

**PROFESSIONAL SERVICES AGREEMENT
FOR
KELLY LANE PHASE 3**

STATE OF TEXAS §
 §
COUNTY 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 Vickrey & Associates, 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 Exhibit A 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, five hundred twenty seven thousand, one hundred three dollars and fifty nine cents. (\$1,527,103.59) as total compensation, to be paid to Consultant as further detailed in Exhibit B – Fee Summary for Professional Services.

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: Vickrey & Associates, LLC
Attn: Kenneth E. Rogers, P.E.
Vice President
12940 Country Parkway
San Antonio, Texas 78216

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 “*Kelly Lane Phase 3*” 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, 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 an amount not less than the amount 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: Premises/Operations	1,000,000 per occurrence, 2,000,000 general aggregate Or	City to be listed as additional insured and provide 30 days' notice of cancellation or material change in coverage
Products/ Completed Operations	2,000,000 combined single coverage limit	City to be provided a waiver of subrogation
Independent Contractors		City prefers that insurer be rated B+V1 or higher by A.M. Best or A or higher by Standard & Poors
Personal Injury		
Contractual Liability		
Business Auto Liability	1,000,000 combined single limit	City to be provided a waiver of subrogation
Workers' Compensation & Employers Liability	Statutory Limits 1,000,000 each accident	City to be provided a waiver of subrogation
Professional Liability	1,000,000	

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 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: CP&Y, Legacy Engineering Group, Blanton & Associates, Rock Engineering & Testing Laboratories, and The Rios Group 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:

Exhibit A - Scope of Services, including Project Description/Scope of Services; Exhibit B - Fee Summary for Professional Services and Exhibit C - 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 2271.002) 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

VICKREY & ASSOCIATES, LLC

(Signature)



(Signature)

Printed Name: Sereniah Breland

Printed Name: Kenneth E. Rogers

Title: City Manager

Title: Vice President

Date: _____

Date: _____

APPROVED AS TO FORM:

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

EXHIBIT A
SCOPE OF SERVICES

Project Background:

The City of Pflugerville (“CITY”) proposes reconstruction and widening of an approximate 1.3 mile segment of Kelly Lane from a two-lane roadway to a four-lane roadway with center median from Moorlynch Ave to Weiss Lane (The “PROJECT”). Vickrey & Associates, LLC (the “CONSULTANT”) has been requested to provide a detailed 30% schematic and a full PS&E. This scope of services includes field surveying, preparation of right-of-way (ROW) acquisition documents, subsurface utility engineering (SUE), preliminary design, environmental services, geotechnical studies, traffic analysis, Plans, Specifications, and Estimate (PS&E) and construction engineering, to be performed by the prime consultant or subconsultant team.

Design services during development of this project shall be performed in accordance with the 2014 City of Pflugerville Engineering Design Manual & Construction Standards, 2020 Pflugerville Pforward Transportation Master Plan, City of Austin Drainage Criteria Manual and TxDOT design manuals (where applicable) located on the TxDOT website. The development of the project shall be consistent with City of Pflugerville procedures and practices and TxDOT (where applicable). This project shall be developed utilizing Power GEOPAK V8i SS4 OpenRoads.

Basic Services:

- a. *Schematic Design and PS&E of Kelly Lane Phase 3*

Additional Services:

These services may or may not be needed to complete the project. A separate "Notice to Proceed" from the City will be required prior to performing this work

- a. *SUE Services – Quality Level A Test Holes*
- b. *Public Involvement*
- c. *Environmental Technical Memorandum – 404 Permitting*

Project Team Sub-consultants:

- a. *Blanton & Associates, Inc. (Environmental and Public Involvement)*
- b. *CP&Y (Utility Coordination)*
- c. *The Rios Group, Inc. (Subsurface Utility Engineering Services)*
- d. *Rock Engineering and Testing Lab, Inc. (Geotechnical Studies)*
- e. *Legacy Engineering Group, PLLC (Traffic Analysis, Traffic signals and Illumination)*

1.0 PROJECT ADMINISTRATION AND COORDINATION SERVICES

The CONSULTANT Project Manager and Task Leaders will be responsible for project oversight and the daily management of the project. Frequent and appropriate communications will be maintained between the CONSULTANT and CITY in an effort to expedite completion of the PS&E, Bid Documents, and performance of Construction Administration Services.

Project Administration Services will include the following:

- 1.1** Prior to the Project Kick-Off Meeting, the CONSULTANT will designate in writing, one (1) Professional Engineer licensed to practice in the State of Texas to be the Project Manager throughout the duration of the project for project management and all communications, including billing. The CONSULTANT will not replace the designated Project Manager without the written approval of the CITY;
- 1.2** The CONSULTANT will submit to the CITY its invoices of services completed and compensation due, arranged by tasks. The CONSULTANT will show the budgeted and currently authorized amounts for each task, along with the invoiced and to-date amounts. The invoice must be submitted to the CITY by the 10th calendar day of each month. In addition, the CONSULTANT's first invoice must include a schedule of anticipated monthly invoice amounts for the duration of the project. The invoice schedule must match the authorized contract amount;
- 1.3** Each month, and included with the submission of each invoice, the CONSULTANT will update the Project Schedule and related documents in accordance with the Project Schedule.
- 1.4** Each month, and included with the submission of each invoice, the CONSULTANT will submit a monthly report of the status of work performed through the end of the previous month. The CONSULTANT will summarize decisions or agreements made, and will outline unresolved or pending issues requiring CITY involvement or decision;

Project Coordination Services will include the following:

- 1.5** The CONSULTANT will attend a Project Kick-Off Meeting with the CITY. The CONSULTANT will prepare and distribute meeting minutes within three (3) business days of the meeting;
- 1.6** The CONSULTANT will meet with CITY monthly (in-person). The CONSULTANT will prepare and distribute the monthly meeting agenda twenty four (24) hours before the meeting. The CONSULTANT will prepare and distribute meeting minutes within three (3) business days of each meeting.
- 1.7** The CONSULTANT will attend a Design Concept Meeting with the CITY. At this meeting, the project design criteria will be compiled and documented into a Design Summary Report format which the CONSULTANT will prepare. The CONSULTANT will prepare and distribute meeting minutes within three (3) business days of the meeting; and
- 1.8** The CONSULTANT will attend 30, 60 and 90 percent submittal review meetings (in-person). The CONSULTANT will respond in writing to reviewer comments for each submittal. Responses will include explanations for any items in disagreement. The CONSULTANT will prepare and distribute meeting minutes within three (3) business days of each meeting. The PM and 2 support staff will attend the meetings. Comments and revisions will be incorporated into the deliverables for the next submittal.
- 1.9** The CONSULTANT shall establish a schedule for the engineering services to be performed by the subconsultants at the beginning of the project. The Engineer shall be responsible for the coordination, supervision, review and incorporation of the subconsultants' work.
- 1.10** The CONSULTANT shall have weekly project coordination meetings with the GEC and shall provide a weekly written update on the work performed the previous week, the work to be performed in the upcoming week and any project issues, etc.
- 1.11** The CONSULTANT shall perform Quality Assurance/Quality Control reviews on all work to assure that the work is in accordance with City requirements and that the work is completed in a timely and efficient manner.

- 1.12 The CONSULTANT shall coordinate with Travis County on an as needed basis and shall attend up to two (2) virtual meetings with County officials. Development of exhibits and meeting minutes will be prepared by the CONSULTANT.

2.0 PROJECT DESIGN CRITERIA

The Project Design Criteria will be as follows:

- 2.1 All engineering documents released, issued, or submitted by or for a registered engineering firm, including preliminary documents, must clearly indicate the engineering firm name and registration number. Additionally, all completed documents submitted for final approval or issuance or a permit must bear the seal with signature and date adjacent thereto of a Professional Engineer licensed to practice in the State of Texas;
- 2.2 The design standards to be used will include but not be limited to the City of Pflugerville Engineering Design Manual, City of Austin Drainage Criteria Manual, TxDOT Roadway Design Manual, TxDOT Bridge Design Manual – LRFD, TxDOT Hydraulic Design Manual, Highway Capacity Manual, the American Association of State Highway and Transportation Officials (AASHTO) A Policy on Geometric Design of Highways and Streets (Green Book), AASHTO LRFD Bridge Design Specifications, Texas Manual on Uniform Traffic Control Devices, ADA Accessibility Guidelines, Texas Pollutant Discharge Elimination System (TPDES) Guidelines, required applicable state and federal guidelines or standards; and
- 2.3 Project specifications will be developed using the latest City of Pflugerville Technical Standards and Specifications and when needed, City of Austin Technical Standards and Specifications and/or the Texas Department of Transportation Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges.

3.0 ENVIRONMENTAL SERVICES (BAI; V&A)

Environmental Services will include the following:

3.1 Data Collection (BAI)

The Engineer shall develop a GIS based data set for the project based on available published environmental data including waters of the US, wetlands, floodplains, water quality data, threatened / endangered / protected species habitat, archeological and historical resources, and hazardous materials sites in relation to published ESRI ARCINFO (or similar data sets) topographic and aerial imagery.

3.2 Environmental Technical Memorandum (BAI)

The Engineer shall prepare an Environmental Technical Memorandum (Tech Memo) related to the proposed improvements, which is intended to document compliance with environmental regulations that are applicable to a City-funded project and does not include preparation of a NEPA document (Categorical Exclusion, Environmental Assessment, or Environmental Impact Statement) pursuant to the National Environmental Policy Act (NEPA). The Tech Memo and supporting resource studies/assessments will be provide sufficient detail and level of review to satisfy general Texas Department of Transportation environmental guidelines, however formatting of reports to the specific requirements of the TxDOT Environmental Tool Box /guidance/TxECOS forms, and reports and including specific review/approval with the Comment Resolution process has not be quoted in this scope.

a. Cultural Resources – Archeology

Archival research (desktop survey only) will be performed in the electronic and

mapping files of the Texas Historical Commission (THC) Atlas Sites database, the Texas Archeological Research Laboratory (TARL), and/or any other relevant archives for information on previous cultural resource investigations conducted and previously recorded sites and historic properties in the vicinity of the project's Area of Potential Effect (APE). The results of this research will be summarized in the cultural resources section of the Tech Memo. A coordination letter will be prepared and sent to the THC in compliance with the Antiquities Code of Texas. Recommendations regarding coordination results with THC and data findings will be provided in the Tech Memo. Should the need for additional survey / investigation which be required, it would be carried out under an additional scope and budget.

b. Water Resources

Engineer will review maps and aerial photography including Federal Emergency Management Agency's National Flood Insurance Program flood hazard maps, National Wetland Inventory maps, National Hydrography Dataset (NHD) maps, U.S. Geological Survey (USGS) topographic maps, soil maps, color infrared aerial photography and other pertinent data to identify potential wetlands and other waters of the US within the Project boundaries. Engineer will collect data on surface water streams and other existing water resources and the potential for pollution (e.g. identification of existing Clean Water Act (CWA) 303(d) listed stream segments), CWA 401/402 water quality compliance requirements including multi-sector permit compliance needs during construction and from the completed facility. The 100-year flood plain, as delineated by FEMA, will be identified and the impacts of the proposed project will be assessed. Specific construction management plans, Stormwater Pollution Prevention Plans, Spill Prevention Control and Countermeasures Plans, FEMA Letters of Map Revision request and supporting engineering studies (i.e. Hydraulics and Hydrology) would be provided under an additional scope and budget as appropriate/needed.

c. Wetlands and Waters of the U.S.

Wetlands specialists will perform evaluations of wetlands and waters of the U.S. in all areas potentially affected by the proposed project. Wetland field delineations will be conducted, and wetland data sheets will be prepared and included in the Tech Memo appendix. This task will include identification of jurisdictional waters within the current regulatory setting for the Fort Worth District and the Navigable Waters Protection Rule with recommendations regarding need for formal determination depending on the type of permit (if any) that will be needed from the U.S. Army Corps of Engineers (USACE). The list of water features and their assessed jurisdictional status including potential permit requirements will be summarized in the Tech Memo. Any 404 permit preparation would be carried out under an additional scope and budget.

d. Biological Resources

Engineer will conduct a literature and database review to determine whether threatened, endangered, or other protected species are of potential occurrence in or adjacent to the Project area and, if so, whether they could be affected by the proposed Project. The desktop review will include a search of the USFWS Environmental Conservation Online System (ECOS), the USFWS Information for Planning and Consultation (IPaC) website, and the Texas Parks & Wildlife Department Natural Diversity Database (NDD). Describe project area biological resources including vegetation communities and wildlife habitat. Ecologically sensitive resources, including potential threatened or endangered species habitat, will be identified and their potential to be affected by project construction and

operation will be assessed and described in the Tech Memo. A habitat assessment for suitability for endangered species will be conducted by the Engineer. Results of the assessment and data reviews will be reported in the Tech Memo with any potential permitting or regulatory compliance needs identified in the project regulatory / permit matrix in the Tech Memo.

e. Hazardous Materials

An ASTM E-1527-13 database (radius) search report of previously recorded hazardous material sites in the project area will be conducted and a summary incorporated into the Tech Memo. During field visits, project environmental staff will identify sites within and near the project corridor that may pose a potential hazardous materials risk. Recommendations for additional investigation or assessment of potential risk resulting from this desktop review with site screening will be provided in the Tech Memo. A full Phase I Environmental Site Assessment per ASTM E-1527-13 is not included in this Scope of Services; however, this can be provided under a separate scope and fee.

f. Environmental Tech Memo Preparation/Comment Response

This task includes the writing and production of a complete environmental technical memorandum, as well as revisions in response to comments from the City Pflugerville. Engineer will develop a regulatory/permit matrix identifying federal, state, and local environmental regulatory issues and any required permits or approvals. This matrix will include permit type, responsible agency, regulated activity covered by the permit, and time requirements to obtain authorization. Only generalized, preliminary mitigation measures will be presented where adverse impacts may potentially occur; detailed mitigation plans are not part of this Scope of Services. This task includes the submittal of two (2) unbound copies and a PDF of the draft environmental tech memo (City of Pflugerville review) and two (2) unbound copies and a PDF of the revised final tech memo.

Exclusions

The following tasks are not covered in this scope of work and may or may not be necessary. If deemed necessary, these tasks could be conducted under a separate or supplemental work authorization:

1. Preparation of a NEPA document (Categorical Exclusion, Environmental Assessment, or EIS);
2. Effort for formatting of reports to the specific requirements of the Texas Department of Texas (TxDOT) Environmental Toolbox / guidance / TxECOS forms, and reports and including specific review/approval with the Comment Resolution Matrix process;
3. Formal Section 10(a) Endangered Species Act consultation, including preparation of a stand-alone Biological Evaluation or Assessment or consultation outside of completion of Travis County Regional HCP coordination;
4. Presence/absence surveys for endangered species;
5. Work extending beyond the specified limits of the project at the time of this work authorization;
6. Any Clean Water Act Section 404 permit preparation or agency correspondence;
7. ASTM Hazardous materials Phase I & Phase II ESAs;
8. Reconnaissance or intensive historic structures surveys, archeological surveys or assessments of eligibility, or management recommendations for any historic structures;

9. Archeological survey, site testing, data recovery, or mitigation planning.
10. Geologic Assessment, potential karst features and caves in the project area / potential for encountering listed karst species, will not be include in the assessment; and
11. Litigation support.

4.0 SURVEYING SERVICES (V&A)

The CONSULTANT will obtain the services of a Registered Professional Land Surveyor to perform field surveys for the Project. All survey services will comply with the latest revision of the Professional Land Surveying Practice Act of the State of Texas and will be accomplished under the direct supervision of a currently licensed State of Texas Registered Professional Land Surveyor.

Surveying Services will include the following:

- 4.1** V&A shall perform sufficient research of property records from various sources and office tasks to develop the record ROWs and adjacent easements of record. At minimum, Travis County Appraisal District (TCAD) and Travis County Clerk’s websites shall be utilized. This task shall be performed without benefit of title abstract for adjacent properties. There may be other instruments not shown or known that affect the properties.
- 4.2** V&A shall coordinate with the GEC Land Right-of-Way Agent to prepare Right-of-Entry (ROE) agreements for adjacent landowners, obtain CITY signature on ROE agreements, and coordinate with landowners as required to acquire approval of ROE agreements for field work outside of the existing public Right-of-Way (ROW). CITY shall provide the outline of the agreement. V&A shall submit agreements to CITY for signature and V&A shall mail the signed agreements to the landowners via regular and certified mail, with a return self-addressed stamped envelope. V&A shall track receipt of executed agreements. If the initial notice requesting ROE is not returned within one (1) week of delivery, a second notice requesting ROE shall be sent by V&A. If after one (1) week of delivery of the second notice the property owner is still unresponsive, CITY shall be notified, and the process shall be escalated with assistance from the CITY. V&A shall maintain a contact list of the property owners which shall be made available to the CITY.
- 4.3** V&A shall establish four (4) primary control points based on NAD 83, 2011 Adjustment, Epoch 2010.00, Texas Coordinate System, Central Zone, FIPS 4203, US Survey feet. Vertical datum shall be GPS Orthometric heights, derived from RTN observations and based on NAVD 88, Geoid 12A. V&A shall establish and densify secondary control as needed for topographic and boundary data gathering procedures. V&A shall perform digital differential level loops for installation of a benchmark system at strategic locations at approx. 800-foot intervals within the project limits.
- 4.4** V&A shall perform sufficient field and office work to recover ROW monuments, property corners along the ROW line and rear property corners (where ROE is secured), and other evidence along the ostensible ROW lines of the project route to aid in the analysis, reconstruction, and depiction of the existing Kelly Lane (including side streets as per limits described) ROW. V&A shall perform sufficient field surveying and subsequent analysis of the adjoining properties to establish the existing property lines for the following properties, as required for real property acquisition:

TCAD ID	Owner	Legal Description
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481802	Ardalia E Martin	9.837 Ac out of Flint E Survey, Abstract 277
481805	Wendee Whitehead & Anne Matron	9.990 Ac out of Flint E Survey, Abstract 277
278089	Wayne R. Moore	10. 00 Ac out of Flint E Survey, Abstract 277
278092	BLD VOHL 6A-1 LLC	1.7240 Ac out of Lot 2, Bratcher Subdivision
877826	Avalon Master Community Inc	Lot 52, Avalon PHS 6C
860227	Avalon Master Community Inc	Lot 51, Avalon PHS 6C
849205	Avalon Master Community Inc	Lot 29 Block AA, Avalon PHS 5B
878933	Avalon Master Community Inc	Lot 30, Block AA, Avalon PHS 5B
708120	BLD VOHL 6A-1 LLC	0.5752 Ac out of Lot 2, Bratcher Subdivision and 2.2648 Ac out of Flint E Survey, Abstract 277
278087	Brian Kirvin Rogers	0. 1400 Ac out of Flint E Survey, Abstract 277
278085	Kelly Ln Super STG/Camp Excav	9.9999 Ac out of Flint E Survey, Abstract 277
278086	A E Martin	10. 00 Ac out of Flint E Survey, Abstract 277
278078	Wind River Cattle LLC	?? Ac out of Flint E Survey, Abstract 277
939584	Crosslife Evangelical Lutheran	Lot 1, Holy Word Pflugerville
783832	Teas Conference Association of Seventh Day Adventists	Lot 1, Pathways Subdivision
888886	Heritage Lake Partners LLC	Lot 1, Block A, Heritage Lakes at Pflugerville Amended
888887	Heritage Lake Partners LLC	Lot 2, Block A, Heritage Lakes at Pflugerville Amended
864919	Patrick J. & Marsha M. Spell	1.703 Ac out of Lot 2, Bratcher Subdivision
838041	735 Henna LLC	12.8779 Ac out of Flint E Survey, Abstract 277
896414	Kelly Lane Water Control & Improvement District No. 2	Lot 47, Block RR, Avalon PHS 14
736351	City of Pflugerville	1.4470 Ac out of JP Kempe Survey 12, Abstract 464
737311	Lakeside Water Control & Improvement District No. 2D	0.8320 Ac out of JP Kempe Survey 12, Abstract 464
736353	Lakeside Water Control & Improvement District No. 2D	0.5790 Ac out of JP Kempe Survey 12, Abstract 464
444701	Vera Lee Witte Hamann	5.100 Ac out of JP Kempe Survey 12, Abstract 464
878932	DOWELL CHRISTIAN T & VANESSA	Lot 1, Block AA, Avalon PHS 5C
904441	Avalon Master Community Inc	Lot 82, Block Z, Avalon PHS 17A
904466	Kelly Lane Water Control & Improvement District No. 1	Lot 83, Block Z, Avalon PHS 17A

4.5 V&A shall perform a topographic survey to include cross sections along the route, at 50-foot intervals. Survey shall include spot elevations, edge of pavement, face and back of curbs, driveways, sidewalks, and ramps, handrails, fences, street signs, roadway centerlines, any other hard surfaced improvements. The collected data shall include enough spot elevations and break lines to generate and/or merge to a 1-foot contour interval DTM for the project. In addition, V&A shall collect a total of 10 hydraulic cross sections along the Wilbarger Creek tributary. The cross sections shall include spot elevations at 50-foot intervals plus at grade breaks. The cross sections shall generally follow the FEMA DFIRM cross sections.

4.6 V&A shall collect survey data of existing driveways adjacent to the Project within the

existing ROW.

- 4.7 V&A shall survey elevations at key points, pipe sizes, and the locations of structures at all existing driveways.
- 4.8 V&A shall survey existing visible utility facilities (e.g., manholes, valve boxes, any available ground markings showing horizontal location, etc.).
- 4.9 V&A shall contact Texas One-Call, other Utility providers for City of Pflugerville, Manville Water Supply Corporation (MWSC), and Southwest Water Company to mark underground utilities and then survey the existing utilities as located.
- 4.10 V&A shall locate, identify and tag all trees with trunk diameter eight inches or greater, to include the trunk diameter, species and spread within the existing ROW per most current City of Pflugerville Tree Ordinance.
- 4.11 V&A shall locate all soil/rock borings as drilled and any environmental features.
- 4.12 V&A shall prepare in Microstation V8 or V8i or Civil3D, 2D drawing files with an ASCII file, along with .tin and .dat files for the DTM model in GEOPAK.
- 4.13 V&A shall prepare Survey Control layout sheets in 11"x17" tabloid paper format, including but not limited to illustrating in graphical format the Project Limits to include monument locations, control recovery sketches detailing pertinent physical features, permanent and temporary Horizontal Control/Vertical Control Bench Marks (three point tie details). Survey Control layout sheets must be signed and sealed by the Registered Professional Land Surveyor responsible for the survey. Survey Control layout sheets will become part of the Final Construction Contract Documents.
- 4.14 Surveying Services (Watermain)

V&A shall coordinate with CP&Y to identify the location of the alignment for proposed watermain. V&A shall perform a topographic survey for a 30-foot wide swath, to include cross sections along the alignment, at 50-foot intervals. Survey shall include spot elevations, grade breaks, visible planimetrics and utilities, and trees. The collected data shall include enough spot elevations and break lines to generate and/or merge to a 1-foot contour interval DTM for the proposed alignment.

V&A shall prepare in Microstation V8 or V8i or Civil3D, 2D drawing files with an ASCII file, along with .tin and .dat files for the DTM model in GEOPAK.

V&A shall perform sufficient field and office work to recover ROW monuments, property corners along the ROW line and rear property corners (where ROE is secured), and other evidence along the ostensible ROW lines of the project route to aid in the analysis, reconstruction, and depiction of the existing property lines for the following properties, as required to prepare easement documents:

TCAD ID	Owner	Legal Description
481802	Ardalia E Martin	9.837 Ac out of Flint E Survey, Abstract 277
481805	Wendee Whitehead & Anne Matron	9.990 Ac out of Flint E Survey, Abstract 277
278089	Wayne R. Moore	10. 00 Ac out of Flint E Survey, Abstract 277
278092	BLD VOHL 6A-1 LLC	1.7240 Ac out of Lot 2, Bratcher Subdivision
708120	BLD VOHL 6A-1 LLC	0.5752 Ac out of Lot 2, Bratcher Subdivision and 2.2648 Ac out of Flint E Survey, Abstract 277
278087	Brian Kirvin Rogers	0. 1400 Ac out of Flint E Survey, Abstract 277
278085	Kelly Ln Super STG/Camp Excav	9.9999 Ac out of Flint E Survey, Abstract 277
278086	A E Martin	10. 00 Ac out of Flint E Survey, Abstract 277

278078	Wind River Cattle LLC	?? Ac out of Flint E Survey, Abstract 277
939584	Crosslife Evangelical Lutheran	Lot 1, Holy Word Pflugerville
783832	Teas Conference Association of Seventh Day Adventists	Lot 1, Pathways Subdivision
888886	Heritage Lake Partners LLC	Lot 1, Block A, Heritage Lakes at Pflugerville Amended
888887	Heritage Lake Partners LLC	Lot 2, Block A, Heritage Lakes at Pflugerville Amended
888892	Heritage Lake Partners LLC	Lot 3, Block A, Heritage Lakes at Pflugerville Amended
278115	Ronny W. Rinderknecht & Becky Lynn Kuueger	17.722 Ac out of Flint E Survey, Abstract 277

5.0 GEOTECHNICAL ENGINEERING SERVICES (RETL)

Geotechnical Engineering Services will include the following:

5.1 Geotechnical Studies

RETL will use truck mounted drilling equipment to perform test borings at spacings not to exceed 500-feet for the proposed project. Based on the length of the project, 14 test borings will be performed to depths of 15-feet below the existing site grades. Laboratory testing will be performed on the samples obtained from the drilling operations. Based on the anticipated soil conditions, the laboratory testing program is anticipated to include moisture content, Atterberg limits, minus number 200 sieve, sieve analysis, hydrometer, sulfate content, and lime series tests.

The results of the field and laboratory testing will be analyzed to produce pavement design recommendations in accordance with City of Pflugerville design standards.

Assumptions

1. Right-Of-Way (ROW) permits from the City of Pflugerville (CoPf) will be required. RETL will obtain all required City permits and ensure that coordination and compliance with the City is provided. All test borings will be accessible to truck-mounted drilling equipment.
2. Non-routine traffic control measures will be required. RETL will acquire the services of a qualified Maintenance-Of-Traffic (MOT) subcontractor and ensure that adequate traffic control is provided.
3. Some test holes will be located within the roadway pavement and will required coring up to a 12" depth
4. Excavation permits from the CoPf will be required. RETL will obtain all required CoPf permits and ensure that coordination and compliance with the CoPf is provided.

Deliverables

1. A geotechnical engineering report including pavement design recommendations, boring location plan, and logs of boring. The report will be signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.

6.0 UTILITY COORDINATION SERVICES (CP&Y; V&A)

Utility Coordination Services will include the following:

- 6.1 The CONSULTANT will gather utility location information using available records from

known local utilities in the area as well as Texas One-Call locates provided by survey. The CONSULTANT will correlate the record information with utility features surveyed to determine any potential conflicts;

6.2 The CONSULTANT will attend Utility Coordination Meetings as follows:

a. *Initial (Kick-off) Project Meeting for Utilities*

Plan and conduct an initial Utility meeting and an on-site inspection (when appropriate) to ensure familiarity with existing conditions, and project requirements. A letter report of the meeting will be prepared.

b. *Group Progress Meeting (1 Group Meeting)*

The Utility Coordinator shall schedule a group meeting with utility companies and owners or owners' representatives for coordination purposes. Such meeting shall commence as early as possible in the design process. The Utility Coordinator shall notify the City at least five (5) business days in advance of each meeting to allow the City the opportunity to participate in the meeting. The Utility Coordinator shall provide and produce meeting minutes of all meetings with said utility companies, owners or owners' representatives within seven (7) business days.

c. *Individual Meetings (6 Individual Meetings)*

The Utility Coordinator shall schedule periodic individual meetings with each required utility company and owner or owner's representatives for coordination purposes as approved by the city. Such meetings shall commence as early as possible in the design process and shall continue until completion of the project. The Utility Coordinator shall notify the City at least five (5) business days in advance of each meeting to allow the City the opportunity to participate in the meeting. The Utility Coordinator shall provide and produce meeting minutes of all meetings with said utility companies, owners or owners' representatives within seven (7) business days. The frequency of such meetings may be adjusted to be appropriate for the matters under discussion with each utility owner.

6.3 The Utility Coordinator will provide a Utility Tracking Report (matrix) and will include the following: The Utility Tracking Report will include the following information as applicable:

- a. Owner of the facility, including the facility address and the name and telephone number of the contact person at the facility;
- b. Location of Conflict, identified by station and offset;
- c. Type of facility;
- d. Expected clearance date;
- e. Status;
- f. Effect on construction;
- g. Type of adjustment required;
- h. Critical path item? Yes or no;
- i. Cost of Relocation to City;
- j. Exclusive/Non-Exclusive easement? Yes or no, maintain exclusivity yes or no; and
- k. Consideration of shared duct bank.

The Utility Coordinator will maintain an existing utility conflict layout in Microstation. This layout shall include existing utilities provided by others which are to remain in place

or be abandoned, and adjusted utilities. As required the Utility Coordinator shall coordinate with the local utility committees to present a footprint of the project with represented utility companies and owners. The Utility Coordinator shall also coordinate with any other utility committees which may include county, state, or other officials, if needed. This includes providing updated plans, exhibits and other relevant project material as needed. The Utility Coordinator will submit the Utility Conflict Matrix and Existing Utility Conflict Layout at the 30 percent design phase submittal and an updated Utility Tracking Report at the 60, 90, and 100 percent design phase submittals.

- 6.4** The Utility Engineer shall review the utility's relocation plans for additional conflicts, to assure compliance with the roadway plans and provide the recommendations to the design team for review and concurrence. The Engineer will also evaluate alternatives in the adjustment of utilities balancing the needs of both the City and the Utility. However, constructability and conformance to utility regulations is the responsibility of each utility owner;
- 6.5** The CONSULTANT will reference in proposed utility lines as background if electronic CAD files are provided and received prior to the submittal of final construction contract document plan sheets; and
- 6.6** The CONSULTANT will develop existing utility layouts.
- 6.7** The Utility Coordinator shall prepare a list of utilities specifying the point of contact and an emergency contact for each. This list may contain design consultants, contractors involved, or departments of the Utility Owner that may become involved as the project progresses.
- 6.8** The Utility Coordinator shall coordinate all activities with the City and its consultants or other contractors or representatives, as authorized by the City. Also, the Utility Coordinator shall provide the City copies of diaries, correspondence and other documentation of work- related communications between the Utility Coordinator, utility owners and other outside entities when requested by the City. The Utility Coordinator shall attend monthly meetings and conference calls.
- 6.9** If a utility is located within an easement, the utility company may have a compensable interest. The utility company must furnish a copy of their easement to the Utility Coordinator. The Utility Coordinator shall determine whether a compensable interest exists and the owner's degree of eligibility. The Utility Coordinator shall identify a utility corridor assignments within the project limits and review the utility cost estimate for these adjustments. The Utility Coordinator shall review plans to ensure compliance with city requirements and ensure the proposal will not conflict with roadway construction. If above conditions are satisfied, the Utility Coordinator will submit a copy of the easement, plans, and utility estimate to the City recommending approval.

Deliverables to be submitted at each phase

- *Utility owner contact list*
- *Utility owner contact logs/emails*
- *Utility conflict matrix*
- *Existing Utility Conflict layout (11x17 sheets)*
- *Utility relocation estimate prepared by others*

7.0 SUBSURFACE UTILITY ENGINEERING (SUE) SERVICES (TRG)

SUE Services will include the following:

- 7.1 During the schematic phase, TRG will perform QL “B” SUE services and will attempt to designate the following utilities within the project area: potable water, reclaimed water, chilled water, natural gas/crude oil/ refined product pipelines, communication duct banks, fiber optic, cable television, telephone, and electric. TRG will attempt to designate utility service lines, however, because services are often non-toneable, and often not depicted on records, these lines may not be shown in the final SUE data, Wastewater and storm drain facilities will be inverted at manholes, and will be depicted as QL “C” information. Additionally, during this phase, TRG will perform an inventory of overhead utilities within the entire project limits. Irrigation lines are excluded from this scope of work.

The Level “B” SUE will be performed per the standard of care guideline, *Standard Guideline for the Collection and Depiction of Existing Utility Data, ASCE/CI 38-02*.

The survey of SUE field markings is not included in the TRG scope of work. It is assumed that the CONSULTANT will provide the survey of TRG field markings, pin flags and test hole locations.

- a. As part of the Records Research effort TRG will perform the following:
 - i. Contact Texas One-Call, other Utility providers for City of Pflugerville, Manville Water Supply Corporation (MWSC), Southwest Water Company and acquire records from all available utility owners including local municipalities (cities, counties, etc.);
 - ii. Perform in-field visual site inspection. Compare utility record information with actual field conditions. Record indications of additional utility infrastructure and visual discrepancies with record drawings; and
 - iii. Interview available utility owners for needed clarification, resolution of found discrepancies, and details not provided on the record drawings;
- b. As part of the Designating Effort TRG will perform the following:
 - i. Select and employ the appropriate suite of industry standard geophysical equipment to search for existing utilities within the limits specified on the project. For metallic/conductive utilities (e.g. steel pipe, electrical cable, telephone cable) electromagnetic induction, and magnetic equipment will be employed. TRG will attempt to designate non-metallic/non-conductive utilities using other proven methods, such as rodding, probing, and Ground Penetrating Radar (GPR). This scope of work includes mapping of the following utilities: water, wastewater, natural gas, gas/oil pipelines, electric, telephone, fiber, duct banks, cable TV, and storm sewer. Unless specifically requested, utility service lines and irrigation lines are not included in this scope;
 - ii. Interpret the surface geophysics, and mark the indications of utilities with paint or pin flags on the ground surface for subsequent depiction on deliverable utility maps;
 - iii. Record all marks on electronic field sketches and correlate such data with utility records and above ground appurtenances obtained from visual inspection to resolve differences and discrepancies. Denote any utilities found where ownership/utility type is not available from records as “unknown” facilities;

- iv. Provide field sketch for survey of the existing utility designating marks and above ground utility appurtenances according to the project control and record the data for subsequent depiction on the plan deliverables. Review survey data of the existing utility designating marks and above ground utility appurtenances provided and record the data for subsequent depiction on the plan deliverables; and
- v. TRG will ensure that adequate traffic control is provided during this phase of the project;

Deliverables

- A utility file in MicroStation format depicting all designated and located utilities. The Client will provide TRG with any necessary background files for use in completing the final deliverables.
- 11" x 17" SUE Plan Sheets depicting all designated utilities. These plans will be signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.

8.0 TRAFFIC CONTROL PLAN SERVICES (V&A)

- 8.1** The CONSULTANT will prepare a Traffic Control Plan (TCP), at a 1"=50' scale double stacked, a Detour Plan if required and a Sequence of Work Narrative which must include a removal strategy describing the steps required to safely remove traffic control devices and the work zone. The Traffic Control Plan will be developed in accordance with the most recent version of the Texas Manual of Uniform Traffic Control devices (TMUTCD). The TCP will identify work areas, temporary paving, temporary shoring, signing, detour alignment, barricades, temporary drainage structures, temporary retaining walls and other TCP related items as required;
- 8.2** The CONSULTANT will prepare Advance Warning Sign Layouts depicting the overall project area including side streets. Spacing, longitudinal and lateral offsets must be included for each sign. The sheets will locate the advance warning signs that will be in place throughout the construction process;
- 8.3** The CONSULTANT will prepare TCP Typical Sections for each Phase of construction as required;
- 8.4** The CONSULTANT will prepare a Sequence of Work Narrative and submit to the CITY for review and incorporation into the plans. The narrative will include a phase-by-phase, step-by-step written account of the proposed activities throughout the construction process. This is intended to be a narrative account of the proposed activities shown in the TCP;
- 8.5** The CONSULTANT will obtain the most current applicable City of Pflugerville, City of Austin and/or TxDOT standards as needed for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data; and
- 8.6** The CONSULTANT will calculate quantities for all items and prepare a quantity Summary Sheet(s).
- 8.7** The CONSULTANT shall develop a preliminary traffic control concept and sequence of construction narrative for the 30% submittal.
- 8.8** The CONSULTANT will develop TCP Cross sections for each Phase of construction up

to the assumed three (3) construction phases with cross sections cut every 100' and at critical locations determined by the CONSULTANT. The TCP cross sections will be not be a deliverable to the CITY and are for use by the CONSULTANT to verify the TCP design only.

- 8.9** The CONSULTANT will develop a Temporary Traffic Signal Layout for the Kelly Ln and Jakes Hill Rd/Hidden Lake Dr intersection to depict the traffic signal head location for each construction phase. This design is strictly limited to developing layouts to depict the new location of the traffic signal heads only. Modification of the existing traffic signals and associated elements, development of traffic signal charts, traffic signal timing operations, phase sequencing, APS charts, etc. are not part of this scope. It is assumed the existing conduit, conduit wiring, ground boxes, signal poles, controller cabinet, span wires, guy wires, ped signal heads, etc. are sufficient in quantity and in their current location and will not need adjustment. If it's determined during design that these elements are in conflict or need modification, a supplemental agreement will need to be executed to design and relocate these traffic signal elements.

9.0 ROADWAY DESIGN SERVICES (V&A)

The tasks performed for the roadway design will include, but are not limited to the following:

- 9.1** The CONSULTANT will develop a Design Summary Report (DSR) documenting all design criteria for the Project;
- 9.2** The CONSULTANT will develop preliminary roadway typical sections for review and approval by the CITY. The existing and proposed typical sections will be shown on the 30 percent schematic layout;
- 9.3** The CONSULTANT will develop horizontal and vertical geometry and will develop up to two (2) alignment options for the roadway section between Pleasant Bay Dr. and end of project at Cele Rd.
- 9.4** The CONSULTANT will prepare a roadway schematic for the 30 percent submittal. The CONSULTANT will design a schematic level horizontal alignment and vertical profile, develop pavement edges, curbs, sidewalks, barriers, retaining walls, and any other pertinent roadside features as required;
- 9.5** The CONSULTANT will develop a preliminary proposed roadway cross sections and a digital terrain model (DTM) to be used for determination of and ROW or easement requirements, location of potential retaining walls, and estimated earthwork quantities. The cross sections will utilize standard items for curb, sidewalk, walls, barrier, etc.;
- 9.6** The CONSULTANT, in conjunction with the CITY, will determine the appropriate pavement section for the preliminary proposed roadway model in accordance with the City's Pavement Design Criteria Manual;
- 9.7** The CONSULTANT will prepare a cross-section roll-plot for the 30 percent submittal. Cross-sections will be created along the proposed horizontal alignment at 100-foot increments and culvert crossings. The cross-sections will show the proposed roadway, roadside features, existing ground, proposed grading, existing ROW, proposed ROW, and easements. The horizontal alignment, pavement cross- slope, existing ROW and proposed ROW must all be labeled;
- 9.8** The CONSULTANT will prepare a Title Sheet which will include pertinent project information;
- 9.9** The CONSULTANT will prepare a detailed Index of Sheets that shows each sheet's location in the plan set and corresponding sheet number;
- 9.10** The CONSULTANT will prepare Project Layout Sheets at a 1"=400' scale double

stacked that clearly indicate the limits of the entire project;

- 9.11** The CONSULTANT will prepare Existing and Proposed Typical Section Sheets from the schematic preliminary roadway typical sections. The existing typical sections will include the current roadway characteristics (pavement section, pavement width, ROW, etc.). The proposed typical sections will include all pertinent information for the proposed roadway construction. Typical sections will be required for all proposed and existing roadways, including side streets, with the best available information. The proposed typical sections must include the following:
- a. Width of travel lanes and directional arrows;
 - b. Width of shoulders;
 - c. Border width;
 - d. Curb offsets;
 - e. ROW width;
 - f. Centerline;
 - g. Profile grade line;
 - h. Pavement structure (detailed layers shown based on Geotechnical Report);
 - i. Side Slopes and front slopes as needed;
 - j. Sodding/seeding limits;
 - k. Landscaping
 - l. Retaining walls;
 - m. Station limits;
 - n. Bridge sections separate;
 - o. Sidewalks (locations, widths);
 - p. Vertical barriers, etc.; and
 - q. Median widths.
- 9.12** The CONSULTANT will prepare Removal Layouts at a 1"=50' scale double stacked. The layouts will indicate pavement, roadway appurtenances, and other pertinent items to be removed with details and descriptions to ensure the intent is clear;
- 9.13** The CONSULTANT will develop Horizontal Alignment Data Sheets that will include all horizontal alignment data;
- 9.14** The CONSULTANT will develop Roadway Plan and Profile Sheets at a scale of 1"=50' H and 1"=10' V. The sheets will include coordinates, superelevation data, stations, horizontal curve data, vertical profile data, elevations of key alignment features, drainage features, utilities, and any other items required for the complete construction of the Project;
- 9.15** The CONSULTANT will develop Intersection Layout Sheets at a 1"=30' scale with spot elevations and proposed grading for the intersections. The following intersections will be included:
- a. Hidden Lake Dr./Jakes Hill Rd.
 - b. Levels Trail
 - c. Pleasant Bay Dr.

- d. Existing Kelly Ln.
 - e. Weiss Ln.
 - f. Mangan Way
- 9.16** The CONSULTANT will prepare Miscellaneous Roadway Details which will include all necessary details not included in standard City of Pflugerville, City of Austin and/or TxDOT detail sheets necessary to fully construct all portions of the Project;
- 9.17** The CONSULTANT will prepare cross-sections at a scale of 1"=20' H and 1"=10' V to be included in the plan set. The cross-sections will be created along the proposed centerline alignment at 50 foot intervals, culvert locations, intersections, existing driveways, and proposed driveways. The cross-sections will show the proposed roadway, roadside features, existing ground, proposed grading, existing ROW, proposed ROW, and easements. The horizontal alignment, pavement cross-slope, existing ROW and proposed ROW must all be labeled. Utilities and storm sewers, if required, will be shown on the cross-sections;
- 9.18** The CONSULTANT will obtain the most current applicable City of Pflugerville, City of Austin and/or TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data;
- 9.19** The CONSULTANT will calculate quantities for all items and prepare a quantity Summary Sheet(s);
- 9.20** The CONSULTANT will prepare any required special specifications or special provisions and identify the applicable CITY general notes;
- 9.21** The CONSULTANT will prepare a request for any design exceptions, including all information necessary to support the request, and submit them to the CITY for review and approval;
- 9.22** The CONSULTANT will prepare an Opinion of Probable Construction Cost utilizing calculated quantities, City of Pflugerville, City of Austin, TxDOT Austin District average unit prices, and TxDOT Statewide average unit prices as appropriate based on the judgment of the CONSULTANT;
- 9.23** The CONSULTANT will prepare a construction schedule utilizing the Critical path Method (CPM) with appropriate software. The CPM schedule will identify the major items of work for construction of the project with durations based on available production rates for those items. The schedule will indicate tasks, subtasks, critical dates, milestones, will depict the interdependence of the various items, and will be in calendar days; and
- 9.24** The CONSULTANT will prepare a Project Manual including standard general provisions, instructions to bidders, bid forms, applicable prevailing wage rates, specifications, special provisions and any other information required for complete construction of the Project. The CITY will provide the front-end documents for use by the CONSULTANT.
- 9.25** Structural design of bridges, bridge class structures, retaining walls, etc. and development of structural details is not part of this contract and will be considered an additional service if warranted.

10.0 DRAINAGE DESIGN SERVICES (V&A)

The tasks performed for the drainage design will include, but are not limited to the following:

- 10.1** The CONSULTANT will obtain current hydrologic and hydraulic as-built drawings, models, and associated data from the responsible government agencies;
- 10.2** The CONSULTANT will acquire current available 1-ft. LiDAR data for drainage area delineation and for model data supplementation;
- 10.3** The hydrologic and hydraulic analyses will be based on the City of Pflugerville's Engineering Design Manual including use of the latest Atlas-14 rainfall data;

Develop and evaluate contributing drainage maps to Kelly Lane. Using the published Atlas 14 rainfall depths and the IDF curves in the Engineering Design Manual determine peak storm water runoff discharges to Kelly Lane. Evaluate impacts of the increased impervious cover in the watershed. We will provide pre-project and project conditions drainage area maps providing delineation of drainage areas and hydrologic data (time of concentration path, impervious cover, soil data, etc.) for the culvert crossings within project limits

The CONSULTANT will compute existing and proposed peak flows by using appropriate hydrologic methods and modeling as required; The CONSULTANT shall prepare the hydrologic calculations associated with the storm drain designs including land use maps, run-off coefficients, etc. The CONSULTANT shall develop the following analysis:

- a. Delineate Overall contributing offsite Drainage Areas to Kelly Lane
 - b. Delineate Internal Roadway Parallel Drainage Areas for ditches, storm sewer, and inlets
 - c. Perform Hydrology Calculations to determine peak design discharges
- 10.4** The CONSULTANT will use calculated peak flows for the design storm and provide 100-year peak flow design verification for all hydraulic crossings. Hydraulic analyses will be performed using HY-8 or HEC-RAS models as appropriate.
- a. Culvert Analysis
 - o Culvert along Hidden Lake Drive
 - o Culvert near the new intersection with Weiss Lane

10.5 Hydraulic Report

The CONSULTANT will prepare a Hydrologic and Hydraulic Drainage Report or Technical Memorandum as requested. The report will include studies of offsite and onsite drainage and floodplain impacts and document the potential impacts associated with the Project to include preliminary culvert recommendations, storm drain/inlet and ditch/offsite drainage design recommendations. The intent of the report is to provide sufficient information for CITY reviewers to determine the acceptability of floodplain changes, verify additional data needs, confirm requirements for additional agency submittals (e.g. FEMA, USACE), and verify the preferred approach for culvert modifications and/or possible span bridge construction. The Hydrologic and Hydraulic Drainage Report will include the following:

- a. Offsite and onsite watershed identification;
 - b. Existing conditions for the applicable creek crossings;
 - c. Proposed condition model results for culvert crossings;
 - d. Identification of assumptions;
- 10.6** The CONSULTANT will prepare Hydraulic Data Sheets for all culvert crossings. The

Hydraulic Data Sheet must include the following:

- a. Structure Location Map;
 - b. Hydrologic Data and Results Table(s) Comparing Pre-project to Project Conditions;
 - c. Hydraulic Data and Results Table(s) Comparing Pre-project to Project Conditions; and
- 10.7** The CONSULTANT will prepare Culvert Layouts for all culvert crossings. Plans shall show the location of existing and proposed culverts, roadway alignment, roadway width, utilities, and channel improvements as required. Profile information for the culvert shall include size, slope, proposed and existing ground lines above the culvert, and hydraulic data for culvert reconstruction or modification. The layouts must also include applicable hydraulic information. The layouts will be prepared at a scale of 1"=20' H and 1"=10' V
- o Culvert along Hidden Lake Drive
 - o Culvert near the new intersection with Weiss Lane
- 10.8** If needed, the CONSULTANT will prepare energy dissipation/erosion protection measures for the culvert outfall points and any associated detail sheets;
- 10.9** The CONSULTANT will calculate quantities for all culvert crossings;
- 10.10** The CONSULTANT will prepare a Summary Sheet for all culvert quantities;
- 10.11** The CONSULTANT will prepare a TxDOT BCS Standard Sheet as needed;
- 10.12** The CONSULTANT will prepare onsite pre-project and project conditions Offsite Drainage Area Maps at a scale of 1"=50'. The maps will depict drainage area boundaries, infrastructure and include flow direction arrows. These maps will depict drainage area boundaries and flow direction arrows. Each area will be identified with a unique number to be used to find run-off information from the calculation sheets.
- 10.13** The CONSULTANT shall prepare Interior Drainage Area Maps at a scale of 1"=50'. These maps will depict drainage area boundaries and flow direction arrows. Each area will be identified with a unique number to be used to find run-off information from the calculation sheets.
- 10.14** The CONSULTANT will prepare Storm Sewer design with runoff, spread, and inlet computations for each inlet. Inlet hydraulics will be calculated using the Rational Method. Calculated flow rates and related input must be indicated on a Runoff and Inlet Computations Sheet; the CONSULTANT will utilize GEOPAK Drainage or other software acceptable to the CITY;
- Storm Sewer Analysis
 - o Hydraulic WSEL elevations for Storm drain mains and laterals for the length of the Kelly Lane alignment
 - o Hydraulic WSEL and ponding calculations for storm drain conveyance of mains and inlets
- 10.15** The CONSULTANT will prepare Drainage Plan and Profile Sheets depicting locations of any inlets, manholes, storm drains, culverts, utilities, channel improvements, swale locations, and flowlines as required. The Drainage Plan and Profile Sheets will be prepared at a scale of 1"=50' H and 1"=10' V; If required, Storm Sewer Profiles will show pipe size, type, slope, existing ground lines, proposed ground lines above the system, pertinent hydraulic information, locations and sizes of inlets, junctions, and utilities;
- 10.16** Ditch Design - The CONSULTANT shall analyze the project ditches to determine ditch capacity, velocities, and other pertinent information. The CONSULTANT will prepare a

tabular ditch layout schedule that depicts pertinent information about the roadside ditch geometry and design. For any required drainage swale design, the CONSULTANT will provide hydrologic and hydraulic data and results, including but not limited to resulting peak stage, peak velocity, and peak shear stress;

- 10.17** The CONSULTANT will review the Traffic Control Plan to confirm there is positive drainage and if required, provide quantities for temporary drainage items necessary to maintain positive drainage during construction.
- 10.18** The CONSULTANT will identify and quantify any trench protection or temporary special shoring if required;
- 10.19** The CONSULTANT will obtain the most current applicable City of Pflugerville, City of Austin and/or TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data.

Exclusions - Structural details for revised structural standard drawings signed and sealed by a professional engineer are not included as part of this WA and will be considered additional services if warranted.

10.20 Task: Floodplain Studies (V&A)

- a. *Review & Evaluate FEMA Models – Unnamed Tributaries to Unnamed Tributary to Wilbarger Creek*

Stream stations, number of cross sections, the shear stress and water surface elevations in key cross sections will be reviewed to include immediate upstream, at, and downstream of Kelly Lane from Moorlynch Ave to south of Hidden Lake Drive. In addition, the area near the proposed intersection of Kelly Lane and Weiss Lane will be reviewed for floodplain impacts with the new alignment.

- b. *Hydrologic Determination*
- c. *Create Corrected Effective Hydraulic Models*

Cross sections will be added along the unnamed tributaries to Wilbarger Creek along Kelly Lane where necessary based on the updated models currently being provided by another consultant for the City of Pflugerville. The latest model will be used as baseline model.

- d. *Compare results with existing FEMA floodplain*

A comparison between peak discharges, calculated WSEL, shear stress will be performed for the downstream sections.

- e. *Develop Proposed Effective Hydraulic Model*

The existing structures will be evaluated and with recommendations for alternative crossings for the new alignment and existing Kelly Lane alignment.

- f. *Evaluate impacts & Develop Floodplain limits*

Compare pre project and post project WSELs within the floodplain. Evaluate impacts-compare pre project and post project peak runoff at the outfalls, this includes the shear stress (and bank erosion potential) and flow in multiple cross sections.

- g. *Develop preliminary Floodplain Management Plan*

The floodplain management alternatives will be prepared and presented to the City for review/approval of floodplain management strategy moving forward.

- h. *Meet with Project Stakeholders to discuss implementation of floodplain mitigation*

At least two community meetings are anticipated to present preliminary mitigation design, get input, and adjust semi-final and final design. The Engineer will meet with FEMA/USACE personnel as needed.

- i. Develop Final Floodplain Management*
- j. Coordination with the City's floodplain administrator*
- k. Report detailing floodplain mitigation commitments*
- l. Exclusion*

FEMA- a Conditional Letter of Map Revision (CLOMR) or Letter of Map Revision (LOMR) and any additional permitting requirements pertaining to jurisdiction waters of the US are not included with this work authorization. Hydrologic and Hydraulic services will be performed in a way that can be submitted FEMA. V&A will use the latest models provided by the City as the baseline models and new models will not be created.

10.21 Floodplain Mitigation

- a. Floodplain Detention Mitigation Plans – Plans for mitigation of Tributary to Unnamed Tributary to Wilbarger based on alignment of Kelly Lane encroaching on the floodplain. The Engineer Shall Prepare:
 - b. Develop grading plans with Detention if required
 - c. Develop Floodplain Mitigation Hydraulic Data Sheets
 - d. Miscellaneous Details
 - e. Mitigation Summary Sheets

11.0 TRAFFIC, SIGNING AND PAVEMENT MARKINGS SERVICES (LEG; V&A)

The tasks performed for the traffic, signing and pavement marking design will include, but are not limited to the following:

11.1 Traffic Study (LEG)

- a. Develop AM/PM and ADT Existing Traffic Volumes*

Traffic counts will be provided by the City of Pflugerville. The counts will be used to develop a balanced AM and PM peak hour volume diagram. The counts will be converted to Average Daily traffic which will be part of the diagrams.

- b. Develop 2040 Projected Traffic Volumes*

Travel demand forecasts will be developed for the year 2040 for Kelly Lane. The forecasts will be developed for the intersections from Moorlynch Ave to Weiss Lane. AM/PM and average daily traffic volumes will be developed for these locations. It is assumed that the ADT model plots will be provided by CAMPO for the study area.

- c. Develop and Calibrate Existing Synchro Model*

A Synchro model will be developed for the corridor. The model will be calibrated by performing travel time runs and noting queuing along the corridor.

- d. Perform Traffic Signal Warrant Analysis*

A Traffic Signal Warrant Analysis (TSWA) will be conducted for the intersections of Levels Trail, Pleasant Bay Dr. and Weiss Lane. The analysis will include the proposed build out condition of the development on the side roads. Existing condition analysis will not be completed. It is assumed that the City will provide

all traffic counts/data as needed. The TSWA will be conducted based on the guidelines established in the most recent TMUTCD and will include the following:

Collect crash records for the study intersection during the most recent twelve (12) month period;

Perform a site inspection at the intersection to record existing traffic characteristics observed in the field. The field work may include taking measurements, document the existing conditions including roadway geometry, signing, striping, speed limits and taking digital photographs of the intersections;

Analyze crash records and prepare a collision diagram from the crash reports showing crash experience by type, location, direction of movement, severity, weather, time of day and date; and

Analyze all traffic count data (provided by the City) and geometric data to perform signal warrant analysis based on the latest version of the TMUTCD.

e. Perform Traffic Analysis for Existing and Projected (2040) Conditions

The existing traffic volumes will be analyzed for the corridor. The results will include level of service and queueing analysis. The analysis will be performed of the 2040 build and no-build conditions. The 2040 volumes will be utilized to evaluate lane configurations at the intersections. The placement will be based on the traffic signal warrant analysis. Results will be documented.

f. Prepare and Revise Traffic Engineering Report

A traffic engineering report will be prepared summarizing the methodology, analysis and recommendation for Kelly Lane. The report will be submitted. Comments will be addressed, and a final report will be prepared.

11.2 The CONSULTANT will prepare proposed signing layouts, and proposed pavement marking and delineation layouts on the same sheets at a scale of 1"=50'. The layouts will identify the various types of proposed signing, striping, and delineation. Signing and striping will be in accordance with the latest version of the TMUTCD or applicable City of Pflugerville, City of Austin and/or TxDOT standards;

11.3 The CONSULTANT will assign a unique number to each sign that will relate that sign to the sign summary sheet;

11.4 The CONSULTANT will prepare pavement marking details for instances in which standards do not apply or are not appropriate;

11.5 The CONSULTANT will prepare special sign panel details as needed;

11.6 The CONSULTANT will prepare the Summary of Small Signs table utilizing the most current applicable City of Pflugerville, City of Austin and/or TxDOT standards. No large guide signs are anticipated;

11.7 LEG will prepare Traffic Signal Design Layouts depicting existing utilities, permanent traffic signal poles and mast arms, pedestrian signal poles, pedestrian signals, push buttons, controller cabinet assemblies, signal heads, street lights, detector loops or other detection systems, conduit ground boxes, power sources with distribution to signal service, communications connections, wiring diagrams, pavement markings, signal phasing plan, conduit and cable chart, pole summary chart, phasing sequence, pole details, pole locations diagram, inputs and timing outputs, and all other items required for the complete construction of the signals;

a. Permanent Traffic Signal Design - Permanent traffic signal design plans will be developed for two intersections at Hidden Lakes Dr./Jakes Hill Rd. and Weiss

Ln. The existing controller at the Hidden Lakes Dr./Jakes Hill Rd. intersection shall be used for the permanent traffic signal, per direction from the GEC. If warrants are not met for the existing conditions plans will still be developed for placing conduits and pole foundations. If warrants are met for Levels Trail and Pleasant Bay Dr., permanent traffic signal design for these intersections will be considered an additional service.

- b. Temporary Traffic Signal Design – Temporary traffic signal design is not part of this WA and will be considered an additional service if warranted.

Drawings shall be prepared at a scale of 1"=50' H with a final engineers estimate.

- 11.8** LEG will develop continuous Illumination design along Kelly Lane. Plans will be developed to identify the equipment needed and the location of the light poles and luminaires including electrical service connections. No lighting analysis will be performed. The spacing will be similar to the existing spacing of other lighting poles along the existing corridor or as directed by the GEC. Drawings shall be prepared at a scale of 1"=50' H with a final engineers estimate.
- 11.9** The CONSULTANT and LEG will calculate quantities for all items and prepare a quantity Summary Sheet(s); and
- 11.10** The CONSULTANT and LEG will obtain the most current applicable City of Pflugerville, City of Austin and/or TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data.

12.0 ENVIRONMENTAL, STORM WATER MANAGEMENT PLAN, AND TREE PRESERVATION SERVICES (V&A)

The tasks performed for the Environmental, Storm Water Management Plan, and Tree Preservation will include, but are not limited to the following:

- 12.1** The CONSULTANT will prepare the Environmental Permits, Issues, and Commitments sheet
- 12.2** The CONSULTANT will develop a Storm Water Pollution Prevention Plan (SW3P) Narrative sheet that will include information such as the project description, project location, and indicate SW3P structural practices to be provided along the Project. The SW3P will be prepared for the length of the Project;
- 12.3** The CONSULTANT will prepare SW3P Layouts to include the necessary controls to minimize the runoff of sediment during construction. The layouts will include information presented in the WPAP and include permanent storm water features as appropriate. The SW3P control measures will be prepared and designed in accordance with the proposed phasing of construction. The layouts will be at a scale of 1"=50' double stacked;
- 12.4** The CONSULTANT will calculate quantities for all items and prepare a quantity Summary Sheet(s);
- 12.5** The CONSULTANT will obtain the most current applicable City of Pflugerville, City of Austin and/or TxDOT standards for inclusion in all plan submittals. Standards that require modification will be modified and sealed by a Professional Engineer licensed by the State of Texas. All standards will have the title blocks filled out with the applicable project data;
- 12.6** The CONSULTANT will prepare a Storm Water Pollution Prevention Plan (SW3P) and

Best Management Practices Plan in full compliance with the most current TPDES General Permit for control of erosion during and after construction (For sites greater than 1 acre of disturbed area);

- 12.7 The CONSULTANT will develop a Tree Inventory Summary Table listing the tree ID, type and size; and
- 12.8 The CONSULTANT will develop Tree Protection Details.
- 12.9 Landscape design and plan preparation is not part of this contract and will be considered an additional service if warranted.

13.0 SUBMITTAL REQUIREMENTS

Project Design Services Submittals will include the following:

a. *Submittals*

The Engineer shall provide the following information at the 30% submittal:

- 1. Draft Schematic Submittal
 - One (1) Schematic roll plot
 - One (1) Preliminary Cost Estimate
 - PDF copies of all submittal items
- 2. Final Schematic Submittal
 - One (1) Schematic roll plot
 - One (1) Preliminary Cost Estimate
 - One (1) Preliminary Traffic Control Concept roll plot
 - PDF copies of all submittal items

13.1 30 Percent Submittal:

- a. Provide two (2) paper copies for review of the items listed below and a PDF containing electronic copies. For the schematic, provide two (2) roll-plots at a scale of 1"=50' submitted in 24" roll paper format, up to 6' long.
- b. The submittal must include the following:
 - i. 30 percent design level schematic roll-plot. Include the existing and proposed horizontal and vertical geometry, aerial topography, locations of existing utilities, drainage structures, existing, and proposed typical sections;
 - ii. 30 percent schematic cross-section roll-plot submitted in 24" roll paper format, up to 6' long;
 - iii. Preliminary Traffic Control Plan including a narrative/conceptual description of anticipated traffic handling, typical sections for phased construction and a roll-plot exhibit depicting the proposed construction phasing;
 - iv. Draft Geotechnical Roadway Report;
 - v. Draft Hydrologic and Hydraulic Drainage Report;
 - vi. A list of Right-of-Way encroachments if needed;
 - vii. Preliminary Opinion of Probable Construction Cost;
 - viii. Preliminary Construction Schedule; and

- ix. Updated Project Design Schedule;

13.2 60 Percent Submittal:

- a. Provide two (2) paper copies for review of the items listed below and a PDF containing electronic copies. Plan sheets and cross-sections will be prepared and submitted in 11"x17" tabloid paper format;
- b. The submittal must include the following:
 - i. 60 percent plan sheets;
 - ii. Responses to 30 percent review comments;
 - iii. Updated Opinion of Probable Construction Cost;
 - iv. Updated Construction Schedule;
 - v. Updated Project Design Schedule;
 - vi. Utility Tracking Report;
 - vii. Final signed and sealed Geotechnical Roadway Report; and
 - viii. Final signed and sealed Hydrologic and Hydraulic Drainage Report;

13.3 90 Percent Submittal:

- a. Provide two (2) paper copies for review of the items listed below and a PDF containing electronic copies. Plan sheets and cross-sections must be prepared and submitted in 11"x17" tabloid paper format;
- b. The submittal must include the following:
 - i. 90 percent plan sheets;
 - ii. Responses to 60 percent review comments;
 - iii. Updated Opinion of Probable Construction Cost;
 - iv. Updated Construction Schedule;
 - v. Updated Project Design Schedule;
 - vi. Updated Utility Tracking Report;
 - vii. Draft Project Manual; and
 - viii. Draft Storm Water Pollution Prevention Plan for Construction;

13.4 100 Percent Submittal:

- a. The submittal must include the following:
 - i. Responses to 90 percent review comments;
 - ii. Two (2) original signed (electronic signatures allowed) and sealed 11"x17" tabloid paper sets of the Final Construction Plans;
 - iii. Two (2) original Project Manuals and Bid Documentation for advertisement and letting;
 - iv. Two (2) original Storm Water Pollution Prevention Plan for Construction; and
 - v. PDFs of the 100 percent submittal documents.

14.0 BID PHASE SERVICES (V&A)

Bid Phase Services will include the following:

- 14.1** The CONSULTANT will attend the Pre-Bid Meeting (in-person) with the CITY and prospective bidders. The CONSULTANT will prepare meeting minutes and submit to the CITY within three (3) business days of the meeting. The PM and 1 support staff will attend the meeting.
- 14.2** The CONSULTANT will respond to Contractor questions raised during the bidding process and develop addenda to the Bid Documentation as required;
- 14.3** The CONSULTANT will attend the formal bid opening. The PM and 1 support staff will attend the meeting.
- 14.4** The CONSULTANT will prepare a bid tabulation, analyze Contractor bids, check references and provide a Recommendation to Award to the apparent lowest responsive responsible bidder within five (5) business days of receiving the bid documents from the CITY; and
- 14.5** The CONSULTANT will furnish a set of Final Conformed Construction Contract Documents including plan sheets, Project Manual and Storm Water Pollution Prevention Plan to the awarded Contractor including all Addenda.

15.0 CONSTRUCTION PHASE SERVICES (V&A)

Construction Phase Services will include the following:

- 15.1** The CONSULTANT will attend the Pre-Construction Meeting with the CITY and the awarded Contractor. The CONSULTANT will prepare meeting minutes and submit to the CITY within three (3) business days of the meeting. The PM and 1 support staff will attend the meeting.
- 15.2** The CONSULTANT shall provide the necessary number of control points/bench marks on the ground for the Project and confirm the horizontal and vertical control correspond with the design plans;
- 15.3** The CONSULTANT will attend status meetings as needed (up to 6 meetings) at the Project location with the CITY and the Contractor. The CONSULTANT will prepare meeting minutes and submit to the CITY within three (3) business days of the meeting. The PM and 1 support staff will attend the meetings. Assuming 18 months for construction
- 15.4** The CONSULTANT will make periodic visits (up to 4 visits) to the site to observe as an experienced and qualified design professional the progress and quality of the executed work, and to determine in general if the work is proceeding in accordance with the plans and specifications and submit brief, monthly written reports relating to such visits. The CONSULTANT will not be required to make continuous on-site inspections to check the quality or quantity of the work. The CONSULTANT will not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by the Contractor or the safety precautions and programs incident to the work of the Contractor. However, the CONSULTANT will report to the CITY any deficiencies in the work actually detected by the CONSULTANT; Assuming 18 months for construction.
- 15.5** The CONSULTANT will review the Contractor's submittals such as Shop Drawings, Product Data and samples and take appropriate action (approve, approve with modifications, reject, etc.), but only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. Such

action will be taken with reasonable promptness to minimize delay. Reviews and approvals or other action will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions and programs incident thereto;

- 15.6** CITY will require the Contractor to submit to the CONSULTANT any necessary requests for additional information (RFI). The CONSULTANT will review and deliver to the CITY its written recommendation regarding the RFI. It is anticipated that there will be (1) RFI's per month during the Project. RFIs deemed to be due to inconsistencies in the Contract Documents will not be counted in the estimated number of RFI's in the contract. Limited to 18 RFI's assuming 18 months for construction.
- 15.7** The CONSULTANT will perform with CITY representative(s) a final inspection of the Project to observe any apparent defects in the completed construction with regard to conformance with the design concept and intent of the specifications, assist the CITY in consultation and discussions with the Contractor concerning such deficiencies, and make recommendations as to replacement or correction of the defective work;
- 15.8** After completion of the work, and before final payment to the Contractor, it will be CITY responsibility to require a set of "Record Drawings" from the Contractor, who has control of the work and who is in a position to know how the Project was constructed. The CONSULTANT, after receiving this information, will transfer the information to a set of "Record Drawings" or "As-Builts" for CITY's permanent file. The CONSULTANT will provide the As-Builts in PDF format;
- 15.9** The CONSULTANT will review and assist in the development at the request of the CITY, any changes, alterations or modifications to the Project that appear to be advisable and feasible and in the best interest of the CITY. The CONSULTANT must be cognizant that any such change may affect one or more of the various utilities and every effort will be made to avoid creating a conflict because of the change. It should be anticipated that there will be no more than one (1) modification to the Project. Modifications deemed to be due to inconsistencies in the design documents will not be counted in the estimate number of modifications in the contract;
- 15.10** The CONSULTANT will field verify and develop a letter to certify the permanent BMPs or measures were constructed as designed. This will serve as the certification letter that will be submitted to the TCEQ Regional Office within 30 days of site completion.

16.0 ADDITIONAL SERVICES

The following additional services will only be implemented if required and with prior approval from the CITY. If additional services not specified herein are determined necessary by the CITY, those services will be negotiated at that time and approved by the CITY prior to commencing work.

- 16.1** SUE Additional Services will include the following (TRG):

The CONSULTANT will obtain services of a SUE sub-consultant (TRG) to perform a Level "A" SUE service. The Level "A" SUE will be performed per the standard of care guideline, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, ASCE/CI 38-02.

TRG will utilize non-destructive vacuum equipment to excavate up to twenty (20) test holes at ARMA approved locations. To layout the test holes, TRG will follow the QL "B" – Designating procedures. Once each utility is located, TRG will record the size, type, material, and depth to top and general direction. Each test hole will be assigned a unique ID number and will be marked with rebar/cap. Test hole numbers will be painted in the field next to each completed test hole. A survey lath labeled with the test hold ID number and other pertinent utility information will be placed at each test hole location.

If rock or concrete is encountered during the excavation and TRG is not able to excavate through normal test hole procedures then CITY will be immediately notified of the field condition. Excavation in rock or to a depth greater than fifteen (15) feet is considered beyond the scope of this proposal. TRG will vacuum down to obtain the required information, and then replace material removed, mechanically- tamped in six (6) inch lifts. Asphalt surfaces will be repaired with asphalt cold patch and concrete cores will be epoxied back in place, flush with surrounding surface. If restoration efforts are needed beyond what is described above TRG will be notified in writing prior to mobilizing to the field. TRG assumes that flowable fill will not be required to restore the original pavement surface. If requested these services can be provided at an additional cost.

TRG will establish any necessary routine traffic control measures at no additional cost. However, it is expected that non-routine traffic control measures (lane closures, traffic detours, flag persons, etc.) will be required and will be invoiced as a direct expense. Due to the risk of damage, TRG will not attempt to probe or excavate test holes on AC waterlines unless approval is obtained from the owner in advance.

a. Assumptions

1. Right-Of-Way (ROW) permits from the City of Pflugerville (CoPf) will be required. TRG will obtain all required City permits and ensure that coordination and compliance with the City is provided. All test holes will be accessible to truck- mounted vacuum excavation equipment. Additionally, it is assumed that any necessary ROW permits will be provided to TRG at no cost.
2. Non-routine traffic control measures will be required. TRG will acquire the services of a qualified Maintenance-Of-Traffic (MOT) subcontractor and ensure that adequate traffic control is provided.
3. Up to ten (10) test holes will be located within the roadway pavement and will require coring up to a 12" depth.
4. Excavation permits from the CoPf will be required. TRG will obtain all required CoPf permits following the selection of QL "A" location and ensure that coordination and compliance with the CoPf is provided. Additionally, it is assumed that any necessary excavation permits will be provided to TRG at no cost.

b. Deliverables

1. A summary sheet of all test holes coordination data and depth information.
2. 8.5" x 11" Test Hole Data Forms for all test hole location completed. These plans will be signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.
3. Updated utility file in MicroStation format depicting all designated and located utilities. The Client will provide TRG with any necessary background files for use in completing the final deliverables.
4. Updated 11" x 17" SUE Plan Sheets depicting all designated and located utilities. These plans will be signed and sealed by a Professional Engineer and delivered to the Client in electronic PDF form.

16.2 Public Involvement Additional Services will include the following (BAI; V&A):

The City shall conduct up to two (2) Public meetings for the project, this scope has been estimated based on two (2) meetings being open house / style in-person public meetings. Should one or more of the Public Meetings be replaced with Stakeholder

outreach events, the Engineer's scope would be covered by the broader scope proposed here. BAI will:

- a. Perform Public Involvement coordination meetings or Dry Runs with City, Engineer and any City invited participants.
- b. BAI will prepare a draft Public Involvement Plan consistent with TxDOT PIPs to assist City and Engineering team with agreeing on project specific elements which may need to be adapted or incorporated into the process,
- c. BAI will utilize City and Engineer property owner data (or County Tax Appraisal records) to prepare an Adjacent Property owner list for Public Meeting notices,
- d. BAI will work with City and Engineer to identify all public elected officials who should receive public notices or mailouts,
- e. BAI will assist Engineer and City with identification of key industry, commercial, public institution or citizen group stakeholders who should be invited to stakeholder or Public Meeting events,
- f. BAI will prepare Public Meeting or Public Hearing Public Notices and letters to elected officials or stakeholders,
- g. Two BAI Environmental staffmembers will attend each public meeting,
- h. BAI will prepare PowerPoint slides and Exhibit Board for Environmental, project timeline, meeting location and wayfarer signage to be utilized at the meetings and assist in communicating environmental constraints and commitments,
- i. V&A will prepare display exhibits (i.e. Schematic) for public review and comment.
- j. V&A Project Manager and two (2) support staff will attend the Public Meetings or group stakeholder meetings.

16.3 Environmental Technical Memorandum - 404 Permitting (BAI)

Should a 404 permit (Regional General or Nationwide or Individual Permit (IP)) be required to due unavoidable impacts to Wates of the US (e.g. intermittent or perennial streams which flow to traditionally navigable waters and/or adjacent wetlands), and upon approval by the City, the wetlands specialist in collaboration with the design engineers shall evaluate the functional values of the wetland per the Fort Worth USACE requirements, determine anticipated impacts, prepare a preliminary compensatory mitigation plan (if appropriate) and prepare and submit a permit application (i.e., Regional General Permit (RGP) application, Pre-Construction Notification (PCN), or IP application) to the Fort Worth District of the USACE, respond to comments or questions, coordinate any mitigation requirements to the City and obtain the permit on behalf of the City. RGP applications, PCNs, and IP applications will be prepared in accordance with current USACE policies and regulations.

To be provided by the City

The City will furnish to the CONSULTANT the following information and/or perform the following tasks for those items for which the City is offering to provide information on file, the City will endeavor to provide items requested by the Engineer that are readily

retrievable and germane to the Project as determined by the City at its sole discretion. Any information supplied by the City to the Engineer will consist of a minimum of one copy in a format deemed appropriate by the City at its sole discretion.

1. Furnish all applicable data and correspondence the City may have on file for the project.
2. Provide as-built drawings, and right-of-way maps that the City may have on file.
3. Provide any existing survey data the City may have on file for the vicinity of the project.
4. Assist in obtaining information from local, regional, state, and federal agencies, as required.
5. Provide design criteria and approve design speed.
6. Provide timely reviews at predetermined milestones, decisions and directions necessary according to the agreed upon project schedule (Exhibit C).
7. Meet on an as needed basis to answer questions, provide guidance, and offer comment.
8. Provide venue, advertisement / notices, court reporter, materials, equipment, and other miscellaneous items, if required, associated with public involvement.
9. Promptly review invoices to City guidelines.
10. Provide CADD files of City Standard Drawings as available.
11. Provide available City GIS data.

EXHIBIT B								
Fee Summary for Professional Services - Basic Services								
Description of Work or Task	V&A	BAI	CP&Y	Legacy	Rock	TRG	TOTAL ODE	TOTAL SALARY
1.0 Project Administration and Coordination Services	\$103,311.52	\$5,760.00		\$5,000.00	\$1,997.82	\$3,415.44		\$119,484.78
3.0 Environmental Services		\$33,260.00						\$33,260.00
4.0 Surveying Services	\$187,648.75							\$187,648.75
5.0 Geotechnical Engineering Services					\$5,094.58			\$5,094.58
6.0 Utility Coordination Services	\$13,490.44		\$51,084.00					\$64,574.44
7.0 Subsurface Utility Engineering (SUE) Services						\$17,521.64		\$17,521.64
8.0 Traffic Control Plan Services	\$80,139.30							\$80,139.30
9.0 Roadway Design Services	\$263,055.62							\$263,055.62
10.0 Drainage Design Services	\$204,050.72							\$204,050.72
11.0 Traffic, Signing and Pavement Marking Services	\$23,920.92			\$95,000.00				\$118,920.92
12.0. Environmental	\$31,005.12							\$31,005.12
13.0 Submittal Requirements	\$14,103.28							\$14,103.28
14.0 Bid Phase Services	\$14,345.52							\$14,345.52
15.0 Construction Phase Services	\$72,920.02							\$72,920.02
Other Direct Expenses	\$30,460.00	\$803.00	\$1,120.00	\$224.00	\$26,833.70	\$41,700.00	\$101,140.70	
Grand Totals (LABOR + ODE)	\$1,038,451.21	\$ 39,823.00	\$52,204.00	\$100,224.00	\$33,926.10	\$62,637.08	\$101,140.70	\$1,327,265.39

EXHIBIT B								
Fee Summary for Professional Services - Additional Services								
Description of Work or Task	V&A	BAI	CP&Y	Legacy	Rock	TRG	TOTAL ODE	TOTAL SALARY
16.1 QL "A" SUE services						\$11,402.12	\$42,725.00	\$11,402.12
16.2 Public Involvement Services	\$15,885.08	\$11,960.00					\$12,900.00	\$27,845.08
16.5 Environmental Technical Memorandum - 404 Permitting		\$43,580.00					\$336.00	\$43,580.00
Grand Totals (LABOR + ODE)	\$15,885.08	\$55,540.00	\$0.00	\$0.00	\$0.00	\$11,402.12	\$55,961.00	\$138,788.20

EXHIBIT B	
Fee Summary for Professional Services - All Services	
Fee Summary for Professional Services - Basic Services	\$1,327,265.39
Fee Summary for Professional Services - Additional Services	\$138,788.20
Grand Totals (LABOR + ODE)	\$1,466,053.59

EXHIBIT B								
Fee Schedule for Professional Services - Kelly Ln Watermain								
Description of Work or Task	V&A	BAI	CP&Y	Legacy	Rock	TRG	TOTAL ODE	TOTAL SALARY
4.14 Surveying Services (Watermain)*	\$61,050.00							\$61,050.00
Grand Totals (LABOR + ODE)	\$61,050.00	\$ -	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$61,050.00

EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Manhours - Basic Services
Vickrey & Associates, LLC**

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEERING TECH	ENGINEERING TECHNICIAN	JUNIOR ENGINEERING TECH	LANDSCAPE ARCHITECT	CADD OPERATOR	JUNIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HRS. & COST
1.0 Project Administration and Coordination Services													
1.2 Monthly Invoice	12											24	36
1.3 Update Project Schedule (monthly)	12												12
1.4 Monthly Progress report	12											12	24
1.5 Attend Project Kick-off meeting (in-person)	8			8								2	18
1.6 Monthly meetings w/ CITY (in-person)	72			36								24	132
1.7 Attend Design Concept meeting (in-person)	8			8								2	18
1.8 Attend Comment Resolution meetings (in-person; 30%,60% & 90%)	24			16	16							12	68
1.9 Coordination	24			24								12	60
1.10 Weekly Coordination meetings w/ the GEC (virtual)	48			24								12	84
1.11 Quality Assurance/Quality Control	32	16		40								6	94
1.12 Travis County Coordination	16			16	8							6	46
Subtotal	268	16	0	172	24	0	0	0	0	0	0	112	592
HOURLY CONTRACT RATE	\$235.78	\$200.00	\$177.13	\$153.26	\$110.00	\$139.26	\$98.59	\$85.00	\$162.25	\$98.59	\$75.00	\$70.73	
TOTAL LABOR COSTS	\$63,189.04	\$3,200.00	\$0.00	\$26,360.72	\$2,640.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$7,921.76	\$103,311.52

SUBTOTAL \$103,311.52

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEERING TECH	ENGINEERING TECHNICIAN	JUNIOR ENGINEERING TECH	LANDSCAPE ARCHITECT	CADD OPERATOR	JUNIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HRS. & COST
6.0 Utility Coordination Services													
6.1 Utility data collection	2			4	8								14
6.2 Attend one (1) utility coordination meeitng w/ CITY	6			6									12
6.4 Review utility conflicts w/ design													0
6.5 Reference proposed utility lines in design plans	3			4	8	6							21
6.6 Existing Utility Layouts	3			8	8	24							43
Subtotal	14	0	0	22	24	30	0	0	0	0	0	0	90
HOURLY CONTRACT RATE	\$235.78	\$200.00	\$177.13	\$153.26	\$110.00	\$139.26	\$98.59	\$85.00	\$162.25	\$98.59	\$75.00	\$70.73	
TOTAL LABOR COSTS	\$3,300.92	\$0.00	\$0.00	\$3,371.72	\$2,640.00	\$4,177.80	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$13,490.44

SUBTOTAL \$13,490.44

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEERING TECH	ENGINEERING TECHNICIAN	JUNIOR ENGINEERING TECH	LANDSCAPE ARCHITECT	CADD OPERATOR	JUNIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HRS. & COST
8.0 Traffic Control Plan Services													
8.1 TCP Phased Layouts	12			24	40	120							196
8.2 Advance Warning Layout	4			4	4	8							20
8.3 TCP Typical Sections	4			8	6	16							34
8.4 Sequence of Construction Narrative	4			8	8	4							24
8.5 TCP Standards	2			2	8	8							20
8.6 Calculate quantities and prepare summary sheet	2			4	8	8							22
8.7 Preliminary Traffic Control Concept	8			16	40	40						2	106
8.8 TCP Cross Sections	4			40	48	36							128
8.9 Temporary Traffic Signal Layouts	2			4	8	8							22
Subtotal	42	0	0	110	170	248	0	0	0	0	0	2	572
HOURLY CONTRACT RATE	\$235.78	\$200.00	\$177.13	\$153.26	\$110.00	\$139.26	\$98.59	\$85.00	\$162.25	\$98.59	\$75.00	\$70.73	
TOTAL LABOR COSTS	\$9,902.76	\$0.00	\$0.00	\$16,858.60	\$18,700.00	\$34,536.48	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$141.46	\$80,139.30

SUBTOTAL \$80,139.30

EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Manhours - Basic Services
Vickrey & Associates, LLC**

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEERING TECH	ENGINEERING TECHNICIAN	JUNIOR ENGINEERING TECH	LANDSCAPE ARCHITECT	CADD OPERATOR	JUNIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HRS. & COST
9.0 Roadway Design Services													
9.1 DSR	16			8									24
9.2 Preliminary Typical Sections	4			12	8	20							44
9.3 Horizontal and Vertical Geometry	24			96	80	120							320
9.4 Prepare Roadway Schematic for 30%	4			16	32	40							92
9.5 Develop Cross sections and DTM	2			24	50	40							116
9.6 Determine Pavement Section	2			12	16	4							34
9.7 Prepare cross-section roll plot for 30%	4			16	24	24							68
9.8 Title Sheet	1			4	8	8							21
9.9 Index of Sheets	1			4	8	8							21
9.10 Project Layout Sheets	1			4	8	8							21
9.11 Existing and proposed typical section sheets	1			4	8	8							21
9.12 Removal Layouts	8			24	40	48							120
9.13 Horizontal Alignment Data Sheet	1			4	8	6							19
9.14 Roadway Plan & Profile Sheets	16			64	120	120							320
9.15 Intersection Layout Sheets	24			36	40	48							148
9.16 Miscellaneous Roadway Details	1			6	12	12							31
9.17 Prepare Roadway Cross Sections	4			40	60	80							184
9.18 Roadway Standards	1			2	8	8							19
9.19 Calculate quantities and prepare summary sheet	4			8	20	24							56
9.20 General Notes and specifications	4			8	16	16							44
9.21 Design Exceptions	2			8	16	8							34
9.22 Opinion of Probable Construction Cost	8			8	16	24							56
9.23 Construction Schedule	8			8								4	20
9.24 Project Manual	8			24								8	40
Subtotal	149	0	0	440	598	674	0	0	0	0	0	12	1873
HOURLY CONTRACT RATE	\$235.78	\$200.00	\$177.13	\$153.26	\$110.00	\$139.26	\$98.59	\$85.00	\$162.25	\$98.59	\$75.00	\$70.73	
TOTAL LABOR COSTS	\$35,131.22	\$0.00	\$0.00	\$67,434.40	\$65,780.00	\$93,861.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$848.76	\$263,055.62

SUBTOTAL | \$263,055.62

EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Manhours - Basic Services
Vickrey & Associates, LLC**

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEERING TECH	ENGINEERING TECHNICIAN	JUNIOR ENGINEERING TECH	LANDSCAPE ARCHITECT	CADD OPERATOR	JUNIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HRS. & COST
10.0 Drainage Design Services													
10.1 & 10.2 Review & Evaluate H&H models and plans/lidar		6		6	6								18
10.3 Hydrologic Determination & Computations		8		30	48	12							98
10.4 Hydraulic Calculations		8		24	48								80
10.5 Hydraulic Report		6		36	24	12						16	94
10.6 Hydrologic & Hydraulic Data Sheets		6		12	40	20	0						78
10.7 Culvert Layout Sheets	6	8		8	8	8	0						38
10.8 Outfall Protection design sheets		2		6	8	8							24
10.9 PS&E Quantities		4		8	16	8							36
10.10 Summary Sheets		4		8	16	30							58
10.11 Culvert BCS sheet				4	12	6							22
10.12 Offsite Drainage Area Maps		2		6	12	24							44
10.13 Internal Drainage Area Maps		4		6	16	12							38
10.14 Storm Sewer Analysis	4	16		40	50	8							118
10.15 Drainage Plan & Profile Sheets	2	16		16	40	80	0						154
10.16 Ditch Design		4		16	30								50
10.17 Temporary Drainage/Traffic Control Sheet	4	8		16	8	6							42
10.18 Trench Protection				2	6	6							14
10.19 Standard Details		1		2	6	6							15
10.20 Floodplain Studies													
a. Create Corrected Effective Hydraulic Model		8		16									24
b. Compare results with existing FEMA floodplain		6		6									12
c. Develop Proposed Effective Hydraulic Model		12		32	8	8							60
d. Evaluate impacts-compare pre project and post project		4		6	4								14
e. Develop Proposed Effective Hydraulic Model		8		24	8								40
f. Evaluate impacts-compare pre project and post project		4		6	4								14
g. Develop Floodplain Mitigation Strategy		6		8									14
h. Develop preliminary Floodplain Management Plan	8	8										4	20
i. Meet with Project Stakeholders	2	8		8								4	22
j. Develop Final Floodplain Management Plan	2	8		8								4	22
k. Coordination with the City's floodplain administrator	4	8										4	16
10.21 Floodplain Mitigation													
a. Floodplain Detention Mitigation Plans	2	8		8	8	8						4	38
b. Develop grading plans with detention		8		8	8	8							32
c. Develop hydraulic data sheets		4		8	8	8							28
d. Miscellaneous Details		2		8	6	8							24
e. Mitigation Summary Sheets		4		8	4	6							22
Subtotal	34	209	0	400	452	292	0	0	0	0	0	36	1423
HOURLY CONTRACT RATE	\$235.78	\$200.00	\$177.13	\$153.26	\$110.00	\$139.26	\$98.59	\$85.00	\$162.25	\$98.59	\$75.00	\$70.73	
TOTAL LABOR COSTS	\$8,016.52	\$41,800.00	\$0.00	\$61,304.00	\$49,720.00	\$40,663.92	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,546.28	\$204,050.72

SUBTOTAL | \$204,050.72

EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Manhours - Basic Services
Vickrey & Associates, LLC**

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEERING TECH	ENGINEERING TECHNICIAN	JUNIOR ENGINEERING TECH	LANDSCAPE ARCHITECT	CADD OPERATOR	JUNIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HRS. & COST
11.0 Traffic, Signing and Pavement Marking Services													
11.2 Signing and Pavement Marking Layouts	8			8	16	40							72
11.4 Prepare Pavement Marking Details	1			4	8	8							21
11.5 Special sign panel details	1			4	8	8							21
11.6 Summary of Small Signs	2			4	8	8							22
11.9 Calculate quantities and prepare summary sheet	2			4	8	6							20
11.10 Standards				2	8	4		2					16
Subtotal	14	0	0	26	56	74	0	2	0	0	0	0	172
HOURLY CONTRACT RATE	\$235.78	\$200.00	\$177.13	\$153.26	\$110.00	\$139.26	\$98.59	\$85.00	\$162.25	\$98.59	\$75.00	\$70.73	
TOTAL LABOR COSTS	\$3,300.92	\$0.00	\$0.00	\$3,984.76	\$6,160.00	\$10,305.24	\$0.00	\$170.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23,920.92

SUBTOTAL | \$23,920.92

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEERING TECH	ENGINEERING TECHNICIAN	JUNIOR ENGINEERING TECH	LANDSCAPE ARCHITECT	CADD OPERATOR	JUNIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HRS. & COST
12.0 Environmental													
12.1 EPIC Sheet		2		4	8	8							22
12.2 SW3P Narrative Sheet		4		4	8	8							24
12.3 SW3P Layouts	4	8		8	16	24							60
12.4 SW3P Summary Sheet		2		4	8	8							22
12.5 Standard Details		1		4	4	4							13
12.6 SW3P & BMP Plan	2	4		4	8	8							26
12.7 Tree Inventory and Tree Preservation Plan	1							8	16				25
12.8 Tree Protection Details	1							8	16				25
Subtotal	8	21	0	28	52	60	0	16	32	0	0	0	217
HOURLY CONTRACT RATE	\$235.78	\$200.00	\$177.13	\$153.26	\$110.00	\$139.26	\$98.59	\$85.00	\$162.25	\$98.59	\$75.00	\$70.73	
TOTAL LABOR COSTS	\$1,886.24	\$4,200.00	\$0.00	\$4,291.28	\$5,720.00	\$8,355.60	\$0.00	\$1,360.00	\$5,192.00	\$0.00	\$0.00	\$0.00	\$31,005.12

SUBTOTAL | \$31,005.12

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEERING TECH	ENGINEERING TECHNICIAN	JUNIOR ENGINEERING TECH	LANDSCAPE ARCHITECT	CADD OPERATOR	JUNIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HRS. & COST
13.0 Submittal Requirements													
13.1 30% Submittal	1	2		4	8	8						4	27
13.2 60% Submittal	1	2		4	8	8						4	27
13.3 90% Submittal	1	2		4	8	8						4	27
13.4 100% Submittal	1	2		4	8	8						4	27
Subtotal	4	8	0	16	32	32	0	0	0	0	0	16	108
HOURLY CONTRACT RATE	\$235.78	\$200.00	\$177.13	\$153.26	\$110.00	\$139.26	\$98.59	\$85.00	\$162.25	\$98.59	\$75.00	\$70.73	
TOTAL LABOR COSTS	\$943.12	\$1,600.00	\$0.00	\$2,452.16	\$3,520.00	\$4,456.32	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,131.68	\$14,103.28

SUBTOTAL | \$14,103.28

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEERING TECH	ENGINEERING TECHNICIAN	JUNIOR ENGINEERING TECH	LANDSCAPE ARCHITECT	CADD OPERATOR	JUNIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HRS. & COST
14.0 Bid Phase Services													
14.1 Pre-Bid Meeting	8			8								2	18
14.2 Respond to Contractor questions	4	4		8		8						2	26
14.3 Attend formal bid opening	8												8
14.4 Prepare bid tabs, analyze bids, & provide recommendation	4											24	28
14.5 Provide final documents to Contractor	4					8						4	16
Subtotal	28	4	0	16	0	16	0	0	0	0	0	32	96
HOURLY CONTRACT RATE	\$235.78	\$200.00	\$177.13	\$153.26	\$110.00	\$139.26	\$98.59	\$85.00	\$162.25	\$98.59	\$75.00	\$70.73	
TOTAL LABOR COSTS	\$6,601.84	\$800.00	\$0.00	\$2,452.16	\$0.00	\$2,228.16	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$2,263.36	\$14,345.52

SUBTOTAL | \$14,345.52

EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Manhours - Basic Services
Vickrey & Associates, LLC**

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEERING TECH	ENGINEERING TECHNICIAN	JUNIOR ENGINEERING TECH	LANDSCAPE ARCHITECT	CADD OPERATOR	JUNIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HRS. & COST
15.0 Construction Phase Services													
15.1 Attend Pre-Construction Meeting	8			8								2	18
15.3 Attend monthly status meetings	40			24								6	70
15.4 Perform site visits & provide work progress updates to CITY	2			48								4	54
15.5 Review Shop Drawings	8			16									24
15.6 Address Contractor RFI's (limited to 18)	8			16	36	24						10	94
15.7 Perform final inspection	8			16									24
15.8 Develop and provide final As-Built plans	4			16	30	36							86
15.9 Provide design modifications	2			8	16	16							42
15.10 Certify permanent BMP's were constructed as designed	4			16									20
Subtotal	84	0	0	168	82	76	0	0	0	0	0	22	432
HOURLY CONTRACT RATE	\$235.78	\$200.00	\$177.13	\$153.26	\$110.00	\$139.26	\$98.59	\$85.00	\$162.25	\$98.59	\$75.00	\$70.73	
TOTAL LABOR COSTS	\$19,805.52	\$0.00	\$0.00	\$25,747.68	\$9,020.00	\$10,583.76	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,556.06	\$66,713.02

SUBTOTAL	\$66,713.02
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**KELLY LN PHASE 3
Summary of Direct Expenses - Basic Services
Vickrey & Associates, LLC**

Other Direct Expenses	Unit	QTY	RATE	COST
Direct Expenses				
I. Mileage	mile	5000	\$0.56	\$2,800.00
II. Copies - 11 x 17	each	4000	\$0.30	\$1,200.00
III. Large Format Plotting	sf	1000	\$4.00	\$4,000.00
IV. Overnight shipping / Courier	each	4	\$50.00	\$200.00
				\$0.00
SUBTOTAL DIRECT EXPENSES				\$8,200.00

SUBTOTAL	\$8,200.00
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SUMMARY COSTS	
1.0 Project Administration and Coordination Services	\$103,311.52
6.0 Utility Coordination Services	\$13,490.44
8.0 Traffic Control Plan Services	\$80,139.30
9.0 Roadway Design Services	\$263,055.62
10.0 Drainage Design Services	\$204,050.72
11.0 Traffic, Signing and Pavement Marking Services	\$23,920.92
12.0 Environmental	\$31,005.12
13.0 Submittal Requirements	\$14,103.28
14.0 Bid Phase Services	\$14,345.52
15.0 Construction Phase Services	\$66,713.02
Other Direct Expenses	\$8,200.00
TOTALS	\$822,335.46

EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Manhours - Additional Services
Vickrey & Associates, LLC**

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	ENGINEER IN TRAINING	SENIOR ENGINEERING TECH	ENGINEERING TECHNICIAN	JUNIOR ENGINEERING TECH	LANDSCAPE ARCHITECT	CADD OPERATOR	JUNIOR CADD OPERATOR	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COST
16.2 Public Involvement Services													
i. Prepare display exhibits	4			16	24	24							68
j. Attend 2 Public Meetings & 1 Public Hearing (PM & 2 support staff)	16			16								4	36
Subtotal	20	0	0	32	24	24	0	0	0	0	0	4	104
HOURLY CONTRACT RATE	\$235.78	\$200.00	\$177.13	\$153.26	\$110.00	\$139.26	\$98.59	\$85.00	\$162.25	\$98.59	\$75.00	\$70.73	
TOTAL LABOR COSTS	\$4,715.60	\$0.00	\$0.00	\$4,904.32	\$2,640.00	\$3,342.24	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$282.92	\$15,885.08

SUBTOTAL	\$15,885.08
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**KELLY LN PHASE 3
Summary of Direct Expenses - Additional Services
Vickrey & Associates, LLC**

Other Direct Expenses - 16.2 Public Involvement Services	Unit	QTY	RATE	COST
Direct Expenses				
I. Mileage	mile	600	\$0.56	\$336.00
II. Copies - 11 x 17	each		\$0.30	\$0.00
III. Large Format Plotting	sf	500	\$4.00	\$2,000.00
IV. Overnight shipping / Courier	each		\$50.00	\$0.00
				\$0.00
SUBTOTAL DIRECT EXPENSES				\$2,336.00

SUBTOTAL	\$2,336.00
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SUMMARY COSTS	
16.2 Public Involvement Services	\$15,885.08
Other Direct Expenses - 16.2 Public Involvement Services	\$2,336.00
TOTALS	\$18,221.08

EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Manhours - Basic Services
Vickrey & Associates, LLC**

TASK DESCRIPTION	Survey Manager	RPLS	Sr. Survey Tech	Survey Tech	Admin	3-Man Crew	TOTAL LABOR HR AND COST
4.0 Surveying Services							
4.1 Research Property Records	1	8			24		33
4.2 ROE Letters	4	8			30		42
4.3 Establish Project Control	2	5	2	6	2.25	24	41.25
4.4 Boundary Surveys, ROW Map, Parcel Plats and Property Descriptions (29 Parcels, 32 Easements)	70	160	420		55	70	775
4.5 Topographic Survey	1	2	2	6	2	45	58
4.7 Drainage Structures	1	2	2	6	2	18	31
4.8 Existing Utilities	1	2	2	6	2	36	49
4.9 Texas 811 and Level B SUE Surveys	2	4	16	2		75	99
4.10 Tree Surveys	1	4	8	2	1	24	40
4.11 Soil/Bore Surveys	1	1	2	1	0.5	12	17.5
4.12 Prepare DGN file, TIN and DAT files	6	16	42		2		66
4.13 Prepare Survey Control Layout Sheets	1.5	5	16		4.5		27
Subtotal	91.50	217.00	512.00	29.00	125.25	304.00	1278.75
HOURLY CONTRACT RATE	\$185.00	\$175.00	\$120.00	\$100.00	\$85.00	\$190.00	
TOTAL LABOR COSTS	\$16,927.50	\$37,975.00	\$61,440.00	\$2,900.00	\$10,646.25	\$57,760.00	\$187,648.75

SUBTOTAL	\$187,648.75
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TASK DESCRIPTION	Survey Manager	RPLS	Sr. Survey Tech	Survey Tech	Admin	3-Man Crew	TOTAL LABOR HR AND COST
4.14 Surveying Services (Watermain)*							
4.14A Topographic Survey	1	2	2	4	2	24	35
4.14B Prepare DGN file, TIN and DAT files	2	16	24		4		46
4.14C Boundary Surveys, Parcel Plats and Property Descriptions (16 Easements)	35	77	185		33	20	350
Subtotal	38.00	95.00	211.00	4.00	39.00	44.00	431
HOURLY CONTRACT RATE	\$185.00	\$175.00	\$120.00	\$100.00	\$85.00	\$190.00	
TOTAL LABOR COSTS	\$7,030.00	\$16,625.00	\$25,320.00	\$400.00	\$3,315.00	\$8,360.00	\$61,050.00

SUBTOTAL	\$61,050.00
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*Surveying services for the Kelly Lane watermain project

TASK DESCRIPTION	Survey Manager	RPLS	Sr. Survey Tech	Survey Tech	Admin	3-Man Crew	TOTAL LABOR HR AND COST
15.0 Construction Phase Services							
15.2 Provide control points and confirm H&V control w/ plans	15.2	2	4	2	1	12	36.2
Subtotal	15	2	4	2	1	12	36.2
HOURLY CONTRACT RATE	\$185.00	\$175.00	\$120.00	\$100.00	\$85.00	\$190.00	
TOTAL LABOR COSTS	\$2,812.00	\$350.00	\$480.00	\$200.00	\$85.00	\$2,280.00	\$6,207.00

SUBTOTAL	\$6,207.00
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EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Direct Expenses - Basic Services
Vickrey & Associates, LLC**

Other Direct Expenses	Unit	QTY	RATE	COST
Direct Expenses				
I. Mileage	mile	2750	\$0.56	\$1,540.00
II. Meals	DAY/PERSON	80	\$56.00	\$4,480.00
III. Hotel Taxes	DAY/PERSON	80	\$35.00	\$2,800.00
IV. Hotel	DAY/PERSON	80	\$158.00	\$12,640.00
V. GPS Receiver	daily	0	\$20.00	\$0.00
VI. Terrestrial Scanner	each	8	\$100.00	\$800.00
SUBTOTAL DIRECT EXPENSES				\$22,260.00

EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Manhours - Basic Services
Blanton & Associates, Inc.**

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENV PROFESSIONAL	STAFF SCIENTIST II	STAFF SCIENTIST I	ENV TECHNICIAN II	ENV TECHNICIAN I	GIS Analyst/ Cartography	GIS TECHNICIAN	Clerical/ Administrative	TOTAL LABOR HR AND COST
1.0 Project Administration and Coordination Services										
1.2 Monthly Invoice	12								8	20
1.9 Coordination	6								4	10
1.11 Quality Assurance/Quality Control	12								4	16
Subtotal	30	0	0			0	0	0	16	46
HOURLY CONTRACT RATE	\$160.00	\$140.00	\$120.00	\$110.00	\$90.00	\$80.00	\$100.00	\$80.00	\$60.00	
TOTAL LABOR COSTS	\$4,800.00	\$0.00	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$960.00	\$5,760.00

SUBTOTAL	\$5,760.00
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TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENV PROFESSIONAL	STAFF SCIENTIST II	STAFF SCIENTIST I	ENV TECHNICIAN II	ENV TECHNICIAN I	GIS Analyst/ Cartography	GIS TECHNICIAN	Clerical/ Administrative	TOTAL LABOR HR AND COST
3.0 Environmental Services										
3.1 Data Collection (Environmental Constraints)	1	8					2	8		19
3.2 Environmental Technical Memorandum										
a. Cultural Resources – Archeology / Historical	4	10			16	24	2	16	4	76
b. Water Resources	2	4			16		1	4	2	29
c. Wetlands and Waters of the U.S.	4	8			32		4	16	2	66
d. Biological Resources	2	16	4	16			1	4	2	45
e. Hazardous Materials	2	8			24		1	4	2	41
f. Environmental Tech Memo Preparation	8	8	4		16	2		8	2	48
Subtotal	23	62	8	16	104	26	11	60	14	324
HOURLY CONTRACT RATE	\$160.00	\$140.00	\$120.00	\$110.00	\$90.00	\$80.00	\$100.00	\$80.00	\$60.00	
TOTAL LABOR COSTS	\$3,680.00	\$8,680.00	\$960.00	\$1,760.00	\$9,360.00	\$2,080.00	\$1,100.00	\$4,800.00	\$840.00	\$33,260.00

SUBTOTAL	\$33,260.00
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EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Direct Expenses - Basic Services
Blanton & Associates, Inc.**

OTHER DIRECT EXPENSES	QTY	UNIT	RATE	COST
Mileage	300	MILE	\$0.560	\$168.00
Meals (Overnight Stay Required)		DAY/PERSON	\$51.00	\$0.00
Photocopies B/W (8 1/2" X 11")		SHEET	\$0.15	\$0.00
Photocopies B/W (11" X 17")		SHEET	\$0.30	\$0.00
Photocopies Color (8 1/2" X 11")		SHEET	\$0.65	\$0.00
Photocopies Color (11" X 17")		SHEET	\$1.20	\$0.00
Plots (Color on Photographic Paper)		PER SQ FT	\$4.10	\$0.00
Presentation Boards 30" X 40" Color Mounted		EACH	\$95.00	\$0.00
Hazardous Materials Database Search	1	PER SEARCH	\$400.00	\$400.00
Tx Parks & Wildlife Data Request Fees	1	EACH	\$45.00	\$45.00
Historic Aerials	2	UNIT	\$95.00	\$190.00
Deed Copies		SHEET	\$4.00	\$0.00
Backhoe Rental		PER DAY	\$1,600.00	\$0.00
TARL Curation Fee		PER SITE	\$250.00	\$0.00
report)		PER PROJECT	\$1,550.00	\$0.00
Public Involvement Facility Rental		EVENT	\$1,000.00	\$0.00
Public Notices - Mass Mailing		PER 500 UNITS	\$450.00	\$0.00
Standard Postage		LETTER	\$0.47	\$0.00
Overnight Mail - letter size		EACH	\$35.00	\$0.00
Newspaper Advertisement		PER PUB.	\$4,000.00	\$0.00
Court Reporter		EVENT	\$600.00	\$0.00
Translator For Public Involvement		EVENT	\$650.00	\$0.00
Written Translation Services		PER WORD	\$0.55	\$0.00
Law Enforcement/Uniform Officer		HOUR/OFFICER	\$75.00	\$0.00
Custodian for Public Involvement		HOUR/CUST.	\$50.00	\$0.00
Audio-Visual Equipment Rental		EVENT	\$550.00	\$0.00
GPS Survey Equipment		DAY/PERSON	\$100.00	\$0.00
SUBTOTAL DIRECT EXPENSES				\$803.00

SUBTOTAL	\$803.00
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SUMMARY COSTS - FUNCTION CODES	
1.0 Project Administration and Coordination Services	\$5,760.00
3.0 Environmental Services	\$33,260.00
OTHER DIRECT EXPENSES	\$803.00
TOTALS	\$39,823.00

EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Manhours - Additional Services
Blanton & Associates, Inc.**

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENV PROFESSIONAL	STAFF SCIENTIST II	STAFF SCIENTIST I	ENV TECHNICIAN II	ENV TECHNICIAN I	GIS Analyst/ Cartography	GIS TECHNICIAN	Clerical/ Administrative	TOTAL LABOR HR AND COST
16.2 Public Involvement Services										
a. PI Coordination Meetings/Dry Runs	16	4			4				2	26
b. Public Involvement Plan	2	4			8				2	16
c. Stakeholder/Adjacent Property Owner Database	2	2			4			4	2	14
f. Public Notices and Letters to Elected Officials										0
g. Open House / Public Meeting (assumes 2 in-person)	16				16	12		2	2	48
Subtotal	36	10	0	0	32	12	0	6	8	104
HOURLY CONTRACT RATE	\$160.00	\$140.00	\$120.00	\$110.00	\$90.00	\$80.00	\$100.00	\$80.00	\$60.00	
TOTAL LABOR COSTS	\$5,760.00	\$1,400.00	\$0.00	\$0.00	\$2,880.00	\$960.00	\$0.00	\$480.00	\$480.00	\$11,960.00

SUBTOTAL	\$11,960.00
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EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Direct Expenses - Additional Services
Blanton & Associates, Inc.**

OTHER DIRECT EXPENSES - 16.2 Public Involvement	QTY	UNIT	RATE	COST
Mileage	300	MILE	\$0.560	\$168.00
Meals (Overnight Stay Required)		DAY/PERSON	\$51.00	\$0.00
Photocopies B/W (8 1/2" X 11")		SHEET	\$0.15	\$0.00
Photocopies B/W (11" X 17")		SHEET	\$0.30	\$0.00
Photocopies Color (8 1/2" X 11")		SHEET	\$0.65	\$0.00
Photocopies Color (11" X 17")		SHEET	\$1.20	\$0.00
Plots (Color on Photographic Paper)		PER SQ FT	\$4.10	\$0.00
Presentation Boards 30" X 40" Color Mounted		EACH	\$95.00	\$0.00
Hazardous Materials Database Search		PER SEARCH	\$400.00	\$0.00
Tx Parks & Wildlife Data Request Fees		EACH	\$45.00	\$0.00
Historic Aerials		UNIT	\$95.00	\$0.00
Deed Copies		SHEET	\$4.00	\$0.00
Backhoe Rental		PER DAY	\$1,600.00	\$0.00
TARL Curation Fee		PER SITE	\$250.00	\$0.00
report)		PER PROJECT	\$1,550.00	\$0.00
Public Involvement Facility Rental		EVENT	\$1,000.00	\$0.00
Public Notices - Mass Mailing	2	PER 500 UNITS	\$450.00	\$900.00
Standard Postage	300	LETTER	\$0.47	\$141.00
Overnight Mail - letter size	3	EACH	\$35.00	\$105.00
Newspaper Advertisement	2	PER PUB.	\$4,000.00	\$8,000.00
Court Reporter	1	EVENT	\$600.00	\$600.00
Translator For Public Involvement	1	EVENT	\$650.00	\$650.00
Written Translation Services		PER WORD	\$0.55	\$0.00
Law Enforcement/Uniform Officer		HOUR/OFFICER	\$75.00	\$0.00
Custodian for Public Involvement		HOUR/CUST.	\$50.00	\$0.00
Audio-Visual Equipment Rental		EVENT	\$550.00	\$0.00
GPS Survey Equipment		DAY/PERSON	\$100.00	\$0.00
SUBTOTAL DIRECT EXPENSES				\$10,564.00

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SUBTOTAL	\$10,564.00
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SUMMARY COSTS - FUNCTION CODES	
16.2 Public Involvement Services	\$11,960.00
OTHER DIRECT EXPENSES - 16.2 Public Involvement	\$10,564.00
TOTALS	\$22,524.00

EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Manhours - Additional Services
Blanton & Associates, Inc.**

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENV PROFESSIONAL	STAFF SCIENTIST II	STAFF SCIENTIST I	ENV TECHNICIAN II	ENV TECHNICIAN I	GIS Analyst/ Cartography	GIS TECHNICIAN	Clerical/ Administrative	TOTAL LABOR HR AND COST
16.5 Environmental Technical Memorandum - 404 Permitting										
Wetlands Conditional Functional Assessment	4	8			48		1	4	1	66
USACE Permitting (3 crossings) (Up to Individual Permit)	4	48			64		2	8	1	127
Wetlands and Waters compensatory mitigation planning	4	48			48		1	16	1	118
USACE coordination and requests for information	4	24			24			4	2	58
1.0 Project Administration and Coordination Services										
1.2 Monthly Invoice	4								4	8
1.9 Subconsultant Coordination	4								4	8
1.11 Quality Assurance/Quality Control	8								4	12
Subtotal	32	128	0	0	184	0	4	32	17	397
HOURLY CONTRACT RATE	\$160.00	\$140.00	\$120.00	\$110.00	\$90.00	\$80.00	\$100.00	\$80.00	\$60.00	
TOTAL LABOR COSTS	\$5,120.00	\$17,920.00	\$0.00	\$0.00	\$16,560.00	\$0.00	\$400.00	\$2,560.00	\$1,020.00	\$43,580.00

SUBTOTAL	\$43,580.00
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EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Direct Expenses - Additional Services
Blanton & Associates, Inc.**

OTHER DIRECT EXPENSES - 16.5 ENV Tech Memo - 404 Permitting	QTY	UNIT	RATE	COST
Mileage	600	MILE	\$0.560	\$336.00
Meals (Overnight Stay Required)		DAY/PERSON	\$51.00	\$0.00
Photocopies B/W (8 1/2" X 11")		SHEET	\$0.15	\$0.00
Photocopies B/W (11" X 17")		SHEET	\$0.30	\$0.00
Photocopies Color (8 1/2" X 11")		SHEET	\$0.65	\$0.00
Photocopies Color (11" X 17")		SHEET	\$1.20	\$0.00
Plots (Color on Photographic Paper)		PER SQ FT	\$4.10	\$0.00
Presentation Boards 30" X 40" Color Mounted		EACH	\$95.00	\$0.00
Hazardous Materials Database Search		PER SEARCH	\$400.00	\$0.00
Tx Parks & Wildlife Data Request Fees		EACH	\$45.00	\$0.00
Historic Aerials		UNIT	\$95.00	\$0.00
Deed Copies		SHEET	\$4.00	\$0.00
Backhoe Rental		PER DAY	\$1,600.00	\$0.00
TARL Curation Fee		PER SITE	\$250.00	\$0.00
Curator (Drawer & TX Archaeological Research Lab for artifacts & report)		PER PROJECT	\$1,550.00	\$0.00
Public Involvement Facility Rental		EVENT	\$1,000.00	\$0.00
Public Notices - Mass Mailing		PER 500 UNITS	\$450.00	\$0.00
Standard Postage		LETTER	\$0.47	\$0.00
Overnight Mail - letter size		EACH	\$35.00	\$0.00
Newspaper Advertisement		PER PUB.	\$4,000.00	\$0.00
Court Reporter		EVENT	\$600.00	\$0.00
Translator For Public Involvement		EVENT	\$650.00	\$0.00
Written Translation Services		PER WORD	\$0.55	\$0.00
Law Enforcement/Uniform Officer		HOUR/OFFICER	\$75.00	\$0.00
Custodian for Public Involvement		HOUR/CUST.	\$50.00	\$0.00
Audio-Visual Equipment Rental		EVENT	\$550.00	\$0.00
GPS Survey Equipment		DAY/PERSON	\$100.00	\$0.00
SUBTOTAL DIRECT EXPENSES				\$336.00

SUBTOTAL	\$336.00
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SUMMARY COSTS - FUNCTION CODES	
16.5 Environmental Technical Memorandum - 404 Permitting	\$43,580.00
OTHER DIRECT EXPENSES - 16.5 ENV Tech Memo - 404 Permitting	\$336.00
TOTALS	\$43,916.00

EXHIBIT B - Fee for Professional Services

KELLY LN PHASE 3
Summary of Manhours - Basic Services
CP&Y

TASK DESCRIPTION	QA/QC ENGINEER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	EIT	SENIOR ENGINEERING TECH	ENGINEERING TECH	JUNIOR ENGINEERING TECH	SENIOR CADD OPERATOR	CADD OPERATOR	JUNIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HR AND COST
6.0 Utility Coordination Services													
6.2 Utility Coordination Meetings													
a. Initial (Kick-off) Project Meeting for Utilities		8			8								16
b. Progress Meetings (1 Group progress mtg X 10 hrs/mtg.) Time includes scheduling, exhibits, travel, agenda, minutes...		10			5					4		2	21
c. Individual Meetings (6 Indiv. mtg X 8 hrs/mtg.) Time includes scheduling, exhibits, travel, agenda, minutes...		48			16					4		2	70
6.3 Create & Maintain Utility Conflict Matrix and Existing Utility Conflict Layout	16	8			16					112			152
6.4 Review relocation plans, options and assist in reviewing		16								4			20
6.7 Prepare/maintain utility contact list		2			12								14
6.8 Coordination with design team, ROW, the City, and utility owners (12-months)		24								12			36
6.9 Coordination with city and utilities that may have property rights		16			12					8			36
Subtotal	16	132	0	0	69	0	0	0	0	144	0	4	365
HOURLY CONTRACT RATE	\$195.00	\$195.00	\$150.00	\$150.00	\$120.00				\$110.00	\$95.00		\$66.00	
TOTAL LABOR COSTS	\$3,120.00	\$25,740.00	\$0.00	\$0.00	\$8,280.00	\$0.00	\$0.00	\$0.00	\$0.00	\$13,680.00	\$0.00	\$264.00	\$51,084.00

SUBTOTAL \$51,084.00

Other Direct Expenses	QTY	UNIT	RATE	COST
Mileage	2000	MILE	\$0.560	\$1,120.00
Meals (Overnight Stay Required)		DAY/PERSON		\$0.00
Hotel		DAY/PERSON		\$0.00
Lodging - Taxes Fees		DAY/PERSON		\$0.00
Overnight Mail - Letter Size		EACH		\$0.00
Overnight Mail - Oversized Box		EACH		\$0.00
Plots (Color on Bond)		square foot		\$0.00
Rental Car (Includes taxes & fees; Insurance costs will not be reimbursed)		DAY		\$0.00
Rental Car Fuel		GALLON		\$0.00
SUBTOTAL DIRECT EXPENSES				\$1,120.00

SUBTOTAL \$1,120.00

SUMMARY COSTS - FUNCTION CODES	
6.0 Utility Coordination Services	\$51,084.00
Other Direct Expenses	\$1,120.00
TOTALS	\$52,204.00

EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Manhours - Basic Services
Legacy Engineering Group, PLLC**

TASK DESCRIPTION	PROJECT MANAGER	QUALITY MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	TRAFFIC ENGINEER	EIT	SENIOR ENGINEERING TECH	ENGINEERING TECH	SENIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HR AND COST
1.0 Project Administration and Coordination Services											
1.2 Monthly Invoice	8									8	16
1.9 Coordination	8										8
1.11 Quality Assurance/Quality Control		8									8
Subtotal	16	8	0	0	0	0	0	0	0	8	32
HOURLY CONTRACT RATE	\$180.00	\$205.00	\$170.00	\$130.00	\$165.00	\$105.00	\$100.00	\$85.00	\$80.00	\$60.00	
TOTAL LABOR COSTS	\$2,880.00	\$1,640.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$480.00	\$5,000.00

SUBTOTAL	\$5,000.00
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TASK DESCRIPTION	PROJECT MANAGER	QUALITY MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	TRAFFIC ENGINEER	EIT	SENIOR ENGINEERING TECH	ENGINEERING TECH	SENIOR CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HR AND COST
11.0 Traffic, Signing and Pavement Marking Services											
11.1 Traffic Study & Traffic Signal Warrant Analysis											
a. Develop AM/PM and ADT Traffic Volumes	2				8	8		4			22
b. Develop Projected (2040) Traffic Volumes	2				8	8		4			22
c. Develop and Calibrate Synchro Models	2				8	8		4			22
d. Perform Traffic Signal Warrant Analysis	8				16	16		40			80
e. Perform Existing and Projected (2040) Traffic Analysis	4				24	16		8			52
f. Prepare and Revise Traffic Engineering Report	4				24	40		16		4	88
11.7 Traffic Signal Design (2 Intersections)											
a. Develop Existing Conditions Layout (2 Intersections)	2		2	4			8		8		24
b. Develop Proposed Traffic Signal Layouts (2 Intersections)	4		8	12			40		40		104
c. Develop Conductor Schedule & Electrical Details	4		8	12			24		24		72
e. Submittal Preparation (60%, 90%, & Final)	4		4	8			8		8	4	36
11.8 Illumination Design (Corridor-Wide)											
a. Develop Proposed Illumination Layouts (Corridor-Wide)	4		16	24			40		40		124
b. Develop Illumination Conductor Schedule (Corridor-Wide)	4		8	12			24		24		72
c. Submittal Preparation (60%, 90%, & Final)	4		4	8			8		8	4	36
11.9 Calculate quantities and prepare summary sheet	4		4	8			16		16		48
11.10 Standards	2		4	4			8		8		26
Subtotal	54	0	58	92	88	96	176	76	176	12	828
HOURLY CONTRACT RATE	\$180.00	\$205.00	\$170.00	\$130.00	\$165.00	\$105.00	\$100.00	\$85.00	\$80.00	\$60.00	
TOTAL LABOR COSTS	\$9,720.00	\$0.00	\$9,860.00	\$11,960.00	\$14,520.00	\$10,080.00	\$17,600.00	\$6,460.00	\$14,080.00	\$720.00	\$95,000.00

SUBTOTAL	\$95,000.00
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EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Direct Expenses - Basic Services
Legacy Engineering Group, PLLC**

Other Direct Expenses	QTY	UNIT	RATE	COST
Mileage (2 Round-Trips)	400	MILE	\$0.560	\$224.00
Meals (Overnight Stay Required)		DAY/PERSON		\$0.00
Hotel (3 INTERSECTIONS, 12 HOUR TM COUNTS = 12 NIGHTS)		DAY/PERSON		\$0.00
Overnight Mail - Letter Size		EACH		\$0.00
Photocopies B/W (8 1/2" X 11")		SHEET		\$0.00
Photocopies B/W (11" X 17")		SHEET		\$0.00
Photocopies Color (8 1/2" X 11")		SHEET	\$0.15	\$0.00
Photocopies Color (11" X 17")		SHEET	\$0.30	\$0.00
Reproduction of CD/DVD		EACH		\$0.00
24-Hour Automated Tube Counts - Volume		per counter/day		\$0.00
24-Hour Automated Tube Counts - Rural Main Lanes		per counter/day		\$0.00
Turning Movement Counts (12-Hour Manual) Major Intersection		each		\$0.00
SUBTOTAL DIRECT EXPENSES				\$224.00

SUBTOTAL	\$224.00
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SUMMARY COSTS - FUNCTION CODES	
1.0 Project Administration and Coordination Services	\$5,000.00
11.0 Traffic, Signing and Pavement Marking Services	\$95,000.00
Other Direct Expenses	\$224.00
TOTALS	\$100,224.00

EXHIBIT B - Fee for Professional Services

KELLY LN PHASE 3
Summary of Manhours - Basic Services
Rock Engineering and Testing Lab, Inc.

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	EIT	SENIOR ENGINEERING TECH	ENGINEERING TECH	SENIOR GEOLOGIST	GEOLOGIST	CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HR AND COST
1.0 Project Administration and Coordination Services												
1.2 Monthly Invoice		2	2									4
1.9 Coordination		2	2									4
1.11 Quality Assurance/Quality Control		2	2									4
Subtotal	0	6	6	0	0	0	0	0	0	0	0	12
HOURLY CONTRACT RATE		\$185.64	\$147.33									
TOTAL LABOR COSTS	\$0.00	\$1,113.84	\$883.98	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$1,997.82

SUBTOTAL	\$1,997.82
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TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	EIT	SENIOR ENGINEERING TECH	ENGINEERING TECH	SENIOR GEOLOGIST	GEOLOGIST	CADD OPERATOR	ADMIN/CLERICAL	TOTAL LABOR HR AND COST
5.0 Geotechnical Engineering Services												
5.1 Geotechnical Studies and Investigations		2	10				50					62
Subtotal	0	2	10	0	0	0	50	0	0	0	0	62
HOURLY CONTRACT RATE		\$185.64	\$147.33				\$65.00					
TOTAL LABOR COSTS	\$0.00	\$371.28	\$1,473.30	\$0.00	\$0.00	\$0.00	\$3,250.00	\$0.00	\$0.00	\$0.00	\$0.00	\$5,094.58

SUBTOTAL	\$5,094.58
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EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Direct Expenses - Basic Services
Rock Engineering and Testing Lab, Inc.**

Other Direct Expenses	QTY	UNIT	RATE	COST
Soil Boring/Rock Coring with TCP (< 60 ft.)	210	LF	\$45.00	\$9,450.00
Soil Boring/Rock Coring with TCP (> 60 ft.)		LF	\$55.00	\$0.00
flexable and rigid pavement (2-man crew)	2	Trip	\$400.00	\$800.00
(a) 4-in. diameter cores	120	Inch	\$7.25	\$870.00
Insurance costs will not be reimbursed)	6	day	\$80.00	\$480.00
Street Cut Permit	10	each	\$115.00	\$1,150.00
Project (Includes labor, equipment and fuel)	2	day	\$1,950.00	\$3,900.00
Shelby Tubes Transportation Box		each		\$0.00
Lodging/Hotel - Taxes and Fees	6	DAY/PERSON	\$35.00	\$210.00
Lodging/Hotel (Taxes/fees not included)	6	DAY/PERSON	\$158.00	\$948.00
Meals	6	DAY/PERSON	\$56.00	\$336.00
Mileage	202	mile	\$4.85	\$979.70
Unconfined Compressive Strength (Soil)		each	\$80.00	\$0.00
Unconfined Compressive Strength (Rock)		each	\$95.00	\$0.00
One Dimensional Swell, Method C		each	\$300.00	\$0.00
Miscellaneous Testing: - 98 Moisture Content, - 28 Atterberg Limits, - 28 #200, - 3 Sieve, - 3 Hydrometer - 14 Sulfate Content - 2 Lime Series	1	each	\$7,710.00	\$7,710.00
SUBTOTAL DIRECT EXPENSES				\$26,833.70

SUBTOTAL	\$26,833.70
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SUMMARY COSTS - FUNCTION CODES	
1.0 Project Administration and Coordination Services	\$1,997.82
5.0 Geotechnical Engineering Services	\$5,094.58
Other Direct Expenses	\$26,833.70
TOTALS	\$33,926.10

EXHIBIT B - Fee for Professional Services

KELLY LN PHASE 3
Summary of Manhours - Basic Services
The Rios Group, Inc.

TASK DESCRIPTION	SUPERVISORY ENGINEER	SUE PROJECT MANAGER	PROFESSIONAL ENGINEER	ASSISTANT PROJECT MANAGER	EIT	ENGINEERING TECH	CADD TECHNICIAN	FIELD MANAGER	ADMIN. SPECIALIST	SENIOR UTILITY COORDINATOR	UTILITY COORDINATOR	TOTAL LABOR HR AND COST
1.0 Project Administration and Coordination Services												
1.9 Coordination	2	4			4							10
1.11 Quality Assurance/Quality Control	2	4	8									14
Subtotal	4	8	8	0	4	0	0	0	0	0	0	24
HOURLY CONTRACT RATE	\$166.06	\$151.93	\$143.73	\$105.89	\$96.48	\$66.85	\$79.76	\$109.85	\$70.80	\$160.00	\$120.00	
TOTAL LABOR COSTS	\$664.24	\$1,215.44	\$1,149.84	\$0.00	\$385.92	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$3,415.44

SUBTOTAL	\$3,415.44
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TASK DESCRIPTION	SUPERVISORY ENGINEER	SUE PROJECT MANAGER	PROFESSIONAL ENGINEER	ASSISTANT PROJECT MANAGER	EIT	ENGINEERING TECH	CADD TECHNICIAN	FIELD MANAGER	ADMIN. SPECIALIST	SENIOR UTILITY COORDINATOR	UTILITY COORDINATOR	TOTAL LABOR HR AND COST
7.0 Subsurface Utility Engineering (SUE) Services												
7.1 QL "B" SUE services	8	24	8	24	8	8	60	20	8			168
Subtotal	8	24	8	24	8	8	60	20	8	0	0	168
HOURLY CONTRACT RATE	\$166.06	\$151.93	\$143.73	\$105.89	\$96.48	\$66.85	\$79.76	\$109.85	\$70.80	\$160.00	\$120.00	
TOTAL LABOR COSTS	\$1,328.48	\$3,646.32	\$1,149.84	\$2,541.36	\$771.84	\$534.80	\$4,785.60	\$2,197.00	\$566.40	\$0.00	\$0.00	\$17,521.64

SUBTOTAL	\$17,521.64
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EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Direct Expenses - Basic Services
The Rios Group, Inc.**

Other Direct Expenses	QTY	UNIT	RATE	COST
Traffic Control (Standard)		daily	\$750.00	\$0.00
Survey (RPLS)	1	daily	\$13,500.00	\$13,500.00
Designating Crew - One Man		hour	\$150.00	\$0.00
Designating Crew - Two Man	120	hour	\$235.00	\$28,200.00
Lodging/Hotel (Taxes/fees not included)		day/person		\$0.00
Lodging/Hotel - Taxes and Fees		day/person		\$0.00
Meals (Excluding alcohol & tips) (overnight stay required)		day/person		\$0.00
Mileage (3 trips at 400 miles)		mile	\$0.56	\$0.00
QL"A" SUE Test Hole 0-5 ft		each	\$1,250.00	\$0.00
QL"A" SUE Test Hole 5-8 ft		each	\$1,525.00	\$0.00
QL"A" SUE Test Hole 8-13 ft		each	\$1,900.00	\$0.00
QL"A" SUE Test Hole 13-20 ft		each	\$2,450.00	\$0.00
QL"A" SUE Test Hole Over 20 ft		each	\$3,025.00	\$0.00
Pavement Coring		each	\$350.00	\$0.00
SUBTOTAL DIRECT EXPENSES				\$41,700.00

SUBTOTAL	\$41,700.00
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SUMMARY COSTS - FUNCTION CODES	
1.0 Project Administration and Coordination Services	\$3,415.44
7.0 Subsurface Utility Engineering (SUE) Services	\$17,521.64
Other Direct Expenses	\$41,700.00
TOTALS	\$62,637.08

EXHIBIT B - Fee for Professional Services

**KELLY LN PHASE 3
Summary of Manhours - Additional Services
The Rios Group, Inc.**

TASK DESCRIPTION	SUPERVISORY ENGINEER	SUE PROJECT MANAGER	PROFESSIONAL ENGINEER	ASSISTANT PROJECT MANAGER	EIT	ENGINEERING TECH	CADD TECHNICIAN	FIELD MANAGER	ADMIN. SPECIALIST	SENIOR UTILITY COORDINATOR	UTILITY COORDINATOR	TOTAL LABOR HR AND COST
16.1 QL "A" SUE services												
QL "A" SUE services	4	16	8	12	16	4	20	20	4			104
Subtotal	4	16	8	12	16	4	20	20	4	0	0	104
HOURLY CONTRACT RATE	\$166.06	\$151.93	\$143.73	\$105.89	\$96.48	\$66.85	\$79.76	\$109.85	\$70.80	\$160.00	\$120.00	
TOTAL LABOR COSTS	\$664.24	\$2,430.88	\$1,149.84	\$1,270.68	\$1,543.68	\$267.40	\$1,595.20	\$2,197.00	\$283.20	\$0.00	\$0.00	\$11,402.12

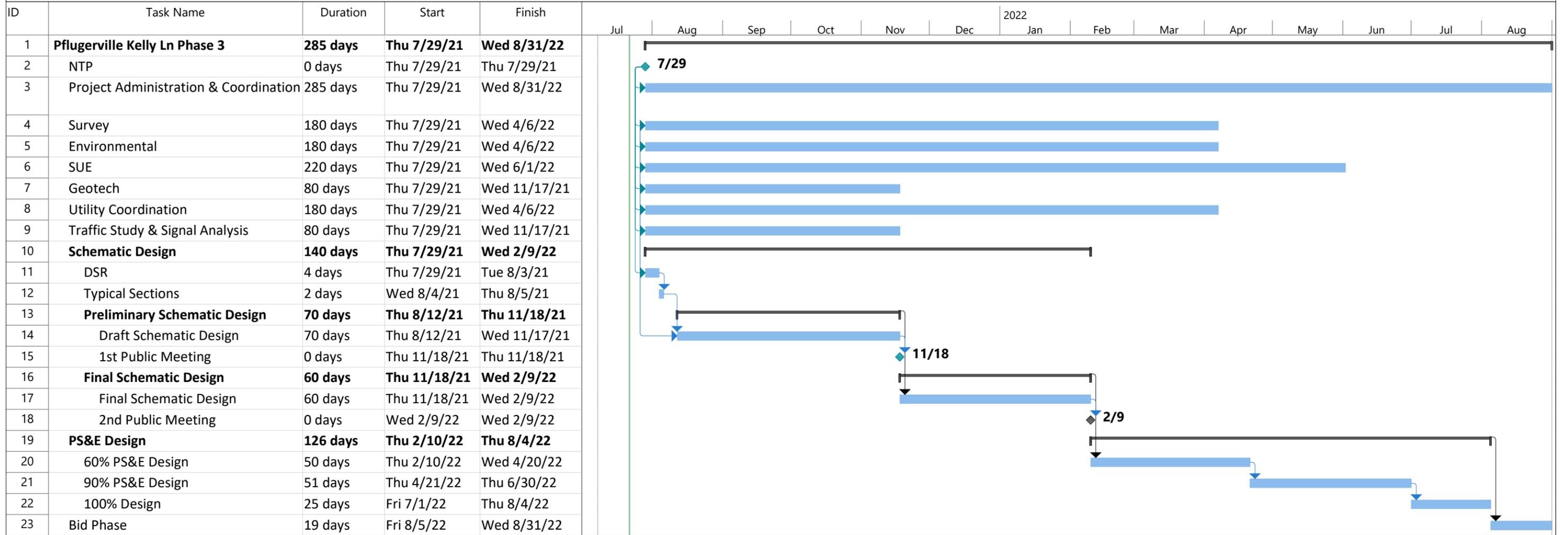
SUBTOTAL \$11,402.12

**KELLY LN PHASE 3
Summary of Direct Expenses - Additional Services
The Rios Group, Inc.**

Other Direct Expenses - QL "A" SUE services	QTY	UNIT	RATE	COST
Traffic Control (Standard)	5	daily	\$750.00	\$3,750.00
Survey (RPLS)	1	LS	\$2,500.00	\$2,500.00
Designating Crew - One Man	20	hour	\$150.00	\$3,000.00
Designating Crew - Two Man		hour	\$235.00	\$0.00
Lodging/Hotel (Taxes/fees not included)		day/person		\$0.00
Lodging/Hotel - Taxes and Fees		day/person		\$0.00
Meals (Excluding alcohol & tips) (overnight stay required)		day/person		\$0.00
Mileage (3 trips at 400 miles)		mile	\$0.56	\$0.00
QL"A" SUE Test Hole 0-5 ft	8	each	\$1,250.00	\$10,000.00
QL"A" SUE Test Hole 5-8 ft	9	each	\$1,525.00	\$13,725.00
QL"A" SUE Test Hole 8-13 ft	2	each	\$1,900.00	\$3,800.00
QL"A" SUE Test Hole 13-20 ft	1	each	\$2,450.00	\$2,450.00
QL"A" SUE Test Hole Over 20 ft		each	\$3,025.00	\$0.00
Pavement Coring	10	each	\$350.00	\$3,500.00
SUBTOTAL DIRECT EXPENSES				\$42,725.00

SUBTOTAL \$42,725.00

SUMMARY COSTS - FUNCTION CODES	
16.1 QL "A" SUE services	\$11,402.12
Other Direct Expenses - QL "A" SUE services	\$42,725.00
TOTALS	\$54,127.12



Project: 20210712 Vickrey - Kel
Date: Thu 7/22/21

Task		Project Summary		Manual Task		Start-only		Deadline	
Split		Inactive Task		Duration-only		Finish-only		Progress	
Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
Summary		Inactive Summary		Manual Summary		External Milestone			