not included under this agreement but will be considered as Extra Work. Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and the Engineer.

• Meetings, outside of those listed.

TASK II: Geotechnical Exploration

Garver will provide the following professional services as follows:

- 2.1 Review available existing geotechnical reports and data in vicinity of proposed work areas.
- 2.2 Travel to the site to select locations for exploratory borings.

Subcontract with a geotechnical company to drill up to 40 borings with depths varying from 30 feet to 50 feet at the site. The bore drillings are expected to be conducted in three phases. It is planned that five initial borings will be drilled, and geotechnical information provided. The five initial borings along with the existing geotechnical information will be utilized to develop the second phase of the geotechnical work. The second phase is planned to consist of 25 borings. Depending on the results of the Phase 1 borings, the Phase 2 borings may happen in a grid layout or based on a specific structure layout. The Phase 3 borings will depend on the results of the Phase 3 borings may be conducted on a grid or by specific structure location.

2.3 Samples will be collected intermittently using continuous flight augers and either split-spoon or tube samplers. For the deeper borings, shale may be sampled using an NX-size core barrel or tested in-situ using a Texas Department of Transportation Cone Penetration Test, as appropriate for the material. At completion, the boreholes will be backfilled with auger cuttings to the ground surface. The geotechnical company will provide up to 4 Piezometers to monitor groundwater levels. The scope includes up to 3 visits to check the groundwater levels in the piezometers.

- 2.4 Select samples for laboratory testing, assign tests, deliver samples to a subcontractor laboratory selected by Garver, and review test results. Testing is expected to include classification tests (liquid and plastic limits and percent passing a #200 sieve or gradation), moisture content, one-dimensional swell, and unconfined compression strength tests.
- 2.5 Geotechnical Investigation Technical Memorandum (TM) or Summary Report

Prepare a TM or summary report of the geotechnical investigation to include:

- Appendix with the boring locations, boring logs, laboratory test results, and a key to the symbols used.
- Discussion of subsurface conditions and soil properties indicated by the field and laboratory work, and the implications for design.
- Foundation and site preparation recommendations for the project. The intent is for the proposed foundations to be compatible with the existing conditions.
- Discuss expected construction related issues, if appropriate based upon materials encountered by the borings.
- Recommend earthwork related methods for use during development of the drawings and specifications.

Deliverables:

- Geotechnical Engineering Report:
 - Draft An electronic pdf of the report to be submitted for review and comment by the City/OR.
 - Final will incorporate or address the City/OR comments. The final sign/sealed Geotechnical Engineering Report to be submitted electronically in PDF.

Extra Work/Assumptions:

The following items are not included under this agreement but will be considered as Extra Work. Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and the Engineer.

- Trips for additional site exploration in addition to those listed.
- Additional borings beyond those listed.

TASK III: Develop Public Outreach Plan

3.1 Public Information and Engagement Plan

Garver will work with City of Pflugerville staff to organize a communications plan that addresses the following audiences:

- Communities adjacent to the site, including residents and businesses.
- Regulatory entities such as the TWDB.
- City Council.

Garver will include the goals, objectives, and specific strategies and tactics for the project in the plan.

Deliverables:

• Public Information and Engagement Plan: Draft, Revised, Final.

Extra Work/Assumptions:

The following items are not included under this agreement but will be considered as Extra Work. Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and the Engineer.

- Development of Stakeholder Database.
- Communication Tools.
- Neighborhood Meetings.
- Public Workshops.
- City Council Presentations.

TASK IV: Environmental Services

Garver shall perform environmental tasks to prepare an Environmental Information Document (EID), in compliance with National Environmental Policy Act (NEPA) regulations and consistent with Texas Water Development Board (TWDB) guidance. Garver will provide the following professional services as follows:

4.1 Constraints Mapping

The Engineer will develop a desktop-based environmental constraints report and map of the study area using aerial photography, US geological Survey (USGS) topographic maps, hazardous materials data, National Wetland Inventory (NWI), US Fish and Wildlife (USFWS) federally-listed threatened and endangered species data, Natural Resources Conservation Service (NRCS), soil surveys, historical/archeological previously recorded sites and those listed on the National Register of Historic Places (NRHP), and other environmental data as needed. The data will be displayed utilizing Geographic Information System (GIS) software (ArcView 10.1) and in pdf format. This work is not a NEPA document, but a constraints document.

4.2 Biological Resources

The Engineer shall perform desktop and field analysis to identify vegetation and habitat in the project area and provide a draft and final Biological Evaluation technical report. The Engineer shall perform surveys of protected species or habitat of protected species. This shall include:

- All species listed by the United States Fish and Wildlife Service (USFWS) as threatened or endangered or proposed for listing as threatened or endangered (50 CFR 17.11-12).
- All species that are candidates for review for listing by USFWS as threatened or endangered (per most recently updated list in Federal Register).
- Species listed as threatened or endangered species or species of greatest conservation need (SGCN) by the State of Texas Threatened and Endangered Species Listings, Texas Park and Wildlife Department (TPWD).
- Species protected by the Migratory Bird Treaty Act (50 CFR 10.13) and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c).

The Engineer shall examine existing data to determine the likelihood that rare species, protected species, their habitat, or designated critical habitat (per 50 CFR §17.94-95) could be

impacted by the proposed project. Existing data shall include the Element Occurrence Identification (EOID) records of the TPWD Natural Diversity Database.

The Engineer shall prepare an effect determination pursuant to the Endangered Species Act (ESA) for all federally listed species. A determination of impact will be included for all statelisted species.

The Engineer shall determine whether critical habitat is present in the study area and whether the proposed project will affect that critical habitat.

4.3 Water Resources

The Engineer shall perform a desktop and field analysis of water resources and provide a draft and final Water Resources technical report including identification of jurisdictional wetlands, streams, and Waters of the U.S. If the analysis combined with potential project impacts indicate permitting beyond a non-reporting nationwide permit (NWP) is necessary, the delineation of all potential Waters of the U.S., including wetlands, throughout the project area, would be conducted as follows:

- Wetland Delineation Engineer to walk the entire alignment and temporary construction easements and delineate wetlands and other waters of the US in accordance with the USACE Wetland Manual and Great Plains Regional Supplement. Senior environmental scientist will GPS wetland boundaries falling within the project area and proposed easements with a submeter GPS unit (capable of 4" accuracy). The Engineer will also delineate and GPS the Ordinary High Water Marks (OHWM) of potentially jurisdictional streams. After the delineation, the Engineer shall:
 - Insert revised boundaries on the design files.
 - Engineer to prepare a Preliminary Jurisdictional determination (PJD) report on findings and list the steps needed to comply with USACE Section 404 Nationwide Permitting (NWP). The report will include aerial photos, ROW limits, alignments, data sheets, and other information and exhibits necessary for the USACE to issue a permit.
 - Nationwide Permit It is anticipated that a Section Nationwide 404 permit would be required and will be filed by the Engineer. This scope does not include preparation of an Individual 404 Permit or wetlands mitigation.
 - Prepare and follow through with USACE permit process. It is assumed for this proposal that USACE will approve a nationwide permit.
 - Meet and Correspond with City and USACE during permit review process. (Assume one meeting).
 - City to purchase mitigation credits, if required. If mitigation credits area required, Engineer will contact local approved mitigation banks, request price quotes, and submit them to the City for review and selection. Engineer will then coordinate with the City's selected bank to obtain a sales agreement and submit it to the City for review and signature.
 - Coordination and Meetings with Owner.
- 4.4 Archeological Resources

The project is subject to the Antiquities Code of Texas (ACT). A permit for archeological survey is required under the ACT. The Engineer shall prepare a permit application for the survey of the proposed project. The permit application and scope will be submitted to the Texas Historical Commission (THC) for review and approval prior to proposed fieldwork.

Following receipt of the archeological permit, survey of the project area will be conducted. The Engineer will perform an intensive archeological survey of the proposed project area to comply with the ACT. All work will conform to 13 TAC 26 which outline the regulations for implementing the ACT. Survey will include intensive pedestrian survey in combination with shovel testing and mechanical trenching of the project area where there is potential for deeply buried archeological materials. In accordance with the State's newly revised survey standards, if artifacts or features are observed within a backhoe trench, a column sample must be excavated. All shovel tests, trench locations, and sites will be documented with a combination of handwritten records and hand-held GPS units. If historic sites are recorded within the project area, deed research will be conducted. Deed research may need to occur in person at the County Clerk's Office.

If USACE permitting is required on the project, Section 106 coordination will be required.

Deliverables:

- Archeological Permit Application.
- Archeological Report.
- 4.5 Hazardous Materials Assessment

The Engineer shall perform a hazardous materials assessment per the TWDB EID outline. Services shall include:

- Site reconnaissance.
- Review of Environmental Database Report.
- Review of historic aerials photos.
- 4.6 Report Preparation

The Engineer shall prepare an EID report following the TWDB EID outline and guidance. The EID will contain appropriate maps, figures, appendices, and photographs. Project description, analysis of impacts to resources including biological, waters, cultural, air, hazmat, and community impacts, and indirect and cumulative impacts, summary of public involvement, and alternatives analysis will be included in the report. The draft EID shall be submitted to the City/OR for review and comment. The Engineer shall address one round of comments received from the City and submit final EID to City/OR for TWDB submittal. Garver shall provide written response to TWDB comments received on the EID in a comment/response matrix.

Deliverables:

- Constraints map.
- Biological technical supporting data (maps, forms, coordination letters).
- Waters and Wetlands technical supporting data (maps, forms, delineation report and coordination letters).
- Archeological background study, survey report and coordination letters.
- Draft and Final EID.

4.7 Public Meeting

The Engineer shall plan and conduct a Public Meeting following TWDB EID requirements. The Engineer shall work with the City to determine logistics of Public Meeting. The Engineer shall provide Staff for the Public Meeting and will ensure all notifications follow the TWDB requirements. The Engineer shall develop meeting materials such as display boards, handouts, presentation, notifications for mail out, and comment cards. The Engineer shall include public meeting information as an Appendix in the final EID submittal.

Deliverables:

- Public Meeting Notice (to be published in local newspaper).
- Exhibit boards (up to 8).
- Handout (up to 200 copies).
- Notification flyer for mail-out (up to 500 copies).
- PowerPoint presentation.
- Comment cards (up to 200 copies).
- Staff for Public Meeting (up to 3).

4.8 Public Meeting Summary including Comment Response matrix.

Garver will provide comments and a summary to the public meeting comments.

Deliverables:

- Wetlands Delineation and Tasks per Section 4.3 of this document.
- Archaeological Report and Permit Application per Section 4.4 of this document.
- Draft and Final EID per Section 4.6 of this document.
- Public Meeting Materials and Summary per Sections 4.7 and 4.8 of this document.

Extra Work/Assumptions:

The following items are not included under this agreement but will be considered as Extra Work. Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and the Engineer.

- Historic resources PCR.
- Ph 1 ESA.
- Individual 404 Permit.
- Mitigation for adverse effects to SAL-eligible archeological sites.
- Project coordination under Section 106 with the USACE or any federal agency.
- Coordination of ROE and landowner letters (to be coordinated by Garver).
- An evaluation of compliance with environmental regulations or evaluation above-ground historic resources.

TASK V: Hydrology and Hydraulics Studies

Garver will provide floodplain analysis services for the project. The purpose of the study will be to analyze the Wilbarger Creek floodplain through the project site and recommend flood mitigation alternatives for the proposed plant. The Engineer will provide the following services as part of this study:

- The hydraulic project limits for this analysis will extend along Wilbarger Creek for approximately 500 feet upstream and downstream of the project site boundaries.
- Garver will attend one site visit to observe existing features at the project site.
- The creek is shown as a Zone A on the FEMA maps. Therefore, a hydrologic and hydraulic model of the creek is not expected to be available from FEMA.
- Garver will prepare a hydrologic model for the project based on offsite runoff that enters Wilbarger Creek adjacent to the project site. The flows determined from this model will be used for the hydraulic model.

 Garver will develop a hydraulic model of the project area using the HEC-RAS software. This model will be used to analyze existing and proposed project scenarios for Wilbarger Creek. These proposed scenarios will include floodplain fill and a levee. Up to three scenarios will be developed.

Garver will prepare a brief drainage memorandum that will include the following items:

- Brief description of the existing floodplain and drainage system hydraulic condition.
- Descriptions of the results for the scenarios described above.
- Plots of relevant cross sections and floodplain limits.
- Tables showing existing and proposed condition hydraulic results such as water surface elevations, velocities, and other hydraulic parameters.
- Submit drainage memorandum to City of Pflugerville for review.

Garver will attend up to two meetings with the City/OR in relation to the Hydrology and Hydraulic studies.

Should encroachment into the Wilbarger Creek floodplain from the project be considered a viable option, Garver will prepare and submit an application package to the Federal Emergency Management Agency (FEMA) in support of a Conditional Letter of Map Revision (CLOMR). No Letter of Map Revision will be submitted or prepared. The CLOMR package will be submitted to the City/OR of Pflugerville and Travis County for review before submittal to FEMA.

Deliverables:

- Draft and Final Drainage Technical Memorandum (submitted as word-searchable PDF document)
- FEMA Application in support of CLOMR

Extra Work/Assumptions:

The following items are not included under this agreement but will be considered as Extra Work. Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and the Engineer.

- Letter of Map Revision.
- Hydrology and Hydraulics analysis of the tributary to Wilbarger Creek.
- Bridge analysis.
- Plans and specifications for detention pond.
- Plans and specifications for culvert at Gregg Lane, if to be replaced.
- Plans and specifications for levee, if needed.

TASK VI: Agency Coordination (to be completed as a cost plus)

Agency Coordination services shall include:

6.1 Coordination with the Wilbarger Interceptor Team

Garver will participate in virtual phone calls and meetings to determine final elevations and locations for the Wilbarger Interceptor at the WWTF.

6.2 TWDB Coordination

As requested by the City/OR, Garver will coordinate and provide information to the OR or TWDB for TWDB submittals and requests.

6.3 Coordination/Meetings with the Texas Commission on Environmental Quality (TCEQ)

These services shall include:

- Garver will coordinate, prepare for, and attend meetings with City staff and the OR with the TCEQ regarding the project. This includes meetings with the City/OR and the OR.
- This task includes notification of the project to TCEQ and a virtual meeting with TCEQ for the Conceptual phase of the Project. Meeting minutes for the meeting with TCEQ will be provided.
- TCEQ Permit Coordination:
 - Garver will coordinate, prepare for, and attend meetings with City staff and the OR with the TCEQ regarding the permit and project phasing. This includes internal meetings with the City/OR and the OR. It is planned that two (2) virtual meetings will be held with TCEQ. This task includes support, preparation, and delivery of a minor amendment to the City/OR's existing permit. Meeting minutes for the meetings with TCEQ will be provided.
- 6.4 FAA Coordination

These services shall include:

- Coordination with City of Pflugerville or Owner's Representative and Austin Executive Airport:
 - Garver will coordinate airspacing study of the planned development with the City of Pflugerville/OR and Austin Executive Airport prior to developing the airspacing analysis exhibits and submitting the exhibits to Federal Aviation Administration OE/AAA portal for determination.
- Height and Hazard Zoning Analysis Coordination:
 - Prior to submitting airspacing analysis exhibits to the OE/AAA portal, Garver will coordinate with the following local entities to determine impacts of proposed development (if any) to the Austin Executive Airport:
 - City of Pflugerville.
 - City of Manor.
 - City of Austin.
 - Austin Executive Airport.
- Airspace Study Part 77 Surfaces Review:
 - Garver will evaluate the impacts of planned development to existing and ultimate Part 77 surfaces for Austin Executive Airport. Conclusions of the evaluation will be document in an Agency Coordination Technical Memo to be included as an attachment in the EFR.
- Airspacing Analysis:
 - Garver will develop and submit layout and elevation data for each building planned for construction of 5 buildings, (2 studies per building, a total of 10 total studies) to the FAA to review through the OE/AAA portal (<u>http://oeaaa.faa.gov</u>). Garver will submit permanent obstruction data and temporary construction data (for use of temporary cranes during construction). Garver will provide the City with the determination letters from the FAA.

Deliverables:

- Airspace Study 11"x17" exhibit evaluation of Austin Executive Airport existing and ultimate Part 77 Surfaces and impacts of planned development.
- Technical Memo documenting conclusions of Airspace Study to be included as attachment to EFR.
- Airspacing Analysis 10 exhibits to be submitted to FAA OE/AAA portal for airspacing determination. Determination letters from FAA's airspacing analysis.

Extra Work/Assumptions:

The following items are not included under this agreement but will be considered as Extra Work. Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and the Engineer.

- Does not include provisions for addressing impacts to any approach or departure procedures.
- Does not include a topographical survey of Austin Executive Airport or any of its facilities. Published coordinates will be used to determine the airspace surfaces.
- Note that while Part 77 surfaces are intended for the FAA to identify potential hazards. The FAA will make the final determination whether obstacles are hazardous.
- 6.5 Coordination with the City-wide comprehensive drainage masterplan.

Garver will coordinate with the consultant performing the City-wide comprehensive drainage masterplan. It is not anticipated that any city-wide drainage requirement will be required on the existing site, outside of site detention.

6.6 Undefined Scope for potential sampling/laboratory testing and any other unknowns that may occur that could negatively impact the schedule if delayed.

TASK VII: Survey

Garver will subcontract with a survey company to provide survey services for the project. Survey services shall include:

7.1 Boundary Survey

The surveyor will verify and depict the existing boundary as surveyed in 2009 by Walker Partners. The surveyor will secure an abstract report for the property.

7.2 Topographic Survey

The surveyor will recover and utilize established control from the previous project performed by Walker Partners in 2009. The surveyor will utilize the existing survey from Walker Partners that was performed in 2009. Since we are using the existing survey, there will be limited survey of the existing site along with survey of the improvements along Gregg Lane, creek cross-sections and geotechnical bores. The surveyor will collect spot elevations and grade breaks within the project site on a limited basis. The surveyor shall survey up to 3 sections upstream and 3 sections downstream of the site in the creek (6 sections total). For these sections, survey the creek channel and 50 feet beyond the top of bank on each side of the creek. The surveyor shall

provide up to 10 ROEs for the survey work. The surveyor shall survey up to 40 geotechnical boring locations. The survey elements to be captured include driveways, curbs, gutters, visible utilities, markings from 811 request, drainage features and trees (8" dbh and up).

The surveyor will establish control points for use during construction.

Deliverables:

- Three (3) copies of the topographical survey which maps 1-foot contours, utilities, and existing structures, with a digital terrain model. Presented in 11x17 format.
- DWG and PDF files electronically.

Extra Work/Assumptions:

The following items are not included under this agreement but will be considered as Extra Work. Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and the Engineer.

- Survey work is for limited site survey. The Walker Partners survey from 2009 will be utilized for the project.
- The Manville GST site located adjacent to the WWTF site is not included.

TASK VIII: Conceptual Design Phase

The conceptual design phase submittal will include a Conceptual Design Report (CDR) and a conceptual phase opinion of probable construction cost. This conceptual submittal will be for the purpose of coordinating the proposed improvements with the City/OR, the Texas Commission of Environmental Quality (TCEQ), and the Texas Water Development Board (TWDB) and to develop an order of magnitude cost estimate for the project. Major elements of the Engineering Report will include the following facility or process evaluations (refer below for the anticipated report Table of Contents):

- All elements as listed in the "General" section of this Scope of Services.
- CDR will include likely future limits (based on discussions with TCEQ) for phosphorus/nitrogen as well as identification of current or future process improvements necessary to meet these likely future limits.
- Hydraulic Grade Line (HGL) determination throughout the treatment processes from the WWTF influent to the WWTF outfall.
- Evaluate solids handling operation and propose options for a new solids treatment train.
- Alternatives Analysis and Design of a new Activated Sludge System.
 - Develop a layout for a new fine bubble diffused air secondary treatment train using conventional activated sludge.
 - Evaluate nutrient removal requirements in future TPDES permit.
 - Evaluate improved primary treatment to offset additional aeration basin capacity.
 - Master Planning of the site for the full build out.

8.1 Historical Data Review

Garver will collect and review relevant information including:

- Land data.
- Previous applicable studies and reports.
- Process data and daily monitoring reports for a three-year period from the Central plant.

- Develop sampling plan.
- 8.2 Flow Projections/Load Projections

Flow Projection Development

Verify population & flow projections for the Central, Wilbarger & Cottonwood Basins to year 2050:

- Gather and review previous population and flow projections provided by the City/OR, including the 2020 Master Plan, available data from the Pflugerville Community Development Corporation, the U.S. Census American Community Survey, and other sources, as available. Gather from the City/OR information on new development connections anticipated in the study area, and review population growth rate trends in nearby, similar-size cities.
- Using the data above as well as historical influent data from the Central WWTP, verify the current population and flow projections as well as the projected populations and flows through 2050 for the three basins.
- Validate maximum month and peak flow peaking factors to year 2050 based on historical flow data to the Central WWTP, as well as 5-years of historical rainfall data.

This subtask will evaluate existing flow rates and compare to existing sewer service population within the three basins. The flow rates will then be compared to a 20-year population projection for a complete 20-year planning horizon flow projection, as required by TWDB.

Load Projection Development

The existing wastewater characterization will be completed by Garver using historical data as required by TCEQ design criteria. Additional sampling and laboratory analysis to be coordinated with the City/OR based on available resources and funding. These sample parameters will be utilized in projecting future loading rates for processes. This is anticipated to include multiple samples, with the analysis of each sample including BOD, Soluble BOD, COD, Soluble COD, TSS, NH₃, Total Phosphorus, Soluble Phosphorus. The City/OR will conduct all sampling, analysis, and pay for lab fees if needed.

Garver will host a virtual workshop with staff to review findings, clarify assumptions, and to ensure consensus with the City/OR on population forecasts, GPCD, flow forecasts, and peaking factors.

8.3 Flow Transfer Evaluation

Garver will evaluate flow transfer alternatives between the Central and Wilbarger basins in order to optimize the phasing of the Wilbarger RWWTF, relative to the phasing of the Central WWTP as stated in the 2020 Master Plan.

- Evaluate previous flow transfer approaches identified in the 2020 Master Plan.
- Taking into account the basin flow projections developed in Task 8.2, develop infrastructure and/or operational alternatives for managing the flow between the Central and Wilbarger basins. This could include flow splitting at the Carmel lift station, the utilization of existing assets such as the Weiss Lane force main, and the conceptual relief of existing lift stations that pump flow to the Central WWTP with gravity mains to convey flow to the Wilbarger RWWTF.

- Develop life cycle cost estimates for the identified alternatives, including estimates of capital and operational (i.e., pumping) costs.
- Taking into account permit limitations and planned capacity increases at the Central WWTP, develop a recommended phasing plan for the Wilbarger RWWTF that optimizes the use of existing assets and planned treatment capacity expansions while meeting TCEQ capacity trigger requirements.

Evaluate the feasibility and cost associated with the transition of flows from the Cottonwood Basin to the Wilbarger Creek RWWTF, versus the construction of a third WWTF in the Cottonwood basin.

- Review available information on the current New Sweden WWTF plan, including prior conceptual planning reports and property information.
- Determine the capital and operational life-cycle costs related to the infrastructure necessary to collect and pump flow from the Cottonwood sewershed not captured by the proposed New Sweden WWTF.
- Identify three (3) potential properties that would be potentially suitable for a new Cottonwood Basin WWTF, that could receive gravity flow from the full basin.
- Develop infrastructure requirements for each of the three (3) identified properties, including the cost of major gravity interceptors required for each location. These infrastructure alternatives will be developed at a master-planning scale for comparative purposes only; no hydraulic modeling of these improvements is anticipated. Develop capital and operational life-cycle costs for these alternatives, including property acquisition costs.
- Perform a weighted triple bottom line (TBL, social/environmental/economic) analysis of the four (4) alternatives identified above the New Sweden WWTF location relative to the three (3) alternative WWTF locations with input from the City/OR.
- Taking into consideration the annual operating costs associated with pumping flows from the Cottonwood Basin, the available property for wastewater treatment in both Cottonwood and Wilbarger Basins, the receiving stream standards in Wilbarger Creek and Cottonwood Creek, perform a comparative analysis on a TBL basis to determine a recommended approach to managing flows in the Cottonwood basin.
- Establish decision making triggers and timing for implementing the recommended approach based on basin development and plant flow rates.

Document the findings from Tasks 8.2 and 8.3, detailing long-term operational strategies for basin flow management between all three Basins, in a Technical Memorandum.

- Garver will deliver an interim TM documenting the findings.
- Deliverable will be PDF documents sent electronically.

8.4 Field Investigation

Garver will evaluate the existing site.

8.5 Hydraulic and Process Modeling

Garver will perform hydraulic modeling of the proposed facility and receiving stream. Modeling will be done utilizing static models. A determination of the boundary conditions of the hydraulic model will be developed. Garver will perform process modeling using GPS-X, BioWIN, or Sumo. A process model of the proposed facility will be developed and calibrated to the Central plant. Two alternatives will be evaluated, based on the alternatives noted in Section 8.8. The process modeling will also consider future nutrient removal regulations. Receiving stream modeling will

be performed using the existing TCEQ Qual-T Model for the receiving stream with the intent of identifying potential future permit requirements for a future 24 MGD phase.

- Garver will deliver an interim TM documenting the findings.
- Deliverable will be PDF documents sent electronically.
- 8.6 Phasing Evaluation

Develop a Wilbarger Creek RWWTF Phasing Plan:

- Based on the results for transitioning flows from the Central Basin to the Wilbarger Basin, determine the capacity of the initial phase of the Wilbarger Creek RWWTF.
- Based on the flow projections, determine the potential ultimate layout for the Wilbarger Creek RWWTF
- Technical Memorandum to include a recommendation on the initial capacity of the Wilbarger Creek RWWTF and the phasing plan to the potential ultimate buildout.
- Garver will deliver an interim TM documenting the findings.

8.7 Site Development Plan

Develop a site development plan for the potential ultimate buildout plan. Include all the site development items in the RFQ.

- Site development layout for civil improvements, including facility fencing, lighting and security, buffer zone, access roads and parking, administration, and maintenance building(s), stormwater infrastructure, required FEMA coordination, and potable water supply. Local soils conditions would require costly over excavation and subgrade improvements to situate a short levee. As such levee construction is excluded from this scope.
- Conduct an electrical service evaluation that meets TCEQ requirements for reliability and emergency backup power, and a communication service evaluation.
- Final recommendations on site management of storm water and TCEQ permitting included.
- Garver will deliver an interim TM documenting the findings.
- Deliverable will be PDF documents sent electronically.
- 8.8 Alternatives Evaluation

Garver will conduct a detailed evaluation of up to two secondary treatment process alternatives, including 1) Anaerobic-Anoxic-Aerobic (A2O) Tapered Aeration Biological Nutrient Removal (BNR), or 2) Extended aeration oxidation ditch BNR process (note: both alternatives will be considered with and without primary clarifiers). Detailed evaluation will include development of design parameters (e.g., equipment sizing criteria), evaluation of hydraulic impacts, development of 10% level site layouts and evaluation of phasing of the proposed alternatives. Strengths and limitations of each alternative will be identified, and conceptual opinions of probable construction cost developed for each. Work under this task will consider the requirements for the various engineering disciplines that will be involved in the design of facilities (i.e., civil, electrical, instrumentation, mechanical, structural, etc.).

Evaluate wastewater treatment alternatives for each treatment process necessary for the potential ultimate buildout.

• Each process will be evaluated based on non-cost factors with weighed priority specifically assigned by the Owner.

• Each process will be evaluated based on estimated annual operating costs, present worth costs and Cost and Effectiveness Analysis per TWDB requirements.

Report will also meet the requirements of an Engineering Feasibility Report (EFR) to be submitted to TWDB for review (and follow the Table of Contents presented in below). Garver will submit this report to TWDB as the Engineering Feasibility Study.

Garver will prepare a conceptual design phase estimate opinion of probable construction costs for the chosen alternative with the recommended project components based upon information obtained during the conceptual design phase. For the Conceptual Design, Garver will consider these opinions as estimates and the expected range of accuracy for this type of estimate is - 20% to +30% of the estimated construction cost.

The alternatives evaluation will include a summary of options for the following processes, with a comparison of advantages, disadvantages, relative capital cost, and recommendation for specific alternative based on Garver's experience of best value and previous life cycle cost.

- Influent Pumping Submersible versus wet pit / dry pit.
- Headworks Screening Technology: Bar versus band screens.
- Grit technology Stacked trays versus vortex basins.
- Blowers Multistage centrifugal versus turbo blowers.
- Tertiary Filters Submerged disk versus partially submerged media.
- UV Disinfection LPHO versus traditional vertical LPMO.
- Odor Control Biological versus chemical.
- Sludge pumping Progressive cavity versus disc pumps versus centrifugal choppers.
- Solids Thickening Gravity thickening, gravity belt thickener, or rotary drum thickener.
- Dewatering Screw Press, centrifuge, or belt filter press.

Conceptual Design Report Table of Contents

The following represents the anticipated Table of Contents for the Conceptual Design Report, including the various components of the report discussed throughout this section of the scope of work document.

- 1. Introduction
 - 1.1. Collection System Background
 - 1.2. Pflugerville Wastewater Recovery Facility Summary
 - 1.3. Wilbarger WWTP and Current Permit Requirements
- 2. Pflugerville Wastewater Collection System Modeling and Master Planning (Summary of relevant components of the TM noted in section 8.2 and 8.3 above. TM included as Appendix to Report.)
- 3. Wilbarger WWTF Expansion Planning (Summary of relevant components of the TM noted in section 8.2, 8.3 and 8.6 above. TM included as Appendix to Report.)
- 4. Plant Siting Considerations (TM noted in section 8.7 above will be used for many sub-components. TM included as Appendix to Report.)
 - 4.1. Plant Buffer Zones
 - 4.2. Adjacent Property Use Considerations
 - 4.3. Floodplain
 - 4.4. Stormwater Detention
 - 4.5. Electrical Service

- 5. Wilbarger WWTF Influent Loading Criteria
 - 5.1. Influent Waste Characterization
 - 5.1.1.Typical Pflugerville Municipal Wastewater (Central)
 - 5.1.2. Industrial Waste Suppliers
 - 5.2. Influent Waste Loadings
 - 5.3. Future Influent Waste Loadings (Include reference to anticipated future permitting at 24 MGD and TM related to the TCEQ stream modeling)
- 6. Solids Train Process Alternatives (Section to be related to Sludge Quantities and Ultimate Disposal Options rather than dewatering equipment—to highlight TWDB EFR requirements)
 - 6.1. Solids Train Design Capacity and Future Expansions
 - 6.2. Ultimate Disposal Options and Treatment Requirements
 - 6.3. Solids Train Master Plan
- 7. Hydraulic Profile
 - 7.1. Receiving Stream Flood Impacts (100-year flood elevation)
 - 7.2. Hydraulic Analysis
 - 7.3. Proposed Hydraulic Profile
- 8. Facility Design Components
 - 8.1. Site Civil Considerations
 - 8.1.1.Yard Piping
 - 8.1.2.Site Utilities
 - 8.1.3.Influent Lift Station
 - 8.1.4.Paving
 - 8.1.5.Drainage
 - 8.1.6.Landscaping
 - 8.1.7. Site Access and Security
 - 8.2. Influent Lift Station
 - 8.2.1. Submersible Configuration
 - 8.2.2.Wet Pit/Dry Pit Configuration
 - 8.2.3.Recommended Lift Station
 - 8.2.4. Provisions for Future Lift Station Expansion
 - 8.3. Headworks Facility
 - 8.3.1. Screening Technology Alternatives
 - 8.3.2. Grit Technology Alternatives
 - 8.3.3.Recommended Headworks Configuration
 - 8.3.4. Future Headworks Expansion
 - 8.4. Influent Foul Air Facility
 - 8.4.1.Biological Odor Control
 - 8.4.2.Chemical Odor Control
 - 8.4.3. Recommended Odor Control Configuration and Future Expansion
 - 8.5. Primary Clarifiers
 - 8.5.1. Primary Clarifier Configuration Alternatives
 - 8.5.2. Primary Sludge Pumping Alternatives
 - 8.6. Secondary Treatment Splitter Structure
 - 8.7. Blower Facility
 - 8.7.1. Multistage Centrifugal Blowers
 - 8.7.2.Turbo Blowers
 - 8.7.3.Recommended Blower Technology
 - 8.7.4. Future Blower Facility Expansion
 - 8.8. Liquid Train Process Alternatives

(Alternatives to reference Process Modeling TM noted in Section 8.5. TM to be included as an Appendix.)

8.8.1.A2O BNR Process

- 8.8.1.1. With Primary Clarifiers
- 8.8.1.2. Without Primary Clarifiers
- 8.8.2. Extended Aeration Oxidation Ditch Process
 - 8.8.2.1. With Primary Clarifiers
 - 8.8.2.2. Without Primary Clarifiers
- 8.8.3.Net Present Worth Evaluation
- 8.8.4.Comparison of Process Alternatives
- 8.8.5.Liquid Train Process Recommendation
- 8.9. Mixed Liquor Splitter Structure
- 8.10. Secondary Clarifiers
- 8.11. RAS/WAS Pump Station
- 8.12. Scum Pump Station
- 8.13. Tertiary Filters
 - 8.13.1. Submerged Disk
 - 8.13.2. Partially Submerged Material
- 8.14. UV Disinfection
 - 8.14.1. LPHO
 - 8.14.2. Traditional vertical LPMO
- 8.15. Effluent Facility
- 8.16. Chemical Storage and Feed Facility
 - 8.16.1. Sodium Hypochlorite for Non-Potable Water System
 - 8.16.2. Coagulant for Potential Chemical Phosphorus Removal
- 8.17. Non-Potable Water System
 - 8.17.1. Plant Water System
 - 8.17.2. Future Offsite/Reclaimed Water Provisions
- 8.18. Sludge Thickening and Holding
 - 8.18.1. Gravity Thickening
 - 8.18.2. Gravity Belt Thickeners
 - 8.18.3. Rotary Drum Thickeners
 - 8.18.4. Aerated Sludge Holding
- 8.19. Sludge Dewatering
 - 8.19.1. Sludge Feed Pump Alternatives
 - 8.19.2. Dewatering Technology Alternatives (With LCC)
- 8.20. Sludge Drying and Composting
- 8.21. Dewatering Facility Foul Air Facility
- 8.22. Building Architectural Considerations
- 8.23. Foundation Design Considerations
- 8.24. Operations and Lab Building
- 8.25. Maintenance Building
- 8.26. Site Electrical and Main Power Distribution
- 8.27. Emergency Power Centers
- 8.28. SCADA
- 9. Opinion of Probable Construction Cost
 - 9.1. American Iron & Steel Requirements
 - 9.2. OPCC Basis and Assumptions
 - 9.3. Construction Cost Estimate Findings
- 10. Construction Delivery Considerations
 - 10.1. Project Delivery Schedule
 - 10.2. Steps of Construction

- 10.3. Construction Procurement Alternatives
- 10.4. Project Funding Considerations
- 8.9 Conceptual Workshop

Garver will conduct a Conceptual Workshop with the City/OR to present the results of the alternatives evaluation and establish the approach and expectations for design of the project. City comments will be documented and incorporated into the draft Conceptual Design Report.

Deliverables:

- Sampling Plan (by word-searchable PDF).
- Flow/Load Projections Draft Technical Memo (by word-searchable PDF).
- Flow Transfer Draft Technical Memo (by word-searchable PDF).
- Plant Hydraulic and Process Draft Technical Memo (by word-searchable PDF).
- Plant Phasing Draft Technical Memo (by word-searchable PDF).
- Site Development Draft Technical Memo (by word-searchable PDF).
- Searchable PDF document of the draft Conceptual Design Report for review and comment by the City/OR (Appendices to the Report will include Final versions of the above Technical Memoranda). City/OR should provide comments in two weeks from delivery.
- Searchable PDF document of the Final Conceptual Design Report incorporating draft review comments.

Extra Work/Assumptions:

The following items are not included under this agreement but will be considered as Extra Work. Extra Work will be as directed by the Owner in writing for an additional fee as agreed upon by the Owner and the Engineer.

 Alternatives evaluations for each process area does not include life cycle cost development, energy consumption analysis or detailed evaluations except were specifically noted.

Project Task	Deliverable(s)
Task 1 Project Management	 Project Management Plan Progress Meetings Agenda Progress Meetings Minutes Monthly Summary Reports Project Schedule Action Item List Decision Log List
Task 2 Geotechnical	8. Geotechnical Report
Task 3 Public Outreach Plan	9. Public Engagement Plan
Task 4 Environmental Services	 10. Constraints Map 11. Biological Supporting Data 12. Water Resources Technical Data 13. Archeological Permit Application 14. Archeological Report 15. Archeological Survey 16. Hazardous Materials Technical Report 17. Environmental Information Document 18. Public Meeting Summary
Task 5 Hydrologic and Hydraulic Studies	 HEC-RAS Model(s) Drainage Memorandum Conditional Letter of Map Revision
Task 6 Agency Coordination	22. Airspace Analysis Exhibits23. Airspace Study Exhibits24. Technical Memorandum – Airspace Study
Task 7 Survey	 25. Abstract Report 26. Partial Site Survey 27. Creek Survey Sections 28. Right of Entry (ROE)
Task 8 Conceptual Design Phase	 29. Sampling Plan 30. Flow/Load Projections Interim Technical Memo 31. Flow Transfer Interim Technical Memo 32. Plant Hydraulic and Process Interim Technical Memo 33. Plant Phasing Interim Technical Memo 34. Site Development Interim Technical Memo 35. Conceptual Design Report 36. Conceptual Workshop Meeting Minutes

Meetings and Workshops Table

Project Task	Meetings
Task 1 Project Management	1. Six City/OR Progress Meetings
Task 2 Geotechnical	2. Site Visit
Task 3 Public Outreach Plan	None
Task 4 Environmental Services	 Site Visit Meeting with City/OR Public Meeting
Task 5 Hydrologic and Hydraulic Studies	 6. Site Visit 7. Meetings with City/OR
Task 6 Agency Coordination	8. Meetings with City/OR and TCEQ
Task 7 Survey	None
Task 8 Conceptual Design Phase	9. Flow Workshop 10. Conceptual Design Workshop

Anticipated	Project	Development	Meeting Topics
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Description	Anticipated Date	Primary Meeting Topics
Kickoff/Monthly Meeting #1	November 2020	Project Scope, Schedule, BudgetWW Sampling PlanSitework Scheduling
Monthly Meeting #2	December 2020	 Site Plan Considerations Architectural Planning Operations, Lab, Maintenance Building Needs
Flow Projection and Flow Transfer Workshop	Late December 2020	 Population forecasts, GPCD, flow forecasts, and peaking factors Flow transfer Basin Flow Management TM
H&H Meeting #1	January 2021	Initial modeling findings
Monthly Meeting #3	January 2021	 Influent loadings Treatment alternative presentation/selection/ Process Model TM Initial Site Plan/Site Development Plan TM
Monthly Meeting #4	February 2021	 Solids Train design criteria and alternatives Hydraulic Profile Preliminary Geotech/Foundation Design
Environmental Progress Meeting #1	February 2021	Wetlands delineation and environmental permitting coordination
H&H Meeting #2	March 2021	Final model findingsH&H-related design recommendations
Monthly Meeting #5	March 2021	Facility component selectionsH&H study update
Monthly Meeting #6	April 2021	 Facility component selections and layout refinement
Environmental Public Meeting	April 2021	Per Section 4.7 of Scoping Document
Conceptual Design Workshop	Late April 2021	Review Conceptual Design ReportOPCC

APPENDIX B

City of Pflugerville Wilbarger Creek WWTF Design

FEE SUMMARY

Site Preparation, Master Planning, and Conceptual Design	Estimated Fees	Garver	Kfriese	Adisa	GAI rvey/A	Archeology	Terracon
TASK I - Project Management and Quality Assurance	\$198,572	\$159,396	\$25,996	\$2,702	\$10,478	\$0	\$0
TASK II - Geotechnical Exploration and Laboratory Analysis	\$131,014	\$38,314	\$0	\$0	\$0	\$0	\$92,700
TASK III - Develop Public Outreach Plan	\$8,401	\$2,182	\$0	\$6,219	\$0	\$0	\$0
TASK IV - Environmental Services	\$159,298	\$138,282	\$0	\$0	\$0	\$21,016	\$0
TASK V - H&H Studies	\$95,140	\$95,140	\$0	\$0	\$0	\$0	\$0
TASK VI - Agency Coordination (to be completed on a Cost Plus basis)	\$123,510	\$123,510	\$0	\$0	\$0	\$0	\$0
TASK VII - Survey	\$104,333	\$29,274	\$0	\$0	\$0	\$75,059	\$0
TASK VIII - Conceptual Design and Alternatives Analysis	\$829,925	\$661,723	\$90,560	\$0	\$77,642	\$0	\$0
8.1 Historical Data Review	\$19,240						
8.2 Flow Projections/Load Projections	\$29,557						
8.3 Flow Transfer Evaluation	\$137,404						
8.4 Field Investigation	\$8,940						
8.5 Hydraulic and Process Modeling	\$135,928						
8.6 Phasing Evaluation	\$59,692						
8.7 Site Development Plan	\$23,036						
8.8 Alternatives Evaluation	\$368,040						
8.9 Conceptual Workshop	\$22,758						
SUBTOTAL	\$1,650,192	\$1,247,820	\$116,556	\$8,921	\$88,120	\$96,075	\$92,700
Total	\$1,650,192	\$1,247,820	\$116,556	\$8,921	\$88,120	\$96,075	\$92,700
		75.62%	7.06%	0.54%	5.34%	5.82%	5.62%
		HUB Non HUB	HUB 81.23%	HUB	HUB		
		HUB	18.77%				

APPENDIX B

City of Pflugerville Wilbarger Creek WWTF Design

CONCEPTUAL DESIGN AND PLANNING

CONCEPTUAL DESIGN AND FLAMMING		Т	Project		r		1	1	T	1	Т	r 1									
		. .	Manager,	Senior																	
	QA/QC/TA/	Senior	Group	Process/	PM/PE	PE	EIT	Designer	Admin/Doc	Diaman 2	Diaman 4	Senior Env. Sci /									
	PIC	Project Manager	Leader,	Discipline	PIVI/PE	PE	EII	Revit	Processing	Planner 3	Planner 4	Planner									
		wanayei	Discipline	Engineer																	
			Leader																	SUB-CO	T
WORK TASK DESCRIPTION													GARVER	Kfriese	Adisa	GAI	GEOTECH/SURVE	Y MARKUP	GARVER	TOTAL	TOTAL
	\$275.00	\$275.00	\$195.00	\$175.00	\$150.00	\$133.00	\$115.00	\$143.00	\$88.00	\$167.00	\$198.00	\$268.00	ODC						TOTAL		()
	-												000			-			TOTAL		I
	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.									
TASK I - Project Management and Quality Assurance					-	10					-			A 10 T 10	AO T OO	-		A1 511	* 4 000	A15 110	A (A A A A A A A A A A
1.1 Project Management Plan			4			12			4					\$12,710	\$2,702			\$1,541	\$4,269	\$15,412	\$19,681
a. Project Schedule		24				12												\$0	\$8,196	\$0	\$8,196
b. Project Budget		24							12									\$0	\$7,656	\$0	\$7,656
c. Quality Management Plan		4																\$0	\$1,100	\$0	\$1,100
d. Change Management Plan		4																\$0	\$1,100	\$0	\$1,100
f. Communications Plan		4				4												\$0	\$1,632	\$0	\$1,632
1.2 Regular Coordination Meetings	48	96	48	48		48				12	2		\$5,000	\$3,772		\$10,478		\$1,425	\$72,569	\$14,250	\$86,819
1.3 Progress Meetings (6)		30		30		42			18	4	2		\$5,000	\$2,518				\$252	\$26,986	\$2,518	\$29,504
1.4 Monthly Project Reports		18				18			18									\$0	\$8,928	\$0	\$8,928
1.5 QA/QC Plan Development	24	8	8	8										\$6,996				\$700	\$12,460	\$6,996	\$19,456
1.6 Risk Register	18	18					40											\$0	\$14,500	\$0	\$14,500
Subtotal - TASK I - Project Management and Quality Assurance	90	230	60	86	0	136	40	0	52	16	4	0	\$10,000	\$25,996	\$2,702	\$10,478	\$0	\$3,918	\$159,396	\$39,176	\$198,572
TASK II - Geotechnical Exploration and Laboratory Analysis																					
2.1 Review Available Geotech Information		8																\$0	\$2,200	\$0	\$2,200
2.2 Site Visit to Identify Boring Locations		8											\$1,000					\$0	\$3,200	\$0	\$3,200
2.3. Geotechnical Work	2	8											. ,				\$82,700	\$8,270	\$11,020	\$82,700	\$93,720
2.4 Laboratory Testing of Samples	_	-			1												\$10,000	\$1,000	\$1,000	\$10,000	\$11,000
2.5 Report of Geotechnical Exploration			24						8								\$10,000	\$0	\$5,384	\$0	\$5,384
a. Appendix with Boring Logs, Lab Results, and Symbols Key			21		6				Ű		-							\$0	\$900	\$0	\$900
b. Discussion of Subsurface Conditions		2			6						-							\$0	\$1,450	\$0	\$1,450
c. Foundation and Site Preparation Recommendations		2			6						-							\$0	\$1,450	\$0	\$1,450
d. Discuss Expected Construction Related Issues	1	2	24		6													\$0	\$5,855	\$0 \$0	\$5,855
e. Recommend Earthwork Related Methods	1		24		6											-		\$0 \$0	\$5,855	\$0 \$0	\$5,855
e. Recommend Earnwork Related Methods	1	-	24		0				-		-							φU	\$ 0,000	φU	\$3,655
Subtotal - TASK II - Geotechnical Exploration and Laboratory Analysis	4	28	72	0	30	0	0	0	8	0	0	0	\$1,000	\$0	\$0	\$0	\$92,700	\$9,270	\$38,314	\$92,700	\$131,014
	4	20	12	U	30	U	U	U	0	U	U	U	\$1,000	φU	φU	φU	\$92,700	\$9,270	\$30,314	\$92,700	\$131,014
TASK III - Develop Public Outreach Plan		0													#0.000			#004	#4 404	#0.000	#4.007
3.1 Public Information and Engagement Plan		2			-		2				-				\$3,806	-		\$381	\$1,161	\$3,806	\$4,967
Report Development		2	-		-		2		-			-			\$2,413	-		\$241	\$1,021	\$2,413	\$3,434
				-		-		-	-		-							\$0	\$0	\$0	\$0
Subtotal TASK III - Develop Public Outreach Plan	0	4	0	0	0	0	4	0	0	0	0	0	\$0	\$0	\$6,219	\$0	\$0	\$622	\$2,182	\$6,219	\$8,401
TASK IV - Environmental Services																					<u> </u>
4.1 Constraints Mapping		2								6	24	2	\$1,000					\$0	\$7,840	\$0	\$7,840
4.2 Biological Resources		2								32	10	2						\$0	\$8,410	\$0	\$8,410
4.3 Water Resources		4								24	16	2						\$0	\$8,812	\$0	\$8,812
a. Wetland delineation		2								44	24	4	\$1,000					\$0	\$14,722	\$0	\$14,722
4.4 Archeological Resources		8								2	4						\$21,016	\$2,102	\$5,428	\$21,016	\$26,444
4.5 Hazardous Materials Assessment		4								24	4							\$0	\$5,900	\$0	\$5,900
4.6 EID Report Preparation		8								130	80	30	\$1,000					\$0	\$48,790	\$0	\$48,790
4.7 Public Meeting		8								60	40	40	\$3,500					\$0	\$34,360	\$0	\$34,360
4.8 Public Meeting Summary		4								8	8							\$0	\$4,020	\$0	\$4,020
																		\$0	\$0	\$0	\$0
Subtotal TASK IV - Environmental Services	0	42	0	0	0	0	0	0	0	330	210	80	\$6,500	\$0	\$0	\$0	\$21,016	\$2,102	\$138,282	\$21,016	\$159,298
TASK V - H&H Studies																					
Data Collection																		\$0	\$0	\$0	\$0
1. Conduct field inspections to observe current conditions	1	4	1	1	10	14		1	1	1	<u> </u>							\$0	\$4,462	\$0	\$4,462
2. Collect available data including GIS data and maps, site survey data, as-builts	1	1	1		2	6	1		1	1	1							\$0	\$1,098	\$0	\$1,098
3. Collect available FIRMs, Flood Insurance Study (FIS) study (Zone AE)						2												\$0	\$266	\$0 \$0	\$266
4. Review survey data and coordinate any additional surveying needs with City	1		2			10					1							\$0	\$1,720	\$0 \$0	\$1,720
			-			10			1		+							\$0 \$0	\$0	\$0 \$0	\$0
Hydrologic Studies					4	40															
1 Revise watershed and sub-watershed boundary	+	+	+	+	1	12		+	1	ł	+							\$0	\$1,746	\$0	\$1,746
2 Prepare Watershed Parameters					2	12			1		-							\$0	\$1,896	\$0	\$1,896
3 Prepare HEC-HMS hydrologic model	2				4	16												\$0	\$3,278	\$0	\$3,278
Hydraulic Studies - Analyze Wilbarger Creek Through the Plant Site																		\$0	\$0	\$0	\$0
1 Insert Lidar and Survey Cross Sections					4	20												\$0	\$3,260	\$0	\$3,260
2 Develop Existing Condition Model of Wilbarger Creek using HEC-RAS		T	T	Γ	4	20	Γ		T	ľ	T							\$0	\$3,260	\$0	\$3,260
3 Model Downstream Culvert			1		2	8					1							\$0	\$1,364	\$0	\$1,364
-	1										1							1			

	QA/QC/TA/ PIC	Senior Project Manager	Project Manager, Group Leader, Discipline	Senior Process/ Discipline Engineer	PM/PE	PE	EIT	Designer Revit	Admin/Doc Processing	Planner 3	Planner 4	Senior Env. Sci / Planner								SUBCO	
WORK TASK DESCRIPTION													GARVER	Kfriese	Adisa	GAI	GEOTECH/SURVE	Y MARKUP	GARVER	SUB-CO TOTAL	TOTAL
	\$275.00 hr.	\$275.00 hr.	\$195.00 hr.	\$175.00 hr.	\$150.00 hr.	\$133.00 hr.	\$115.00 hr.	\$143.00 hr.	\$88.00 hr.	\$167.00 hr.	\$198.00 hr.	\$268.00 hr.	ODC						TOTAL		
4 Plot Existing Condition Floodplain of Study Reach	111.	111.	111.	111.	2	2	14	ГШ. 	111.	ГШ. -	THT.	TH.						\$0	\$2,176	\$0	\$2,176
5 Develop Proposed Watershed Condition of Wilbarger Creek Using HEC-RAS		2			4	16	10											\$0	\$4,428	\$0	\$4,428
6 Plot Proposed Condition Floodplain of Study Reach		2			2	2	10											\$0	\$2,266	\$0	\$2,266
7 Develop Model to Analyze Fill / Levee Scenarios (up to 3 Scenarios)	2	2			12	8	24											\$0	\$6,724	\$0	\$6,724
8. Prepare Hydraulic Report	2				12	36							\$1,000					\$0	\$8,138	\$0	\$8,138
Meetings with City (Up to 2)		8			16	16												\$0	\$6,728	\$0	\$6,728
Conditional Letter of Map Revision Preparation																		\$0	\$0	\$0	\$0
1 Floodplain Mapping (Annotated FIRM)					2	8												\$0	\$1,364	\$0	\$1,364
2 Floodway Modeling - Not Applicable																		\$0	\$0	\$0	\$0
3 Report/Forms	2				8	20												\$0	\$4,410	\$0	\$4,410
ID Impacted Parcels					1		10											\$0	\$1,300	\$0	\$1,300
Develop Address Database					1		10											\$0	\$1,300	\$0	\$1,300
Prepare Draft Letter					5		40											\$0	\$750	\$0	\$750
Mail Letters					3 4	0	12											\$0	\$1,830	\$0	\$1,830
Structure Exhibit					4	8												\$0 \$0	\$1,664 \$0	\$0 \$0	\$1,664 \$0
Entity Approvals 1 Respond to Pflugerville and Travis County Comments					0	12						-					-	\$0 \$0	\$2,796	\$0 \$0	\$0 \$2,796
2 Meetings (2 virtual)		8			8	12							\$1,000					\$0 \$0	\$4,400	\$0 \$0	\$4,400
3 Coordination With FEMA (Answering Review Comments)		0	4		45								φ1,000					\$0 \$0	\$7,530	\$0 \$0	\$7,530
Develop Detention Pond Size					-10													\$0	\$0	\$0 \$0	\$0
1 Develop Drainage Areas					2	10												\$0	\$1,630	\$0	\$1,630
2 Develop Runoff Model					2	12												\$0	\$1,896	\$0	\$1,896
3 Determine Detention Volume and Outfall Type for WWTF Only	2				4	16							\$7,500					\$0	\$10,778	\$0	\$10,778
4 Develop Stage Storage Curve					1	4												\$0	\$682	\$0	\$682
																		\$0	\$0	\$0	\$0
Subtotal TASK V - H&H Studies	10	26	6	0	171	290	90	0	0	0	0	0	\$9,500	\$0	\$0	\$0	\$0	\$0	\$95,140	\$0	\$95,140
TASK VI - Agency Coordination (to be completed on a Cost Plus basis)																					
6.1 Coordination with the Wilbarger Interceptor Team		16					40											\$0	\$9,000	\$0	\$9,000
6.2 TWDB Coordination with Owner, TWDB as needed		16					40										-	\$0	\$9,000	\$0	\$9,000
6.3. TCEQ Permit Coordination for project/phasing	8	16	30				64											\$0 \$0	\$19,810	\$0	\$19,810
6.4 FAA Coordination Coordination with City of Pflugerville / Owner Representative		2		4	4												-	\$0 \$0	\$0 \$1,850	\$0 \$0	\$0 \$1,850
Coordination with Austin Executive Airport		2		4	4													\$0 \$0	\$1,300	\$0 \$0	\$1,300
Height and Hazard Zoning Analysis Coordination - City of Pflugerville		2		4	4		2						\$1,000					\$0 \$0	\$3,080	\$0 \$0	\$3,080
Height and Hazard Zoning Analysis Coordination - City of Manor		1		4	4		2						\$1,000					\$0	\$2,805	\$0 \$0	\$2,805
Height and Hazard Zoning Analysis Coordination - City of Martin		1		4	4		2						<i><i><i></i></i></i>					\$0	\$1,805	\$0	\$1,805
Height and Hazard Zoning Analysis Coordination - Austin Executive Airport				4	4		2											\$0	\$1,530	\$0	\$1,530
Develop Part 77 Surfaces for Austin Executive Airport (Existing and Ultimate)	1	1		2	4		8	1	1									\$0	\$1,870	\$0	\$1,870
Investigate How Planned Development will Impact Part 77 Surface (Existing and Ultimate)				2	4		10											\$0	\$2,100	\$0	\$2,100
Document Findings from Part 77 Surfaces study in Technical Memo				4	8		6											\$0	\$2,590	\$0	\$2,590
Air spacing Analysis Exhibits for Permanent and Temporary Con. and Upload to OE/AAA					8		30											\$0	\$4,650	\$0	\$4,650
Portal		10			Ū												-				
6.5 Coordination with City Wide Drainage Masterplan		16	16				40						* 50.000					\$0	\$12,120	\$0	\$12,120
6.6 Undefined Scope Activities													\$50,000					\$0 \$0	\$50,000	\$0 \$0	\$50,000
Subtotal TASK VI - Agency Coordination	8	70	46	32	48	0	246	0	0	0	0	0	\$52,000	\$0	\$0	\$0	\$0	\$0 \$0	\$0 \$123,510	\$0 \$0	\$0 \$123,510
TASK VII - Agency Coordination	0	10	40	52	40	U	240	v	U	U	U	5	<i>402,000</i>	φU	ψŪ	φυ	φυ	φU	φ120,010	ψυ	φ123,310
7.1 Site boundary survey confirmation		2		4													\$1,500	\$150	\$1,400	\$1,500	\$2,900
7.2 Site topo survey (limited)	1	2		24			ł	ł	1								\$62,059	\$6,206	\$10,956	\$62,059	\$73,015
Site survey CAD coordination/renderings		2		12				72					\$500					\$0	\$13,446	\$0	\$13,446
ROEs (up to 10)		2		4				4					\$500				\$11,500	\$1,150	\$3,472	\$11,500	\$14,972
Subtotal TASK VII - Survey	0	8	0	44	0	0	0	76	0	0	0	0	\$1,000	\$0	\$0	\$0	\$75,059	\$7,506	\$29,274	\$75,059	\$104,333

LAD MONTON PARTIEPARTP		QA/QC/TA/ PIC	Senior Project Manager	Project Manager, Group Leader, Discipline	Senior Process/ Discipline Engineer	PM/PE	PE	EIT	Designer Revit	Admin/Doc Processing	Planner 3 Planner 4	Senior Env. Sci / Planner								
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8.6 Phasing Evaluation Image: stand st	Document results		4			6		12												
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8.7 Site Development Plan 6<	Determine phasing triggers	-	12		24															
Site development layouts for all facilities for build out 4 4 24 6 64 6	8.7 Site Development Plan																			
s.8 Alternatives Evaluation Image: Marcine Structure Structu	· · · · · · · · · · · · · · · · · · ·		4		24				64											
8.8 Alternatives Evaluation 6.8 Alternatives E	Electrical service evaluation		4	4		40														
	8.8 Alternatives Evaluation	-		-						8										
	SCADA plan development		12				24						\$10,000			\$55,325		\$22,025	\$55,325	\$77,350

	QA/QC/TA/ PIC	Senior Project Manager	Project Manager, Group Leader, Discipline	Senior Process/ Discipline Engineer	PM/PE	PE	EIT	Designer Revit	Admin/Doc Processing	Planner 3	Planner 4	Senior Env. Sci / Planner									
WORK TASK DESCRIPTION													GARVER	Kfriese	Adisa	GAI	GEOTECH/SURVEY	MARKUP	GARVER	SUB-CO TOTAI	TOTAL
	\$275.00	\$275.00	\$195.00	\$175.00	\$150.00	\$133.00	\$115.00	\$143.00	\$88.00	\$167.00	\$198.00	\$268.00	ODC						TOTAL	TOTAL	
	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.	hr.									
Process Area Development				12			40											\$0	\$6,700	\$0	\$6,700
High level screening of alternatives	4			4	24		24							\$48,770				\$4,877	\$13,037	\$48,770	\$61,807
Two alternatives development	24			12			40											\$0	\$13,300	\$0	\$13,300
Hydraulic model of 2 alts				48	60		60	16										\$0	\$26,588	\$0	\$26,588
Layout of Alt 1	4	24		64		44	32	32										\$0	\$33,008	\$0	\$33,008
Layout of Alt 2	4	24		64		44	32	32										\$0	\$33,008	\$0	\$33,008
Solids handling facility determination		12		48		80	32	32	40					\$16,972				\$1,697	\$35,813	\$16,972	\$52,785
Develop OPCC and Life Cycle Costing				12	8									\$8,136				\$814	\$4,114	\$8,136	\$12,250
Develop Construction Schedule			8			8	24											\$0	\$5,384	\$0	\$5,384
Draft Conceptual Report TM	2	12					12	8	10					\$9,610				\$961	\$8,215	\$9,610	\$17,825
Final Conceptual Report TM	2	4		8			12		8					\$3,570		\$6,585		\$1,016	\$6,150	\$10,155	\$16,305
Submit to TWDB		2					8		6												
																\$10,665		\$1,067	\$1,067	\$10,665	\$11,732
8.9 Conceptual Workshop																		\$0	\$0	\$0	\$0
Preparation	4	8	4	8			16		4					\$3,502		\$5,067		\$857	\$8,529	\$8,569	\$17,098
Workshop	4	6	6	6			6											\$0	\$5,660	\$0	\$5,660
Subtotal TASK VII - Conceptual Design and Alternatives Analysis	111	300	120	748	724	394	1424	250	103	0	0	0	\$10,000	\$90,560	\$0	\$77,642	\$0	\$16,820	\$661,723	\$168,202	\$829,925
																		\$0	\$0	\$0	\$0
																		\$0	\$0	\$0	\$0
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