

ENGINEERING SERVICES AGREEMENT

THE STATE OF TEXAS §
 §
COUNTY OF WALLER §

THIS AGREEMENT is made and entered into by and between **WALLER COUNTY, TEXAS**, a public body corporate and politic of the State of Texas acting by and through the Waller County Commissioners Court (hereinafter referred to as "County"), and Binkley & Barfield, Inc., hereinafter called the "Engineer" or "Company".

W I T N E S S E T H:

WHEREAS, the County proposes to hire the Engineer to perform design services to reconstruct Clay Road into a four lane boulevard from approximately Schlipf Road to the Harris County line in Waller County, Texas, hereinafter called the "Project;"

WHEREAS, the Engineer has represented to the County that it is qualified and prepared to perform all of the services described in the Scope of Services, Appendices A, attached hereto and incorporated herein by reference as if copied herein verbatim (Scope of Services), and has submitted a proposal to provide professional engineering services for the Project;

WHEREAS, the County is satisfied that the Engineer is capable of performing the necessary services required for the Project and desires to contract with the Engineer to perform the services described in the Scope of Services;

WHEREAS, the provisions of Chapter 252, Texas Local Government Code, Competitive Bidding Law do not apply to the proposed agreement because the contract is for professional engineering services and the services were procured pursuant to Chapter 2254, Texas Government Code;

WHEREAS, the County has determined and found that it would be in the best interest of the County to delegate to LJA Engineering, Inc. ("LJA") supervisory and management authority over the Engineer; and

WHEREAS, the Engineer will control the methods and means in performing the work set out in the Scope of Services;

NOW, THEREFORE, in consideration of the mutual covenants and conditions set forth below, the parties agree as follows:

1. General

- a. In performing professional engineering services under this Agreement, the Engineer will function solely and exclusively for the benefit of the County and not for the benefit of the Engineer for the Project or any other party. All services rendered by the

Engineer under this Agreement shall be performed under the supervision of LJA. The Engineer shall render services in accordance with generally accepted professional standards of competent engineers practicing in the same or similar locality and under the same or similar circumstances and professional license and use that degree of care and skill to comply with all applicable laws and regulations.

- b. The Engineer shall be responsible for the professional quality, technical accuracy and the coordination of all deliverable documents and services furnished by the Engineer under this Agreement. The Engineer shall, without additional compensation, correct or revise all errors and omissions in its documents. Reuse of the documents and deliverables for any purpose other than that for which such deliverables were originally prepared, or alteration of such documents or deliverables without the written verification or adaptation by Engineer for the specific purpose intended, shall be at County's risk. All title blocks and engineer's seal, if applicable, shall be noted and made according to Texas Administrative Code.
- c. At the County's request, the Engineer will collaborate with LJA and County personnel to facilitate the implementation of a Project Database within the County's Electronic Document Management System. The Electronic Document Management System will provide electronic management that shall govern the distribution and file copies of all Project related correspondence, reports, plans, and technical data. The County and the Engineer will use this system to facilitate the effective electronic exchange of Project information and documents with members of the design team and other interested stakeholders.
- d. The Engineer will collaborate with LJA and County personnel to facilitate the maintenance of the Project Database. Project files shall be entered into the database by the Engineer on a timely basis and made available by LJA and the County at all times for performance of daily Project activities. Other documents, including those used for legal review, audit requests/requirements, and open records request purposes, shall be entered by the County staff assisting the Engineer team. The Engineer shall also ensure that all Project files are appropriately entered into the database:
 - 1. At all critical milestones;
 - 2. At established periodic intervals; and
 - 3. Following completion of the work as a final Project record, including applicable record drawings.
- e. County may provide information, reports, studies, site characterizations, advice, instructions, and similar information in its possession relating to the Project ("County Data"). Engineer may reasonably and in good faith rely upon the accuracy of County Data provided by County or any third party designated by County. However, Engineer will not ignore the implications of information furnished to Engineer and shall make reasonable inquiries if County Data as furnished appears to be incorrect or incomplete. Engineer makes no representations or warranties as to the quality, accuracy, usefulness, or completeness of any Services to the extent Engineer relies on County Data. Engineer, its officers, directors, and employees shall have no liability

whatsoever with respect to the use of unreliable, inaccurate, or incomplete County Data.

2. Scope of Services

The services to be provided herein in regard to the Project are defined in Appendices A (“Scope of Services”).

3. Compensation and Payment

- a. The Engineer shall be entitled to payment of the lump sum amount of **\$1,801,934.00** for services to perform the tasks delineated in Appendix A-1. Development of the plans for the Project will be the responsibility of the Engineer. The Engineer shall submit plans for County review at 30%, 60%, 90% and 100% completion, unless modified in writing by County. The County shall review and provide the Engineer comments to the submittals within 20 working days of receipt. The County will pay the Engineer commensurate to the plan submittal completion based upon the County’s assessment. The Engineer will not receive further payment until the County is satisfied with the Engineer’s responses to the review comments. The services necessary to perform the tasks delineated in Appendix A-2 shall be paid based on hourly rates and the County shall not be obligated to pay in excess of **\$443,912.00** for the services described in Appendix A-2. The Engineer shall not be obligated to perform further services hereunder once the Scope of Services delineated in Appendices A-1 and A-2 have been performed.

- (1) All hourly billing for the services defined in Appendix A-2 and any additional services not included in the Scope of Services under this Agreement, including changes in the contractual scope of work and revision of work satisfactorily performed, will be performed only when approved in advance and authorized by the County, and will be reimbursed at the raw salary rates in effect at that time, times a multiplier as set forth below, to the extent that such direct salary costs and subcontracts are reasonable and necessary for the performance of such services. The reimbursable hourly raw salary rates cannot exceed those set forth in Appendix B. The Engineer shall also be entitled to expense reimbursement as set forth in Appendix B, provided that miscellaneous expenses, if any, may be reimbursed hereunder only when LJA determines that incurring such expenses is not required as part of the original Scope of Services and provides written approval of such expense in advance of it being incurred. Payment will be made on the basis of certified time and expense records and in accordance with those payment procedures set forth in subparagraph b., below. Billing rates will have a 3.00 multiplier on raw salary rates.

- (2) Where Subconsultants are employed by the Engineer to perform additional services not within the original Scope of Services, the Engineer will be reimbursed for Subconsultants' salaries and hourly rates, including overtime rates, on the same basis as described for the Engineer's own personnel in subparagraph a. (1), of this Paragraph. Reimbursement to the Subconsultant for non-salary costs incurred by

Subconsultants will be on the same basis as if the costs were incurred by the Engineer. Total contract amounts shall include Subconsultant fees.

- b. It is understood and agreed that monthly payments will be made to the Engineer by the County based on the following procedures: On or about the fifteenth day of each month during the performance of services hereunder and on or about the fifteenth day of the month following completion of all services hereunder, the Engineer shall submit to the County the invoice electronically showing the amounts due for services performed during the previous month, set forth separately for work under this Agreement and for additional services (accompanied by supporting certified time and expense records of such charges in a form acceptable to the County Auditor). The fee, as determined by the methods described herein, includes out-of-pocket costs of Engineer for delivery services, parking, mileage at IRS rate and document printing. Travel expenses submitted for reimbursement must be incurred in accordance with County's travel policy. All expenses submitted by Engineer shall be subject to approval by County prior to reimbursement.

LJA shall review such invoices and approve them within ten (10) calendar days with such modifications as are consistent with this Agreement and forward same to the County Engineer, who will forward to the County Auditor. The County shall pay each such invoice as approved by the County Auditor within twenty (20) calendar days after the County Auditor's approval of same. Invoices are due and payable net 30 days from receipt.

- c. It is expressly understood and agreed that the County has available the total maximum sum of **\$2,245,846.00** as hereinafter certified available for the purpose of satisfying the County's obligations under the terms and provisions of this Agreement. The County shall not be liable under any circumstances or any interpretations hereof for any costs under the Agreement except for those certified available for this Agreement by the Waller County Auditor, as evidenced by the issuance of a purchase order by Waller County for the certified amount. Once the funds are expended for the purpose of satisfying the County's obligations under the terms and provisions of this Agreement, the County shall have no further obligations nor shall the Engineer be required to perform further services hereunder.

4. Time of Performance

It is understood and agreed that time is of the essence for performance of the Engineer's services under this Agreement and services shall be performed as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect.

5. The County's Option to Terminate

- a. The County has the right to terminate this Agreement at its sole option at any time, with or without cause, by providing written notice of such intention to terminate and by

stating in said notice the "Termination Date." Upon such termination, the County shall compensate the Engineer in accordance with Paragraph 3., above, for those services that were provided under this Agreement prior to its termination and that have not been previously invoiced to the County. The Engineer's final invoice for said services will be presented to and paid by the County in the same manner set forth in Paragraph 3. b., above.

- b. Termination of this Agreement and payment in settlement as described in subparagraph a. of this Paragraph shall extinguish all rights, duties, obligations, and liabilities of the County and the Engineer under this Agreement and this Agreement shall be of no further force and effect; provided, however, such termination shall not act to release the Engineer from liability for any previous default either under this Agreement or under any standard of conduct set by law. No termination of this Agreement shall have the effect of terminating the Engineer's obligations under Sections 7 (Delays and Damages), 8 (Inspection of the Engineer's Books and Records), 12 (Appearance as Witness), or 15 (Indemnification).
- c. If the County shall terminate this Agreement as provided in this Paragraph, no fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to the Engineer.
- d. The County's rights and options to terminate this Agreement, as provided in any provision of this Agreement shall be in addition to, and not in lieu of, any and all rights, actions and privileges otherwise available under law or equity to the County by virtue of this Agreement or otherwise. Failure of the County to exercise any of its rights, actions, options or privileges to terminate this Agreement as provided in any provision of this Agreement shall not be deemed a waiver of any rights, actions or privileges otherwise available under the law or equity with respect to any continuing or subsequent breaches of this Agreement or of any other standard of conduct set by law.
- e. Copies of all completed and partially completed documents prepared under this Agreement shall be delivered to the County upon the Engineer's receipt of termination payment when and if this Agreement is terminated.

6. Source of Fee Payments

The County intends to pay for design and construction with the proceeds from the sale and issuance of bonds. It is expressly acknowledged that all payments owing for Engineering services performed under this Agreement shall be made solely from this source of funds for financing design and construction of the Project. The County shall be under no liability under this Agreement to make payment to the Engineer from any other source. In addition, the County reserves the right, at its sole discretion, at any time prior to issuance by the County of the written notice to proceed, to terminate this Agreement and in the event of such termination, the Engineer shall not be entitled to any payment, nor have any claim for compensation or damages resulting from such cancellation. In no event shall the liability of the County under this Agreement exceed the amount hereunder certified as available by the County Auditor.

7. Delays and Damages

Except as otherwise provided herein, the Engineer agrees that no other charges or claims for damage shall be made by it against the County for any delays or hindrances occurring during the progress of the Engineer in providing to the County the services specified in this Agreement.

8. Inspection of the Engineer's Books and Records

County shall have the right, during normal business hours, to inspect, copy and audit at any time, and from time to time, all of Engineer's files, books, records, costs, and expenses pertaining to the Program. The County will conduct an audit on an annual basis, or more frequently at its sole discretion. If County elects to audit Engineer's files, books, records, costs, and expenses pertaining to the Program, and the audit discloses a discrepancy of one percent (1%) or more from the payment applications or invoices, then, in addition to repaying County all sums owing, Engineer shall pay the cost of the audit. Any such audit or examination may be undertaken by County or its contracted representative at reasonable times during normal business hours and in conformance with generally accepted auditing standards upon five (5) business days' notice to Engineer.

9. Personnel, Equipment, and Material

- a. The Engineer represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for performance of the services required under this Agreement and that the Engineer shall furnish and maintain, at its own expense, adequate and sufficient personnel and equipment, in the opinion of LJA, to perform the services when and as required and without delays. It is understood that LJA will approve assignment and release of all key engineering personnel and that the Engineer shall submit written notification of all key engineering personnel changes monthly for LJA's approval prior to the implementation of such changes. Services described in this Agreement shall be performed under the direction of an engineer licensed to practice professional engineering in the State of Texas.
- b. All employees of the Engineer or Subconsultants hired by the Engineer shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of the Engineer or Subconsultant of the Engineer who, in the opinion of LJA, is incompetent or by his conduct becomes detrimental to the Project shall, upon request of LJA, immediately be removed from association with the Project.
- c. Except as otherwise specified, the Engineer shall furnish all equipment, transportation, supplies, and materials required for its operations under this Agreement.

10. Subletting

The Engineer shall not sublet, assign, or transfer all or any part of the services in this Agreement without the prior written approval of the County. Even in the case of a permitted sublet, Engineer shall remain responsible under this Agreement for the work.

11. Conferences

At the request of LJA, the Engineer shall provide appropriate personnel for conferences at its offices, or attend conferences at the various offices of LJA, or at the site of the Project. LJA and the County are permitted to inspect the Engineer site Project offices.

12. Appearance as Witness

If requested by the County, or on its behalf, the Engineer shall prepare such engineering exhibits and plats as may be requested for all hearings and trials related to the Project and, further, it shall prepare for and appear at conferences and shall furnish competent expert engineering witnesses to provide such oral testimony and to introduce such demonstrative evidence as may be needed throughout all trials and hearings with reference to any litigation relating to the Project. Compensation for trial preparation and appearance by the Engineer in courts regarding litigation matters will be made in accordance with the provisions of Paragraph 3. a. (1), above.

13. Compliance with Laws

The Engineer shall comply with all applicable federal, state, and local laws, statutes, ordinances, rules and regulations, and the orders and decrees of any courts or administrative bodies or tribunals in any matter affecting the performance of this Agreement, including, without limitation, Worker's Compensation laws, minimum and maximum salary and wage statutes and regulations, licensing laws and regulations. When required, the Engineer shall furnish the County with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees specified above.

The Engineer shall strictly comply with Section 2251.022 Texas Government Code, and shall require that its Subconsultants fully comply with Section 2251.023 Texas Government Code.

14. Insurance

The Engineer shall obtain, keep and maintain any and all insurance that may be required by law or that may be required by any agreement the County has with any other party concerning the Project as contained in Attachment C.

15. Indemnification

TO THE EXTENT ALLOWED BY LAW, THE ENGINEER AGREES TO INDEMNIFY AND HOLD HARMLESS THE COUNTY, ITS COMMISSIONERS, OFFICERS, EMPLOYEES, AND AGENTS FROM LIABILITY, LOSSES, EXPENSES, DEMANDS, REASONABLE ATTORNEYS' FEES, AND CLAIMS FOR BODILY INJURY (INCLUDING DEATH) AND PROPERTY DAMAGE TO THE EXTENT CAUSED BY THE NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT OF THE ENGINEER (INCLUDING THE ENGINEER'S AGENTS, EMPLOYEES, VOLUNTEERS, AND SUBCONSULTANTS/CONSULTANTS UNDER CONTRACT, OR ANY OTHER ENTITY OVER WHICH THE ENGINEER EXERCISES CONTROL) IN THE

PERFORMANCE OF THE SERVICES DEFINED IN THIS AGREEMENT. THE ENGINEER SHALL ALSO SAVE THE COUNTY HARMLESS FROM AND AGAINST ANY AND ALL EXPENSES, INCLUDING REASONABLE ATTORNEYS' FEES, IN PROPORTION TO THE ENGINEER'S LIABILITY, THAT MIGHT BE INCURRED BY THE COUNTY, IN LITIGATION OR OTHERWISE RESISTING SUCH CLAIMS OR LIABILITIES.

16. Delivery of Notices, Etc.

- a. All routine written notices, invoices, change orders, etc. are to be delivered to the County Engineer J. Ross McCall, P.E., 775 Business US 290 East, Hempstead, TX 77445, or at such other place or places as the County may designate by written notice delivered to the Engineer.

All formal notices and demands under this Agreement shall be delivered to the Waller County Judge, Attention: Carbett "Trey" J. Duhon III, 425 FM 1488, Hempstead, TX 77445.

- b. All written notices, demands, and other papers or documents to be delivered to the Engineer under this Agreement shall be delivered to Kevin A. Mineo, Binkley & Barfield, Inc., 1711 Seamist Drive, Houston, Texas 77008, or at such other place or places as the Engineer may designate by written notice delivered to the County.

17. Reports of Accidents, Etc.

Within 24 hours after the occurrence of any accident or other event which results in, or might result in, injury to the person or property of any third person (other than an employee of the Engineer), whether or not it results from or involves any action or failure to act by the Engineer or any employee or agent of the Engineer and which arises in any manner from the performance of this Agreement, the Engineer shall send a written report of such accident or other event to the County, setting forth a full and concise statement of the facts pertaining thereto. The Engineer shall also immediately send the County a copy of any summons, subpoena, notice, or other documents served upon the Engineer, its agents, employees, or representatives, or received by it or them, in connection with any matter before any court arising in any manner from the Engineer's performance of work under this Agreement.

18. The County's Acts

Anything to be done under this Agreement by the County may be done by such persons, corporations, or firms as the County may designate.

19. Limitations

Notwithstanding anything herein to the contrary, all covenants and obligations of the County under this Agreement shall be deemed to be valid covenants and obligations only to the extent authorized by the Act creating the County and permitted by the laws and the Constitution of the State of Texas.

20. Captions Not a Part Hereof

The captions or subtitles of the several sections and divisions of this Agreement constitute no part of the content hereof but are only labels to assist in locating and reading the provisions hereof.

21. Controlling Law, Venue

This Agreement shall be governed and construed in accordance with the laws of the State of Texas. This Agreement shall be performed entirely in Waller County, Texas and the parties hereto acknowledge that venue is proper in Waller County, Texas, for all disputes arising hereunder and waive the right to sue or be sued elsewhere.

22. Successors and Assigns

The County and the Engineer bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of the other party, in respect to all covenants of this Agreement.

23. Independent Engineer

Notwithstanding any provision of this Agreement, the Engineer shall at all times act as an independent Engineer, and not as an employee of the County, and the Engineer shall be responsible for the means and methods employed in performing services hereunder.

24. Certificate of Interested Parties (Form 1295)

Texas law requires all parties who enter into any contract with the County that must be approved by Commissioners Court to disclose all Interested Parties. Texas Ethics Commission Form 1295 must be completed in its entirety. If changes to this Form are necessary during this Agreement, the Engineer will notify and send the County an updated and complete version.

25. Additional Statutory Requirements. Certain State Law Requirements for Contracts. For purposes of section 2252.152, 2271.002, and 2274.002, Texas Government Code, as amended, Engineer hereby verifies that Engineer and any parent company, wholly owned subsidiary, majority-owned subsidiary, and affiliate:

- a. Unless affirmatively declared by the United States government to be excluded from its federal sanctions regime relating to Sudan or Iran or any federal sanctions regime relating to a foreign terrorist organization, is not identified on a list prepared and maintained by the Texas Comptroller of Public Accounts under Section 806.051, 807.051, or 2252.153 of the Texas Government Code.
- b. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Engineer does not boycott Israel and is authorized to agree in such

contracts not to boycott Israel during the term of such contracts. "Boycott Israel" has the meaning provided in section 808.001 of the Texas Government Code.

- c. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Engineer does not boycott energy companies and is authorized to agree in such contracts not to boycott energy companies during the term of such contracts. "Boycott energy company" has the meaning provided in section 809.001 of the Texas Government Code.
- d. If employing ten (10) or more full-time employees and this Agreement has a value of \$100,000.00 or more, Engineer does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and is authorized to agree in such contracts not to discriminate against a firearm entity or firearm trade association during the term of such contracts. "Discriminate against a firearm entity or firearm trade association" has the meaning provided in section 2274.001(3) of the Texas Government Code. "Firearm entity" and "firearm trade association" have the meanings provided in section 2274.001(6) and (7) of the Texas Government Code.

BY ACCEPTANCE OF AGREEMENT, ENGINEER ACKNOWLEDGES THAT THE COUNTY IS OPPOSED TO HUMAN TRAFFICKING AND THAT NO COUNTY FUNDS WILL BE USED IN SUPPORT OF SERVICES OR ACTIVITIES THAT VIOLATE HUMAN TRAFFICKING LAWS.

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IN WITNESS WHEREOF, County and Engineer have caused their respective duly authorized representatives to execute, seal and deliver this Agreement, all as of the day and year first above written.

COUNTY:

ENGINEER:

WALLER COUNTY

Binkley & Barfield, Inc.

Carbett "Trey" J. Duhon III, County Judge

Kevin A. Mineo

Date

Date

ATTEST:

Debbie Hollan, County Clerk

Approved:

J. Ross McCall, P.E., County Engineer

AUDITOR'S CERTIFICATE

I hereby certify that funds are available in an amount not to exceed \$2,245,846.00 to accomplish and pay the obligation of Waller County in the foregoing matter.

Alan R. Younts, County Auditor

APPENDIX A-1
Scope of Services (Lump Sum)

Scope of Services

Clay Road: From Schlipf Rd to Pitts Rd

The proposed improvements include the widening for 2.0 miles from 2 to 4 lanes on Clay Rd from Schlipf Rd to Pitts Rd.

Work not specifically listed below will be provided by others.

1. General

- The Engineer will collect all available land plans, existing as-built plans, drainage studies, survey data, and all other data pertaining to the design of the project.
- The Engineer shall attend periodic progress meetings with the County, their consultants, and other stakeholders as required to present a status report on design development.
- *The engineer shall coordinate with and prepare a permit application for TxDOT approval.*
- The Engineer shall coordinate with the governing drainage district and water authorities.
- The Engineer shall coordinate with local permitting agencies.
- The Engineer shall coordinate with existing and future development.
- The Engineer shall coordinate with utilities, pipelines, LIDS, HOAs, POAs, and MUDs, to analyze impacts and obtain Letters of No Objections (LONOs) or have utilities relocate to be completed by others.
- The Engineer shall perform QA/QC at all levels. For each deliverable, the Engineer shall have some evidence of their internal review and mark-up of that deliverable. A milestone submittal is not considered complete unless the associated internal red-line mark-ups are submitted.
- The Engineer shall coordinate all subconsultant activity to include quality of and consistency of plans and administration of the invoices and monthly progress reports.
- The Engineer shall develop a detailed project schedule and prepare invoicing and progress reports for each month.

County projects will follow the Waller County Engineering Design Manual.

2. Preliminary Engineering

- Perform detailed field survey for the detailed design phase.

1. Survey Control

- a. Horizontal and Vertical Survey Control for each site shall be referenced to the nearest Waller County Survey Control Monument, or NGS if no County Monuments are established.
- b. Survey Control Points will be established at 1,000-foot maximum intervals and tied to the Calculated Alignment for each site.

Scope of Services
Clay Road: From Schlipf Rd to Pitts Rd

- c. Deliverable will be Signed and Sealed Survey Control Maps (22"x34", 11"x17") per Waller County standards with Detail Sketches in PDF format and CAD Files.

2. Existing Right of Way Mapping (Cat. 1B, Cond. 3)

- a. Perform abstract survey; obtain deeds of record, and plats for the right-of-way, streets intersecting and tracts of land adjoining the project limits.
- b. Establish the existing right-of-way and boundary lines adjoining the project limits.
- c. Deliverable will be Signed and Sealed existing Right-of-Way Map Sheets (22"x34", 11"x17") in PDF format per Waller County standards and CAD Files.

3. Topographic Surveying (Cat. 6, Cond. 1)

The Surveyor will provide the following within the surveying limits described above:

- a. For the roadway and ditches, obtain cross-sections at 100-foot intervals with grade breaks. Cross-sections shall extend 20 feet beyond the Proposed right-of-way. Topographic Survey will include the following: Identify locations and elevations of physical features to include edges or curbs and gutters of pavement, parking lanes, center of the median, fences, walls, tree-lines (individual tree locations is not included), sidewalks, driveways and driveway curbs, power poles, light poles, water meters, water wells, ponds, sprinklers, off-site drain pipe, elevations at ditch banks, toe, flow line, and side slope, etc. Horizontally and vertically locate available existing utilities within, crossing, and adjoining project limits. Utilities will be located and tied based on visual evidence and marked by "One Call" within the project limits. The rim (top) and flow line elevations will be obtained on inlets, manholes (sanitary and storm), and drainage structures, including culverts, SETs, etc. The rise, width, flowlines, etc. of the drainage elements will be obtained where accessible.
- b. Research and preparation of right-of-entry letters. Letters will include name and contact info for each consultant on the project.
- c. Prepare existing Signed and Sealed Topographic Survey Map Sheets (22"x34", 11"x17") of the Project to be delivered in PDF per Waller County standards and CAD Files.

4. Control and Right-of-Way Staking

- a. Recover or re-establish project control referenced to the project baseline for construction.
- b. Stake the right-of-way with wooden stakes at PC's, PT's, and 100'-200' intervals along the project limits.
- c. Control and ROW Staking is estimated to happen 3 separate times (for beginning of construction, during or right after construction, and one additional for as needed purposes).

5. Parcel Surveys

Scope of Services
Clay Road: From Schlipf Rd to Pitts Rd

- a. Prepare metes and bounds descriptions and parcel plats in accordance with Waller County guidelines for property acquisition and add parcels to the existing right-of-way maps.
- Perform detailed SUE QL A-D for the detailed design phase.
- Perform geotechnical evaluation for pavement or structural design in the final design phase.
 - Drill and sample:
 - **22** soil borings each to a depth of 10 feet for the proposed roadway and utilities. The borings are spaced at approximately 500-ft intervals along the roadway alignment. Boring locations for roadway will alternate between two directions.
 - **2** soil borings to a depth of 25 feet for the proposed new detention basin at the project alignment. Location and depth of the proposed detention basin is unknown.
 - **1** soil boring to a depth of 40 feet for the proposed new traffic signal at the intersection with Bartlett Rd.
- Perform an environmental constraints evaluation and identify any required approvals to proceed to the final design phase.
 - The environmental constraints evaluation will be for a study corridor of approximately 500 feet on each side of the existing ROW.
 - Obtain and review the most recent available data for natural resources, cultural resources, land use, locations of public resources, gas pipeline and well information, water wells, and ASTM third-party hazardous materials database search.
 - A limited “windshield” field reconnaissance will be conducted to verify data and identify other environmental concerns.
 - An environmental constraints map will be prepared at a reasonable scale, and a brief letter report (or as part of the PER) summarizing the environmental review. The report will include a regulatory and analysis framework, methods, results, conclusions, and recommendations.
 - A supplemental scope of work may be required for environmental field surveys and to determine any required approvals to proceed to the final design phase.
 - A supplemental scope of work may be required to conduct thorough background archeological literature and records research and coordination with the Texas Historical Commission for concurrence of findings.
 - Additional assumptions (quantity of meetings, etc.) are included in the fee proposal.
 -

Scope of Services
Clay Road: From Schlipf Rd to Pitts Rd

- Present a schematic roll plot for each alternative with horizontal and vertical alignments.
- Evaluate intersections for sight triangles and analyze need for Unobstructed Visibility Easements (UVE).
- Evaluate ROW requirements for roadway based on preliminary cross sections.
- Perform a review of the utilities along the corridor and provide a utility conflict list which includes all correspondence with utility companies to the Program Manager.
- Provide Signal Warrant analysis for the intersection of Clay Rd and Bartlett Rd.
- **Optional:** Provide Signal Warrant analysis for the intersection of Clay Rd and Schlipf Rd.
- Perform a Drainage Analysis in the preliminary design stage to include the following:
 - Identify the ultimate project outfalls
 - Define drainage boundaries for the project
 - Size crossing using HEC-RAS and/or HY-8
 - Provide existing vs proposed flows. If existing road has inlets (curb and gutter), analyze existing street ponding.
- Provide Drainage Report.
- Provide updated construction cost estimates based on the preliminary design.
- Provide Preliminary Engineering Report (PER, draft and final).
- Attend PER meeting at Waller County facility.
- Provide M&Bs for ROW taking after design is finalized at PER meeting.

3. Final Design

- Construction drawings will be prepared on 11"x17" sheets.
- 70%, 95%, & 100% submittals will be completed
- Obtain LONOs from utilities or have utilities relocated prior to bidding.
- Obtain final permitting approvals from all agencies (TxDOT, Cities, RR, etc.) prior to bidding.
- Obtain environmental permit approvals prior to project bidding. (If needed, to be included in a supplemental scope of work)
- Prepare project title sheet and index sheet
- Prepare typical section sheets
- Prepare project layout sheet

Scope of Services
Clay Road: From Schlipf Rd to Pitts Rd

- Prepare survey control map
- Prepare existing & proposed right-of-way sheets
- Prepare horizontal alignment data sheet
- Prepare roadway plan and profile sheets to include existing topo
- Prepare intersection plan and profile sheets at the Schlipf Rd, Peony Ridge Rd, Bartlett Rd, Lake Walton Dr, and Shore Gaze Dr intersections.
- Prepare temporary intersection plan and profile sheet at the Pitts Rd intersection.
- Prepare driveway schedule & detail sheets
- Prepare drainage area maps.
- Prepare drainage and roadway details.
- Prepare storm sewer plan and profiles with hydrologic and hydraulic data.
- Prepare culvert layouts sheets with hydrologic and hydraulic data.
- Prepare traffic control plans.
- Prepare signing and striping details.
- Prepare signalization details at the intersection of Clay Rd and Schlipf Rd.
- **Optional:** Prepare signalization details at the intersection of Clay Rd and Bartlett Rd
- Prepare erosion control details.
- *Prepare air bridge or Zero load slab details for the crossing pipeline.*
- Prepare Earthwork cross sections (including proposed roadway section) based on survey information. Includes slopes and critical elevations on proposed roadway section.
- Other Miscellaneous items. Prepare tree protection details, Sanitary/Water line details (or relocation details).
- Include construction standards.
- Provide updated construction cost estimates based on the final design.
- Prepare the complete package for letting including project manual with general notes, specification list, summary of work, utility adjustment summary, geotechnical report (if applicable) and bid form.

4. Construction/Bid Phase Services

- Provide administrative documents.
- Attend pre-bid meeting
- Respond to questions from bidders.

Scope of Services
Clay Road: From Schlipf Rd to Pitts Rd

- Attend preconstruction meeting
- Attend field meetings and make visits to site
- Calculate quantities and assist the County Engineer in preparing change orders
- Review and approval of shop drawings
- Review and approval of forming details
- Respond to requests for information (RFIs)
- Answer general questions
- Provide record drawings.

SUMMARY		
Design		\$1,801,934.00
Roadway & Drainage	Binkley & Barfield	\$ 1,295,806.00
Traffic	TEDSI	\$ 18,858.00
Structural	Linfield	\$ 91,713.00
Survey	Weisser	\$ 152,645.00
SUE	Pape Dawson	\$ 165,634.00
Geotechnical	Raba Kistner	\$ 77,278.00
Environmental	Conсор	\$ -
Construction Phase Services		\$ 181,612.00
Roadway & Drainage	Binkley & Barfield	\$ 163,957.00
Survey	Weisser	\$ 17,655.00
Optional Additional		\$ 262,300.00
Roadway & Drainage	Binkley & Barfield	
Traffic	TEDSI	\$ 123,470.00
Survey	Weisser	\$ 138,830.00
SUE	Pape Dawson	
TOTAL		\$ 2,245,846.00

FEE SCHEDULE

TASK DESCRIPTION	PRINCIPAL	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	EIT	SENIOR ENGR TECH	ENGR TECH	CADD OPERATOR	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS	UNIT	NO OF UNITS	HOURS PER UNIT
GENERAL													
DATA COLLECTION	1	8		16	24					49	NA	NA	
PROJECT MEETINGS	6	24		24						54	NA	NA	
COORDINATION WITH LOCAL AGENCIES	8	24		24						56	NA	NA	
PROJECT ADMINISTRATION	24								40	64	NA	NA	
PRELIMINARY ENGINEERING													
SURVEYING COORDINATION	8	40		80						128	NA	NA	
SUE COORDINATION	1	24		40	16					81	NA	NA	
STRUCTURAL COORDINATION	1	8		12	16				12	49	NA	NA	
GEOTECH COORDINATION	1	16		32	24					73	NA	NA	
ENVIRONMENTAL CONTRAINTS EVALUATION										0	NA	NA	
PREPARE SCHEMATIC ROLL PLOT	2	80		160	160		160			562	NA	NA	
EVALUATE ROW REQUIREMENTS	1	8		16	16					41	NA	NA	
UTILITY COORDINATION	2	40		40	40					122	NA	NA	
DRAINAGE ANALYSIS										0	NA	NA	
DRAINAGE REPORT										0	NA	NA	
CONSTRUCTION COST ESTIMATES	2	8		40	40					90	NA	NA	
PREPARATION OF PER	4	40		80	80					204	NA	NA	
PER MEETING	4	4		4						12	NA	NA	
FINAL DESIGN													
TITLE SHEET	1	1		2	4		8			16	SHEET	1	16
INDEX SHEET	1	2		6	18		4			31	SHEET	1	31
EXISTING TYPICAL SECTIONS	1	8		8	16		16			49	SHEET	2	25
PROPOSED TYPICAL SECTIONS	1	8		8	24		16			57	SHEET	2	29
PROJECT LAYOUTS													
HORIZONTAL ALIGNMENT DATA SHEET													
ROADWAY PLAN & PROFILE SHEETS (1"=50' SCALE)	4	120		160	220		180			684	SHEET	20	34
INTERSECTION LAYOUTS (2)	1	4		12	30		24			71	SHEET	2	36
ROADWAY DETAILS	1	20		40	40		40			141	SHEET	4	35
EARTHWORK/DESIGN CROSS SECTIONS (EVERY 50')	4	16		120	160		160			460	NA	NA	
STORM SEWER PLAN AND PROFILES (1"=50' SCALE)										0	SHEET	20	0
CULVERT LAYOUT SHEETS										0	NA	NA	
DRAINAGE DETAILS										0	NA	NA	
DRAINAGE SUBAREA MAPS (1"=50' SCALE DOUBLE BANK)										0	SHEET	11	0
SIGNING AND STRIPING LAYOUTS (1"=50' SCALE DOUBLE BANK)	4	40		80	120		120			364	SHEET	11	33
TCP LAYOUTS (1"=50' SCALE DOUBLE BANK)	4	120		200	280		240			844	SHEET	33	26
PIPELINE STRUCTURAL DETAILS										0	NA	NA	
SW3P LAYOUTS (1"=50' SCALE DOUBLE BANK)	4	24		60	80		80			248	SHEET	10	25
MISCELLANEOUS DETAILS	2	8		8	22		36			76	SHEET	2	38
PREPARATION OF STANDARDS	1	4		8	8		16			37	NA	NA	
DETAILED CONSTRUCTION COST ESTIMATE	1	20		40	60					121	NA	NA	
PRODUCE PROJECT MANUAL	2	4		12	16					34	NA	NA	
CONSTRUCTION PHASE SERVICES													
ADMINISTRATIVE DOCUMENTS	2	4							60	66	NA	NA	
ATTEND PRE-BID MEETING	2	2		2						6	NA	NA	
RESPOND TO QUESTIONS	2	24		48						74	NA	NA	
PRECONSTRUCTION MEETING	2	2		2						6	NA	NA	
ATTEND FIELD MEETINGS AND SITE VISITS	4	4		4						12	NA	NA	
PREPARATION OF CHANGE ORDERS	4	40		96						140	NA	NA	
REVIEW AND APPROVE SHOP DRAWINGS	3	32		48						83	NA	NA	
REVIEW AND APPROVE FORMING DETAILS	4	32		48						84	NA	NA	
RESPOND TO RFIS	4	32		48						84	NA	NA	
ANSWER GENERAL QUESTIONS	4	32		48						84	NA	NA	
PROVIDE RECORD DRAWINGS	2	32		48						82	NA	NA	
HOURS SUB-TOTALS	130	959	0	1,724	1,514	0	1,100	0	112	5,539		119	
CONTRACT RATE PER HOUR	\$361.00	\$255.00	\$216.00	\$183.00	\$165.00	\$179.00	\$162.00	\$133.00	\$105.00			# OF SHEETS	
TOTAL LABOR COSTS	\$46,930.00	\$244,545.00	\$0.00	\$315,492.00	\$249,810.00	\$0.00	\$178,200.00	\$0.00	\$11,760.00	\$1,046,737.00			
LABOR SUBTOTAL										\$1,046,737.00			

OTHER DIRECT EXPENSES	# OF UNITS	UNIT	COST/UNIT							
Mileage (based on current IRS rate)	300	mile	\$0.700							\$210.00
Overnight mail - letter size		each								\$0.00
Overnight mail - oversized box		each								\$0.00
Photocopies B/W (8.5 x 11)	1,000	each	\$0.15							\$150.00
Photocopies B/W (11 x 17)	2,000	each	\$0.25							\$500.00
SUBTOTAL DIRECT EXPENSES										\$860.00

SUMMARY	
TOTAL LABOR COSTS	\$1,046,737.00
OTHER DIRECT EXPENSES	\$860.00
TOTAL	\$1,047,597.00

FEE SCHEDULE

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	EIT	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS	UNIT	NO OF UNITS	HOURS PER UNIT
GENERAL										
DATA COLLECTION	4		8		8		20	NA	NA	NA
PROJECT MEETINGS	8		8				16	NA	NA	NA
COORDINATION WITH LOCAL AGENCIES	8		8				16	NA	NA	NA
PROJECT ADMINISTRATION	8						8	NA	NA	NA
PRELIMINARY ENGINEERING										
DRAINAGE ANALYSIS	40		120		240		400	NA	NA	NA
DRAINAGE REPORT	24		60		120		204	NA	NA	NA
ASSIST IN CONSTRUCTION COST ESTIMATES	4		4		8		16	NA	NA	NA
ASSIST WITH PREPARATION OF PER	4		4		8		16	NA	NA	NA
ASSIST WITH PER MEETING	8						8	NA	NA	NA
FINAL DESIGN										
STORM SEWER PLAN AND PROFILES (40 SCALE)	40		240		520		800	NA	20	40
LATERAL SHEETS SHEETS	10		60		120		190	NA	5	38
CULVERT LAYOUT SHEETS	8		24		48		80	NA	2	40
HEC-RAS SHEETS	12		36		72		120	NA	3	40
DETENTION POND SHEET	8		24		48		80	NA	2	40
DRAINAGE DETAILS	8		24		48		80	NA	2	40
DRAINAGE SUBAREA MAPS (50 SCALE DOUBLE BANK)	16		40		80		136	NA	4	34
HYDRAULIC CALC SHEES	8		24		48		80	NA	2	40
MISCELLANEOUS DETAILS	4		12		24		40	NA	2	20
PREPARATION OF STANDARDS	4		12		24		40	NA	2	20
ASSIST WITH DETAILED CONSTRUCTION COST ESTIMATE	4		4		8		16	NA	NA	NA
ASSIST WITH PRODUCTION OF PROJECT MANUAL	4		4		8		16	NA	NA	NA
CONSTRUCTION PHASE SERVICES										
RESPOND TO QUESTIONS	2		2		4		8	NA	NA	NA
ATTEND FIELD MEETINGS AND SITE VISITS	4						4	NA	NA	NA
PREPARATION OF CHANGE ORDERS	2		2		4		8	NA	NA	NA
REVIEW AND APPROVE SHOP DRAWINGS	2		2		4		8	NA	NA	NA
REVIEW AND APPROVE FORMING DETAILS	2		2		4		8	NA	NA	NA
RESPOND TO RFIS	2		2		4		8	NA	NA	NA
ANSWER GENERAL QUESTIONS	2		2		4		8	NA	NA	NA
PROVIDE RECORD DRAWINGS	4		4		16		24	NA	NA	NA
HOURS SUB-TOTALS	254	0	732	0	1,472	0			44	# OF SHEETS
CONTRACT RATE PER HOUR	\$255.00	\$216.00	\$183.00	\$165.00	\$145.00	\$105.00				
TOTAL LABOR COSTS	\$64,770.00	\$0.00	\$133,956.00	\$0.00	\$213,440.00	\$0.00	\$412,166.00			
LABOR SUBTOTAL							\$412,166.00			

OTHER DIRECT EXPENSES	# OF UNITS	UNIT	COST/UNIT				
Mileage (based on current IRS rate)		mile	\$0.700				\$0.00
Overnight mail - letter size		each					\$0.00
Overnight mail - oversized box		each					\$0.00
Photocopies B/W (8.5 x 11)		each					\$0.00
Photocopies B/W (11 x 17)		each					\$0.00
SUBTOTAL DIRECT EXPENSES							\$0.00

SUMMARY	
TOTAL LABOR COSTS	\$412,166.00
OTHER DIRECT EXPENSES	\$0.00
TOTAL	\$412,166.00

EXHIBIT B - BASIC SERVICES FEE SCHEDULE

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	EIT	SENIOR ENGR TECH	ENGR TECH	CADD OPERATOR	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS	UNIT	NO OF UNITS	HOURS PER UNIT
CLAY ROAD AT BARTLETT ROAD													
GENERAL													
DATA COLLECTION (TRAFFIC COUNTS - 12-HR COUNT & SPOT SPEED SURVEY)	1		2		8				1	12	NA	NA	NA
PROJECT MEETINGS	1		2							3	NA	NA	NA
COORDINATION WITH LOCAL AGENCIES	1		1		2					4	NA	NA	NA
PROJECT ADMINISTRATION	1		2						2	5	NA	NA	NA
PRELIMINARY ENGINEERING											NA	NA	NA
EVALUTE INTERSECTION SIGHT TRIANGLES	2		4		5			9		20	NA	NA	NA
SIGNAL WARRANT ANALYSIS	2		12		25			2	1	42	NA	NA	NA
ASSIST IN CONSTRUCTION COST ESTIMATES										0	NA	NA	NA
ASSIST WITH PREPARATION OF PER										0	NA	NA	NA
ASSIST WITH PER MEETING	1		2							3	NA	NA	NA
HOURS SUB-TOTALS	9	0	25	0	40	0	0	11	4	89		0	
CONTRACT RATE PER HOUR	\$350.91	\$314.92	\$256.44	\$215.96	\$175.46	\$184.45	\$160.00	\$155.22	\$130.46			# OF SHEETS	
TOTAL LABOR COSTS	\$3,158.22	\$0.00	\$6,410.88	\$0.00	\$7,018.27	\$0.00	\$0.00	\$1,707.39	\$521.86	\$18,816.62			
LABOR SUBTOTAL										\$18,816.62			

OTHER DIRECT EXPENSES	# OF UNITS	UNIT	COST/UNIT							
Mileage (based on current IRS rate)	50	mile	\$0.700							\$35.00
Overnight mail - letter size		each								\$0.00
Overnight mail - oversized box		each								\$0.00
Photocopies B/W (8.5 x 11)		each								\$0.00
Photocopies B/W (11 x 17)	55	each	\$0.10							\$5.50
SUBTOTAL DIRECT EXPENSES										\$40.50

EXHIBIT B - OPTIONAL ADDITIONAL SERVICES FEE SCHEDULE

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	EIT	SENIOR ENGR TECH	ENGR TECH	CADD OPERATOR	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS	UNIT	NO OF UNITS	HOURS PER UNIT
CLAY ROAD AT SCHLIPF ROAD													
GENERAL													
DATA COLLECTION (TRAFFIC COUNTS - 12-HR COUNT & SPOT SPEED SURVEY)	1		2		8				1	12	NA	NA	NA
PROJECT MEETINGS	2		4							6	NA	NA	NA
COORDINATION WITH LOCAL AGENCIES	2		2		4			4		12	NA	NA	NA
PROJECT ADMINISTRATION	4		8						4	16	NA	NA	NA
PRELIMINARY ENGINEERING													
EVALUTE INTERSECTION SIGHT TRIANGLES	2		4		5			9		20	NA	NA	NA
PERFORM A TRAFFIC STUDY										0	NA	NA	NA
SIGNAL WARRANT ANALYSIS	2		12		25			2	1	42	NA	NA	NA
ASSIST IN CONSTRUCTION COST ESTIMATES										0	NA	NA	NA
ASSIST WITH PREPARATION OF PER										0	NA	NA	NA
ASSIST WITH PER MEETING	1		2							3	NA	NA	NA
CLAY ROAD AT SCHLIPF ROAD & AT BARTLETT ROAD													
FINAL DESIGN - 2 INTERSECTIONS										0	NA	NA	NA
SIGNALIZATION DETAILS	6		65		135			190	4	400	NA	12	33
PREPARATION OF STANDARDS	1		2		3					6	NA	6	1
ASSIST WITH DETAILED CONSTRUCTION COST ESTIMATE	1		8		8					17	NA	NA	NA
ASSIST WITH PRODUCTION OF PROJECT MANUAL	1		5							6	NA	NA	NA
CONSTRUCTION PHASE SERVICES - 2 INTERSECTIONS													
RESPOND TO QUESTIONS	2		2							4	NA	NA	NA
ATTEND FIELD MEETINGS AND SITE VISITS	4		4							8	NA	NA	NA
PREPARATION OF CHANGE ORDERS	1		2		5			9		17	NA	NA	NA
REVIEW AND APPROVE SHOP DRAWINGS	2		18							20	NA	NA	NA
REVIEW AND APPROVE FORMING DETAILS										0	NA	NA	NA
RESPOND TO RFIS	2		6							8	NA	NA	NA
ANSWER GENERAL QUESTIONS										0	NA	NA	NA
PROVIDE RECORD DRAWINGS	1		6		8			15		30	NA	NA	NA
HOURS SUB-TOTALS	35	0	152	0	201	0	0	229	10	627		18	
CONTRACT RATE PER HOUR	\$350.91	\$314.92	\$256.44	\$215.96	\$175.46	\$184.45	\$160.00	\$155.22	\$130.46			# OF SHEETS	
TOTAL LABOR COSTS	\$12,281.98	\$0.00	\$38,978.15	\$0.00	\$35,266.82	\$0.00	\$0.00	\$35,544.83	\$1,304.64	\$123,376.41			
LABOR SUBTOTAL										\$123,376.41			

OTHER DIRECT EXPENSES	# OF UNITS	UNIT	COST/UNIT							
Mileage (based on current IRS rate)	120	mile	\$0.700							\$84.00
Overnight mail - letter size		each								\$0.00
Overnight mail - oversized box		each								\$0.00
Photocopies B/W (8.5 x 11)		each								\$0.00
Photocopies B/W (11 x 17)	90	each	\$0.10							\$9.00
SUBTOTAL DIRECT EXPENSES										\$93.00

SUMMARY	
BASIC SERVICES	
TOTAL LABOR COSTS	\$18,816.62
OTHER DIRECT EXPENSES	\$40.50
BASIC SERVICES TOTAL	\$18,858.00
OPTIONAL ADDITIONAL SERVICES	
TOTAL LABOR COSTS	\$123,376.41
OTHER DIRECT EXPENSES	\$93.00
OPTIONAL ADDITIONAL SERVICES TOTAL	\$123,470.00

OVERALL PROJECT TOTAL (BASIC + OPTIONAL ADDITIONAL)	\$142,328.00
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FEE SCHEDULE

TASK DESCRIPTION	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	DESIGN ENGINEER	EIT	CADD OPERATOR	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS	UNIT	NO OF UNITS	HOURS PER UNIT
GENERAL											
DATA COLLECTION		2			4			6	NA	NA	NA
PROJECT MEETINGS	6							6	NA	NA	NA
PROJECT ADMINISTRATION	12							12	NA	NA	NA
PRELIMINARY ENGINEERING											
GEOTECH COORDINATION								0	NA	NA	NA
ASSIST IN CONSTRUCTION COST ESTIMATES		2			4			6	NA	NA	NA
ASSIST WITH PREPARATION OF PER	1	2	4		24	40		71	NA	NA	NA
ASSIST WITH PER MEETING	2							2	NA	NA	NA
FINAL DESIGN											
BRIDGE LAYOUT DETAILS	1	2	4		16	32		55	NA	NA	NA
MISCELLENAEIOUS DETAILS	2	8	24		96	128		258	NA	NA	NA
PREPARATION OF STANDARDS	1	2	4		12		6	25	NA	NA	NA
ASSIST WITH DETAILED CONSTRUCTION COST ESTIMATE	1	3	6		12			22	NA	NA	NA
ASSIST WITH PRODUCTION OF PROJECT MANUAL	1	3	6		12		6	28	NA	NA	NA
CONSTRUCTION PHASE SERVICES											
PREBID MEETING	1										
RESPOND TO QUESTIONS	1	1	2		4	4	1	13	NA	NA	NA
PRE-CONSTRUCTION MEETING	1							1			
ATTEND FIELD MEETINGS AND SITE VISITS	2	2						4	NA	NA	NA
PREPARATION OF CHANGE ORDERS	1	1			2		1	5	NA	NA	NA
REVIEW AND APPROVE SHOP DRAWINGS	1	2	4		16			23	NA	NA	NA
REVIEW AND APPROVE FORMING DETAILS	1	2	4		8			15	NA	NA	NA
RESPOND TO RFIS	1	2	2		4			9	NA	NA	NA
ANSWER GENERAL QUESTIONS	1	2	2		4			9	NA	NA	NA
PROVIDE RECORD DRAWINGS	2				16	16		34	NA	NA	NA
HOURS SUB-TOTALS	39	36	62	0	234	220	14	605		0	
CONTRACT RATE PER HOUR	\$290.00	\$230.00	\$190.00	\$145.00	\$135.00	\$125.00	\$70.00			# OF SHEETS	
TOTAL LABOR COSTS	\$11,310.00	\$8,280.00	\$11,780.00	\$0.00	\$31,590.00	\$27,500.00	\$980.00	\$91,440.00			
LABOR SUBTOTAL								\$91,440.00			

OTHER DIRECT EXPENSES	# OF UNITS	UNIT	COST/UNIT					
Mileage (based on current IRS rate)	390	mile	\$0.700					\$273.00
Overnight mail - letter size		each						\$0.00
Overnight mail - oversized box		each						\$0.00
Photocopies B/W (8.5 x 11)		each						\$0.00
Photocopies B/W (11 x 17)		each						\$0.00
SUBTOTAL DIRECT EXPENSES								\$273.00

SUMMARY	
TOTAL LABOR COSTS	\$91,440.00
OTHER DIRECT EXPENSES	\$273.00
TOTAL	\$91,713.00

FEE SCHEDULE

TASK DESCRIPTION	PROJECT MANAGER RPLS	PROJECT SUPERVISOR	SURVEY TECHNICIAN	CADD OPERATOR	FIELD CREW COORDINATOR	2-PERSON FIELD CREW	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	HR / SHT
RIGHT-OF-WAY SURVEY										
RIGHT-OF-WAY MAPPING	24		50	44	8	72	1	199		
RESEARCH			40					40	N/A	N/A
DELIVERABLE	20		50	40			1	111	N/A	N/A
HOURS SUB-TOTALS	44	0	140	84	8	72	2	350	0	
CONTRACT RATE PER HOUR	\$175.00	\$145.00	\$125.00	\$100.00	\$110.00	\$155.00	\$75.00			
TOTAL LABOR COSTS	\$7,700.00	\$0.00	\$17,500.00	\$8,400.00	\$880.00	\$11,160.00	\$150.00	\$45,790.00		
% DISTRIBUTION OF STAFFING	12.57%	0.00%	40.00%	24.00%	2.29%	20.57%	0.57%			
SUBTOTAL FC 145								\$45,790.00		

TASK DESCRIPTION	PROJECT MANAGER RPLS	PROJECT SUPERVISOR	SURVEY TECHNICIAN	CADD OPERATOR	FIELD CREW COORDINATOR	2-PERSON FIELD CREW	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	HR / SHT
DESIGN SURVEY AND SURVEY CONTROL										
ROE LETTERS, TRACKING, REPORTS	10						40	50	N/A	N/A
ESTABLISH CONTROL AND DIGITAL LEVEL LOOP	35		40	32	4	48		159	N/A	N/A
PREPARE CONTROL MAPS	10		32	40				82		
TOPOGRAPHIC SURVEY	30		28	110	20	230		418	N/A	N/A
TOPOGRAPHIC DELIVERABLES	10		20	80			4	114	N/A	N/A
HOURS SUB-TOTALS	95	0	120	262	24	278	44	823	0	
CONTRACT RATE PER HOUR	\$175.00	\$145.00	\$125.00	\$100.00	\$110.00	\$155.00	\$75.00			
TOTAL LABOR COSTS	\$16,625.00	\$0.00	\$15,000.00	\$26,200.00	\$2,640.00	\$43,090.00	\$3,300.00	\$106,855.00		
% DISTRIBUTION OF STAFFING	11.54%	0.00%	14.58%	31.83%	2.92%	33.78%	5.35%			
SUBTOTAL FC 160 (150)								\$106,855.00		

LABOR SUMMARY BY FUNCTION CODE	PROJECT MANAGER RPLS	PROJECT SUPERVISOR	SURVEY TECHNICIAN	CADD OPERATOR	FIELD CREW COORDINATOR	2-PERSON FIELD CREW	ADMIN/ CLERICAL	TOTAL MH BY FC	TOTAL COSTS BY FC
RIGHT-OF-WAY SURVEY FC 130 (130)	44	0	140	84	8	72	2	350	\$45,790.00
DESIGN SURVEY AND SURVEY CONTROL	95	0	120	262	24	278	44	823	\$106,855.00
SUBTOTAL LABOR EXPENSES	139	0	260	346	32	350	44		\$152,645.00

UNIT COSTS	# OF UNITS	COST/UNIT	UNIT				
PARCELS	42	\$ 2,955.00	EACH				\$124,110.00
LEVEL A & B SUE	3	\$ 3,730.00	EACH				\$11,190.00
CONTROL & ROW STAKING	3	\$ 5,885.00	EACH				\$17,655.00
BORE HOLE LOCATIONS	1	\$ 3,530.00	EACH				\$3,530.00
SUBTOTAL UNIT COSTS	49						\$156,485.00

OTHER DIRECT EXPENSES	# OF UNITS	COST/UNIT	UNIT				
Mileage (based on current IRS rate)		\$0.700	mile				\$0.00

FEE SCHEDULE

Certified Letter Return Receipt			each				\$0.00
Standard Postage			each				\$0.00
Deed Copies			sheet				\$0.00
SUBTOTAL DIRECT EXPENSES							\$0.00

SUMMARY	
TOTAL COSTS FOR SUR ONLY	\$152,645.00
NON-SALARY (UNIT COSTS) FOR SUR ONLY	\$156,485.00
NON-SALARY (OTHER DIRECT EXPENSES) FOR SUR ONLY	\$0.00
GRAND TOTAL	\$309,130.00

FEE SCHEDULE

TASK DESCRIPTION	SR ENV PLANNER	PROJECT ENV PLANNER	JR ENV PLANNER			TOTAL LABOR HRS. & COSTS	UNIT	NO OF UNITS	HOURS PER UNIT
GENERAL									
DATA COLLECTION / FIELD RECONNAISSANCE	2		20			38	NA	NA	NA
PROJECT MEETINGS (up to 4 meetings)	2	4	4			10	NA	NA	NA
COORDINATION WITH LOCAL AGENCIES (up to 2 meetings)	2					2	NA	NA	NA
PROJECT ADMINISTRATION (up to 4 months)	6					18	NA	NA	NA
PRELIMINARY ENGINEERING						0	NA	NA	NA
ENVIRONMENTAL CONSTRAINTS EVALUATION (preparation of Constraints Map)	1	2	4			23	NA	NA	NA
PREPARATION OF PER (Environmental Constraints Report - up to 2 rounds of review)	1	6	24			31	NA	NA	NA
PER MEETING (assumes one in person meeting)	1					1	NA	NA	NA
FINAL DESIGN						0	NA	NA	NA
ASSIST WITH PRODUCTION OF PROJECT MANUAL						0	NA	NA	NA
HOURS SUB-TOTALS	15	12	52	0	0	123		0	
CONTRACT RATE PER HOUR	\$276.00	\$218.00	\$117.00	\$0.00	\$100.00			# OF SHEETS	
TOTAL LABOR COSTS	\$4,140.00	\$2,616.00	\$6,084.00	\$0.00	\$0.00	\$17,996.00			
LABOR SUBTOTAL						\$17,996.00			

OTHER DIRECT EXPENSES	# OF UNITS	UNIT	COST/UNIT				
Mileage (based on current IRS rate)	100	mile	\$0.70				\$70.00
ASTM Haz Mat Search (based on land use density and length of project)	1	each	\$800.00				\$800.00
SUBTOTAL DIRECT EXPENSES							\$870.00

SUMMARY	
TOTAL LABOR COSTS	\$17,996.00
OTHER DIRECT EXPENSES	\$870.00
TOTAL	\$18,866.00

FEE SCHEDULE

TASK DESCRIPTION	PROJECT MANAGER	ENGINEER SENIOR	ENGINEER PROJECT	ENGINEER DESIGN	ENGINEER IN TRAINING II	ENGINEER IN TRAINING I	ENGINEERING TECHNICIAN SENIOR	ENGINEERING TECHNICIAN	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	HR / SHT
GEOTECH INVESTIGATION												
Coordinate Soil Bore Locations/Mark/Utility Call-ins			2			12	8			22	N/A	N/A
Field Personnel and Management During Drilling			2			12	72			86	N/A	N/A
Sample Classification, Laboratory Coordination and Boring Log Generation								20		20	N/A	N/A
Preliminary Geotechnical Report with Bridge Recommendations	2	4	12			40		2		60	N/A	N/A
Final Geotechnical Report with Bridge Recommendations	2	4	30			20		1		57	N/A	N/A
Prepare Boring Log Sheets, Stamp and Seal		2	4			8			6	20	N/A	N/A
Design Meetings		6	6									
HOURS SUB-TOTALS	4	16	56	0	0	92	80	23	6	277	0	
CONTRACT RATE PER HOUR	\$190.00	\$170.00	\$150.00	\$100.00	\$100.00	\$100.00	\$80.00	\$55.00	\$55.00			
TOTAL LABOR COSTS	\$760.00	\$2,720.00	\$8,400.00	\$0.00	\$0.00	\$9,200.00	\$6,400.00	\$1,265.00	\$330.00	\$29,075.00		
% DISTRIBUTION OF STAFFING	1.44%	5.78%	29.22%	0.00%	0.00%	33.21%	28.88%	8.30%	2.17%			
SUBTOTAL FC 102 (110)										\$29,075.00		

LABOR SUMMARY BY FUNCTION CODE	SUPPORT MANAGER	ENGINEER SENIOR	ENGINEER PROJECT SENIOR	ENGINEER PROJECT	ENGINEER DESIGN	ENGINEER IN TRAINING II	ENGINEER IN TRAINING I	GEOLOGIST JUNIOR	ADMIN/ CLERICAL	TOTAL MH BY FC	TOTAL COSTS BY FC
GEOTECH INVESTIGATION	4	16	56	0	0	92	80	23	6	277	\$29,075.00
SUBTOTAL LABOR EXPENSES	4	16	56	0	0	92	80	23	6		\$29,075.00

UNIT COSTS	# OF UNITS	Test Code	COST/UNIT	UNIT						
Unconfined Compressive Strength (Soil)	30	ASTM D2166	\$45.00	each						\$1,350.00
Unconfined Compressive Strength (Rock)		ASTM D2938		each						\$0.00
Soil Boring/Rock Coring without TCP (< 60 ft.)	310	N/A	\$18.00	LF						\$5,580.00
Soil Boring/Rock Coring without TCP (> 60 ft.)		N/A		LF						\$0.00
Borehole Grouting - Bentonite Chips	310	N/A	\$7.00	LF						\$2,170.00
Pavement Coring, thickness up to 6" (Each)	23	N/A	\$150.00	each						\$3,450.00
Pavement Coring, thickness 6" to 12" per inch	138	N/A	\$12.00	inch						\$1,656.00
Patch Asphalt Cold Mix/ Ready Mix Concrete per core	23	N/A	\$50.00	each						\$1,150.00
Determining Moisture Content in Soil Materials	132	Tex-103-E	\$9.00	each						\$1,188.00
Determining Liquid Limits of Soils	56	Tex-104-E	\$25.00	each						\$1,400.00
Determining Plastic Soil Limits	56	Tex-105-E	\$29.00	each						\$1,624.00
Calculating the Plasticity Index of Soils	56	Tex-106-E	\$30.00	each						\$1,680.00
Particle Size Analysis of Soils		Tex-110-E	\$48.00	each						\$0.00
Determining the Amount of Material in Soils Finer than the 75 micrometer (No. 200) Sieve	56	Tex-111-E	\$48.00	each						\$2,688.00
Determining Sulfate Content in Soils - Colorimetric Method	30	Tex-145-E	\$170.00	each						\$5,100.00
Dispersive Characteristic by Crumb Test	6	ASTM D6572	\$38.00	each						\$228.00
Double Hydrometer	3	ASTM D4221	\$177.00	each						\$531.00
Specific Gravity	4	ASTM D854	\$59.00	each						\$236.00
Consolidated-Underdrained Triaxial Compression - Multi-Sample Single-Stage	1	ASTM D4767	\$2,500.00	each						\$2,500.00
SUBTOTAL UNIT COSTS										\$32,531.00

OTHER DIRECT EXPENSES	# OF UNITS	COST/UNIT	UNIT						
Mileage (based on current IRS rate)	360	\$0.700	mile						\$252.00
Mobilization and Demobilization of Drilling Rig (Trips over 100 miles from office to site)	150	\$6.00	mile						\$900.00
Traffic Control Services, Arrow Boards and Attenuator trucks - (Includes labor, equipment and fuel)	6	\$2,420.00	day						\$14,520.00
SUBTOTAL DIRECT EXPENSES									\$15,672.00

SUMMARY	
TOTAL COSTS FOR GEO ONLY	\$29,075.00
NON-SALARY (UNIT COSTS) FOR GEO ONLY	\$32,531.00
NON-SALARY (OTHER DIRECT EXPENSES) FOR GEO ONLY	\$15,672.00
GRAND TOTAL	\$77,278.00

38%

FEE SCHEDULE

TASK DESCRIPTION	PROJECT MANAGER	ENGINEER SENIOR	ENGINEER PROJECT	ENGINEER DESIGN	ENGINEER IN TRAINING II	ENGINEER IN TRAINING I	ENGINEERING TECHNICIAN SENIOR	ENGINEERING TECHNICIAN	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	HR / SHT
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FEE SCHEDULE

TASK DESCRIPTION	PROJECT MANAGER	ENGINEER PROJECT	ENGINEER UTILITIES	ENGINEER TECHNICIAN	ENGINEER IN TRAINING I	ADMIN/ CLERICAL	TOTAL LABOR HRS. & COSTS	NO OF DWGS	HR / SHT
Utility Engineering									
Utility Base Layout	2	8		24	8		42	N/A	N/A
Utility Coordination Meetings	32	12		6	6		56	N/A	N/A
Utility Kick Off Mtg & Field Review	8	8					16	N/A	N/A
Utility Conflict Matrix, CAD file and Contact List. Progress Mtgs w State and it's reps	12	24		40	24		100	N/A	N/A
Utility Coordination							0		
HOURS SUB-TOTALS	54	52	0	70	38	0	214	#REF!	
CONTRACT RATE PER HOUR	\$375.00	\$200.00	\$100.00	\$115.00	\$180.00	\$100.00			
TOTAL LABOR COSTS	\$20,250.00	\$10,400.00	\$0.00	\$8,050.00	\$6,840.00	\$0.00	\$45,540.00		
% DISTRIBUTION OF STAFFING	25.23%	24.30%	0.00%	32.71%	17.76%	0.00%			
SUBTOTAL FC 135 (135)							\$45,540.00		

LABOR SUMMARY BY FUNCTION CODE	PROJECT MANAGER	ENGINEER PROJECT	ENGINEER UTILITIES	ENGINEER IN TRAINING II	ENGINEER IN TRAINING I	ADMIN/ CLERICAL	TOTAL MH BY FC	TOTAL COSTS BY FC
Utility Engineering	54	52	0	70	38	0	214	\$45,540.00
SUBTOTAL LABOR EXPENSES	54	52	0	70	38	0		\$45,540.00

UNIT COSTS	# OF UNITS	COST/UNIT	UNIT			
SUE Mobilization/Demobilization	120	\$5.50	mile			\$660.00
SUE (Quality Level D)	42,000	\$0.40	LF			\$16,800.00
SUE (Quality Level C)	500	\$0.40	LF			\$200.00
SUE (Quality Level B - Utility Designation)	42,000	\$1.85	LF			\$77,700.00
SUE (Quality Level A - Utility Locate, Test Holes) Level A: 0 to 5 ft	4	\$1,500.00	each			\$6,000.00
SUE (Quality Level A - Utility Locate, Test Holes) Level A: > 5 to 8 ft	2	\$1,750.00	each			\$3,500.00
SUE (Quality Level A - Utility Locate, Test Holes) Level A: > 8 to 13 ft	2	\$1,900.00	each			\$3,800.00
SUE (Quality Level A - Utility Locate, Test Holes) Level A: > 13 to 20 ft	0	\$2,500.00	each			\$0.00
SUE (Quality Level A - Utility Locate, Test Holes) Level A: > 20 ft	0	\$175.00	FT			\$0.00
One (1) Designating Person with equipment	16	\$150.00	hour			\$2,400.00
Two (2) Designating Person with equipment	16	\$200.00	hour			\$3,200.00
Two (2) Person Vacuum Excavation with equipment	0	\$300.00	hour			\$0.00
Coring and repairing the pavement includes labor, equipment, and materials	2	\$250.00	each			\$500.00
SUBTOTAL UNIT COSTS						\$114,760.00

OTHER DIRECT EXPENSES	# OF UNITS	COST/UNIT	UNIT			
Mileage (based on current IRS rate)	120	\$0.700	mile			\$84.00
Traffic Control Services, Arrow Boards and Attenuator trucks - (Includes labor, equipment and fuel)	1	\$5,250.00	day			\$5,250.00
SUBTOTAL DIRECT EXPENSES						\$5,334.00

FEE SCHEDULE

SUMMARY	
TOTAL COSTS FOR SUE ONLY	\$45,540.00
NON-SALARY (UNIT COSTS) FOR SUE ONLY	\$114,760.00
NON-SALARY (OTHER DIRECT EXPENSES) FOR SUE ONLY	\$5,334.00
GRAND TOTAL	\$165,634.00

APPENDIX A-2
Scope of Services (Hourly)

The work to be performed by the Engineer for additional services shall be approved in writing by the County, or LJA, prior to the Engineer starting any work on the task. Prior to initiating any work, the Engineer shall submit a scope of services and a proposed fee for each requested task for the County's review and approval. Tasks may include, but are not limited to, Construction Phase services or any other services deemed necessary by the County for the project.

Appendix B
Maximum Hourly Rates and Expenses

	Prime BBI	Surveying Weisser	Geotechnical Raba Kistner	SUE Pape Dawson	Traffic Signal TEDSI	Bridge Linfield
Job Classification	Maximum Raw Salary Rate	Maximum Raw Salary Rate	Maximum Raw Salary Rate	Maximum Raw Salary Rate	Maximum Raw Salary Rate	Maximum Raw Salary Rate
Principal	\$124.00					
Senior Project Manager	\$114.00					
Deputy Project Manager	\$88.00					
Support Manager		\$95.00	\$102.00	\$120.00	\$110.00	\$97.00
Senior Tolling Advisor				\$120.00		
Quality Manager	\$114.00	\$84.00	\$76.00	\$120.00		
Senior Project Engineer	\$75.00	\$79.00	\$62.00	\$90.00	\$98.00	
Project Engineer	\$63.00	\$53.00	\$53.00	\$75.00	\$80.00	\$63.00
Design Engineer				\$65.00	\$67.00	\$48.00
Senior Traffic Engineer				\$90.00		
Traffic Engineer				\$75.00		
Senior Structural Engineer	\$88.00			\$90.00		\$77.00
Structural Engineer	\$75.00			\$75.00		
Senior Electrical Engineer				\$90.00		
Electrical Engineer				\$75.00		
Engineer-In-Training II	\$57.00	\$63.00	\$41.00	\$55.00	\$55.00	\$45.00
Senior Environmental Planner						
Project Environmental Planner						
Junior Environmental Planner			\$41.00			
Engineer-In-Training I	\$50.00		\$40.00	\$40.00		
Senior CADD Technician	\$56.00	\$47.00	\$37.00	\$55.00		
CADD Technician	\$46.00	\$35.00		\$45.00	\$48.00	\$42.00
Junior CADD Technician		\$24.00		\$35.00		
Senior Engineering Technician		\$53.00	\$31.00	\$55.00	\$58.00	
Engineering Technician		\$51.00	\$27.00	\$45.00	\$50.00	
Junior Engineering Technician				\$35.00		
Senior Scheduler				\$80.00		
GIS Specialist	\$59.00	\$49.00		\$55.00		
GIS Technician	\$42.00	\$35.00		\$40.00		
Survey Project Manager (TX RPLS)		\$84.00		\$90.00		
Project Manager (TX RPLS)/Senior RPLS		\$53.00		\$75.00		
Surveyor RPLS						
Survey Technician		\$49.00				
1-Person Survey Crew						
2-Person Survey Crew						
3-Person Survey Crew		\$84.00		\$310.00		
4-Person Survey Crew				\$350.00		
SUE Project Manager		\$53.00		\$120.00		
SUE Senior Engineer		\$79.00		\$75.00		
SUE Engineer-In-Training		\$63.00		\$52.00		
SUE Engineering Technician		\$51.00		\$45.00		
SUE Utilities Coordinator				\$65.00		
Admin	\$36.00	\$25.00	\$30.00	\$35.00	\$41.00	\$23.00

Appendix C

Insurance

Engineer's Insurance Requirements. Throughout the term of this Agreement, Engineer shall carry and maintain in force the insurance described herein.

Commercial General Liability Insurance at least as broad as CG 00 01 (including protective liability coverage on operations of independent Engineers engaged in construction, blanket contractual liability coverage, products liability coverage, and explosion, collapse and underground hazards coverage) for the benefit of Engineer, against claims for personal injury, bodily injury and property damage, with a limit of not less than One Million Dollars (\$1,000,000) in the event of personal injury or bodily injury to any number of persons or of damage to property arising out of any one occurrence, and not less than \$1,000,000 in the aggregate applicable to this Program.

Workers' compensation insurance covering all employees of Engineer employed in, on or about the Program in order to provide statutory benefits as required by the laws of the State of Texas.

Automobile Liability: \$300,000 combined single limit per accident for bodily injury and property damage. County shall be named as Additional Insured for this coverage.

Professional Liability: \$1,000,000 aggregate covering Engineer in connection with the services to be provided by Engineer under this Agreement.

Engineer shall, upon County's request, furnish County with appropriate certificates evidencing the insurance required to be maintained by Engineer hereunder.