



COUNTY OF KAUFMAN | PURCHASING DEPARTMENT  
100 N. Washington St. | Kaufman, Texas 75142  
469-376-4548 | purchasing@kaufmancounty.net

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## **KAUFMAN COUNTY**

### **REQUEST FOR QUALIFICATIONS**

**RFQ #21-20**

### **ENGINEERING DESIGN SERVICES**

### **ON-SYSTEM PROJECTS**

**RETURN DEADLINE: 2:00 P.M., MONDAY, JULY 19, 2021**

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**LEGAL NOTICE**

Kaufman County, Texas  
Advertisement for Submittals

Sealed responses will be received in the office of the Purchasing Agent located at 100 N. Washington, Kaufman, Texas 75142 until **Monday, July 19, 2021, at 2:00 p.m.** for the following:

**RFQ 21-20: ENGINEERING DESIGN SERVICES | KAUFMAN COUNTY  
TRANSPORTATION BOND PROGRAM ON-SYSTEM PROJECTS**

Specifications may be obtained online (<https://www.kaufmancounty.net/county-offices/purchasing-agent/>), in the office of the Purchasing Agent, 100 N. Washington St., Kaufman, Texas, or requested by email ([purchasing@kaufmancounty.net](mailto:purchasing@kaufmancounty.net)).

All submittals must be clearly addressed to the Purchasing Department and include the solicitation name and number on the outside of the package. The responses will be publicly opened, immediately following the closing date and time, in the Courthouse-Annex 2<sup>nd</sup> Floor Conference Room located at 100 N. Washington, Kaufman, Texas 75142.

Kaufman County cannot guarantee, due to internal mail delivery procedures, any submittals sent priority mail will be picked up from the post office by County mail employees and delivered to the Purchasing Department by the closing date and time. It is recommended that submittal deliveries be made either in person or via an alternate delivery method ensuring delivery to the physical address. ***Respondents shall bear full responsibility for ensuring that the submittal is delivered to the specified location by due date and time.*** Late submittals will be considered as non-responsive and returned un-opened.

**SOLICITATION NAME:** Engineering Design Services | Kaufman County Transportation Bond Program On-System Projects

**SOLICITATION NUMBER:** RFQ 21-20

**DUE DATE/TIME:** 2:00 p.m., Monday, July 19, 2021

**MAIL OR DELIVER TO:** Kaufman County Purchasing Department  
Attn: Raylan Smith  
Kaufman County Courthouse – Annex  
100 N. Washington St.  
Kaufman, Texas 75142

County reserves the right to reject all submittals and to waive any informality in submittals received, deemed to be in the best interest of the County. No officer or employee of Kaufman County shall have a financial interest, direct or indirect, in any contract with Kaufman County.



**COUNTY OF KAUFMAN | PURCHASING DEPARTMENT**  
100 N. Washington St. | Kaufman, Texas 75142  
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### **Standard Terms and Conditions**

1. Only the Commissioners Court of Kaufman County, Texas, acting as a body may enter into any type of agreement or contract on behalf of Kaufman County. Department heads, other elected or appointed officials, are not authorized to enter into any type of agreement or contract on behalf of Kaufman County, or to agree to any type of supplemental agreements or contracts for goods or services. Contracts are subject to review by the County's attorney prior to signature by the authorized County official.
2. The Respondent shall be considered an independent contractor and not an agent, servant, employee, or representative of the County in the performance of the work. No term or provision, hereof, or act of the Respondent shall be construed as changing that status.
3. The Respondent shall defend, indemnify, and shall hold harmless the County and all its officers, agents, employees, from and against all suits, actions, or claims of the character, name, and description brought for or on account of any injuries or damages (including but not restricted to death) received or sustained by any person(s) or property on account of, arising out of, or in connection with the performance of the work, including without limiting the generality of the foregoing, any negligent act or omission of the Respondent on the execution or performance of the Contract.
4. Kaufman County reserves the right to terminate an agreement / contract at any time, without cause, upon thirty (30) days written notice to Respondent. Upon termination, Kaufman County shall pay Respondent for those costs directly attributable to work done or supplies obtained in preparation for completion or compliance with the Contract, except no payment shall be made for costs recoverable by Respondent in the normal course of doing business or which can be mitigated through the sale of supplies or materials obtained for use under this Contract. It is further agreed by Respondent that Kaufman County shall not be liable for loss or reduction of any anticipated profit.
5. Advertising – Respondent shall not advertise or publish, without Kaufman County's prior consent, the fact that Buyer has entered into this contract, except to the extent necessary to comply with proper requests for information from an authorized representative of the federal, state, or local government.
6. No negotiations, decisions, or actions shall be executed by the Respondent as a result of any discussions with any public service official, employee, and/or consultant. Only those transactions provided in written form may be considered binding.

7. All documents submitted as part of the Respondent's offering will be deemed confidential during the evaluation process.
8. **Conflict of Interest Questionnaire (CIQ) Form** – Effective January 1, 2006, Chapter 176 of the Texas Local Government Code requires that any vendor or person considering doing business with a local government entity disclose in the Questionnaire Form (CIQ), the vendor or person's affiliation or business relationship that might cause a conflict of interest with a local government entity. By law, this questionnaire must be filed with the records administrator of Kaufman County no later than the 7<sup>th</sup> business day after the date the person becomes aware of facts that require the statement to be filed. See Section 176.006, Local Government Code. An offense under this section is a Class C misdemeanor. By submitting a response to this request, the vendor represents that it is following the requirements of Chapter 176 of the Texas Local Government Code. Original, completed forms should be included, if applicable, in your response.
9. **Certificate of Interested Parties Form 1295** – In 2015, In 2015, the Texas Legislature adopted House Bill 1295, which added section 2252.908 of the Government Code. The law states that a government entity or state agency may not enter into certain contracts with a business entity unless the business entity submits a disclosure of interested parties form to the governmental entity or state agency at the time the business entity submits the signed contract to the government entity or state agency. The form discloses any interested parties who have a controlling interest (10% or more ownership) in the business entity and those who actively participate in facilitating the contract or negotiate the terms of the contract (broker, intermediary, advisor, and/or attorney), if any. The disclosure requirement applies to a contract entered into on or after January 1, 2016.

The "Certificate of Interested Parties" form must be completed on the Texas Ethics Commission website, printed, signed, and submitted to the County by the authorized agent of the Business Entity with acknowledgment that disclosure is made under oath and under penalty of perjury prior to final contract execution. To obtain additional information on HB 1295, to learn more about Texas Ethics Commission process to create a new account or to complete an electronic version of Form 1295 for submission with a signed contract, please go to the following website: <https://www.ethics.state.tx.us/tec/1295-Info.htm>. Instructional videos for business entities on how to file online can be found at [https://www.ethics.state.tx.us/whatsnew/elf\\_info\\_form1295.htm](https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm).

The identification number (section 3 of form 1295) is this solicitation number.

By submitting a response to this request, the respondent represents that it is in compliance with the requirements of Chapter 176 of the Texas Local Government Code. Please send completed forms to the Kaufman County Clerk's Office located at the Kaufman County Courthouse, 100 W. Mulberry, Kaufman, TX 75142.

10. **Nondiscrimination Authorities** – The Respondent, for itself, its assignees, and successors in interest agrees to comply with the following nondiscrimination statutes and authorities; including but not limited to: Title VI of the Civil Rights Act of 1964 (42 U.S.C. §2000d et seq., 78 stat. 252), and 49 CFR Part 21. The respondent will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements or materials and leases of equipment. The Respondent will not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices.

11. **TEXAS PUBLIC INFORMATION ACT** – All responses submitted to Kaufman County become the property of Kaufman County and are subject to the Public Information Act (Texas Government Code Chapter 552). The interested firms/individuals should familiarize themselves with the provisions of the Act. In no event shall Kaufman County, or any of its agents, representatives, consultants, directors, officers, or employees, be liable to a firm/individual for the disclosure of all or any portion of a response submitted pursuant to the solicitation. If a firm/individual has special concerns about information that it desires to make available to Kaufman County, but which it believes constitutes a trade secret, proprietary information, or other information excepted from disclosure, such firm/individual should specifically and conspicuously designate (i.e., mark confidential) each page of that information, which the Respondent believes, should not be disclosed outside Kaufman County. Disclosure of requested information will be subject to the Texas Public Information Act.
12. **Purchasing Agent as Contract Administrator** – The Purchasing Agent will serve as sole liaison between the Kaufman County Commissioners Court, the affected Kaufman County Departments, and the successful vendor. Unless directly outlined in this specification the vendor shall consider only the Purchasing Agent authorized to communicate, by any means, information or suggestions throughout the solicitation process. The Purchasing Agent has been designated the responsibility to ensure compliance with contract requirements, such as but not limited to, acceptance, inspection, and delivery. The County will not pay for work, equipment or supplies, which it deems unsatisfactory. Vendors will be given a reasonable opportunity to correct deficiencies before termination. This, however, shall in no way be construed as negating the basis for termination for non-performance.

**Standard Terms & Conditions - RESPONDENT’S ACCEPTANCE** – By submitting a response to this solicitation, the respondent certifies that it has fully read and understands the terms, conditions, and statements and has knowledge of the scope and quality of the services to be furnished and intends to adhere to the provisions described herein. Respondent understands and agrees that this solicitation is issued predicated on anticipated requirements for Kaufman County and that Kaufman County has made no representation, written or oral, that any such requirements be furnished under a contract arising from this solicitation. Respondent acknowledges and understand that the Commissioners Court of Kaufman County reserves the right to refuse to award a contract for any or all services covered in this solicitation. Furthermore, Respondent recognizes and understands that any cost borne by the Respondent which arises from Respondent’s performance hereunder shall be at the sole risk and responsibility of the Respondent.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Date

**This original, along with original signature MUST be returned with solicitation response**

**KAUFMAN COUNTY, TEXAS  
RFQ #21-20**

**ENGINEER DESIGN SERVICES  
KAUFMAN COUNTY TRANSPORTATION BOND PROGRAM  
ON-SYSTEM PROJECTS**

***I. GENERAL***

Kaufman County Commissioners Court is requesting Qualification Statements from firms who can adequately demonstrate they have the resources, experience, and qualifications to provide Engineering Design Services for projects identified in Exhibit B.

If your firm would be interested in submitting qualifications for this project, please submit six (6) complete sets, one original and five copies, as well as one electronic copy in PDF format on flash drive, prior to 2:00 p.m., Monday, July 19, 2021. Qualification Statements should be sent to:

Raylan Smith, Purchasing Agent  
100 N. Washington  
Kaufman, TX 75142

Late statements will not be accepted. Each firm is responsible for ensuring that responses to this RFQ have been delivered by date, time, and location specified. Firms are directed to submit questions in writing no later than 5:00 p.m. Friday, July 9, 2021. Substantive questions and answers will be provided to all RFQ recipients and will be made available on the Purchasing Department website and the online bidding system, Vendor Registry:

- <https://www.kaufmancounty.net/purchasing/about/bids-and-proposals/>
- <https://vrapp.vendorregistry.com/Bids/View/BidsList?BuyerId=fbdcaf8b-5a8c-49b1-9c7f-e2774c03dc3d>

Except for the submission of written questions or in response to requests or inquiries from Kaufman County, firms shall refrain from contacting members of the Selection Committee, Commissioners Court, consultants, or other staff with respect to this RFQ or the selection process.

By submitting a response to this RFQ, each firm unequivocally acknowledges that he/she has read and fully understands this RFQ, has asked questions, and has received satisfactory answers from Kaufman County regarding any provisions of this RFQ with regard to which clarification was desired.

All responses submitted become the property of Kaufman County and are subject to the Public Information Act (Texas Government Code Chapter 552). All documentation shall be open for public inspection, except for trade secrets and confidential information so identified by firm as such. All confidential information should be specifically and conspicuously marked as such in red. Kaufman County will follow all requirements and procedures in the Public Information Act when responding to requests for disclosure of documents.

**HISTORICALLY UNDERUTILIZED BUSINESS (HUB) CONTRACTING:** The goal of Kaufman County is to ensure all HUBs, as described in the Texas Government Code, Title 10 Subtitle D, Chapter 2161, have maximum opportunities to participate in the county's procurement and good faith effort to increase contract awards for the purchase of goods or services from the HUBs. HUB vendors are encouraged to participate in the county's purchasing and bidding process. While the county is oriented to adhere to good faith efforts, nothing in this effort shall be construed to establish set-asides or mandatory quotas. The county and all prime contractors (if subcontractors are to be let) will take the affirmative steps listed below:

1. Placing qualified small and minority businesses and women's business enterprises on solicitation lists.
2. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources.
3. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business.
4. Establishing delivery schedules, where the requirements permit, which encourage participation by small and minority business, and women's business enterprises.
5. Using the services and assistance of the Small Business Administration, the Minority Business Development Agency of the Department of Commerce and the Texas Comptroller's (TPASS) Centralized Master Bidders List HUB Directory.



## **II. EVALUATION**

The Request for Qualifications will be evaluated using a point system (100) divided as follows:

### **A. Firm Qualifications (40)**

1. Background/Qualifications of the firm (20)
2. Availability and dedication to Kaufman County project (5)
3. Contract requirements (5)
4. Response to Disclosure Requirements in Section IV, A, 6. (5)
5. Clarity and brevity of the response and requested information included and thoroughness of response to the requirements (5)

### **B. Technical Qualifications (60)**

1. Qualifications of key personnel adequate for requirement (10)
2. Verifiable relevant experience (20)
3. Understanding of the project (10)
4. Creativity and thoroughness of proposed approach and/or methodology to providing services (20)

It is understood that Kaufman County reserves the right to accept or reject any and/or all responses to this RFQ as it shall deem to be in the best interest of Kaufman County. Receipt of any Qualification Statements shall be received and acknowledged only so as to avoid disclosure of the contents to competing bidders and kept secret during the negotiation/evaluation process. However, all documentation shall be open for public inspection after a contract is awarded, except for trade secrets and confidential information so identified by bidder as such. All confidential information should be clearly marked in red.

Any cost or expense incurred by the Respondent that is associated with the preparation of the submittal or during the phase of the selection process, if any, shall be borne by the Respondent. It is understood that Kaufman County reserves the right to accept or reject any and/or all responses to this RFQ as it shall deem to be in the best interest of Kaufman County.

Some firms considered for project selection may, at the sole discretion of Kaufman County, be required to appear and present oral presentations. The oral presentations, if required, shall be conducted to enable the committee to further evaluate the Respondent's capability to provide project-specific services. Kaufman County will notify the affected firms of the schedule, order, and procedure for the presentation, including the content, time limits, use of handouts or visual aids, etc. The oral presentations shall be scored by the Selection Committee. Kaufman County emphasizes that it may elect to forego oral presentations for all or some projects. Consequently, all responses shall be comprehensive and clear on their face, and no firm should rely upon the opportunity to present additional or clarifying information during oral presentations.

Respondents to this RFQ should understand that Kaufman County will select firms according to their responses to this RFQ and the qualifications of the key personnel represented in the responses. In this context, Responders should further understand that project managers or key personnel on County projects, once selected, are expected to remain in place. Any changes in key personnel must be disclosed to the county as soon as possible, but no later than three business days after the key personnel is removed from association with the project. Additionally, any replacement in project manager or key personnel must be deemed satisfactory by the

county.

### **Evaluation for Projects listed in Exhibit B**

The county will select one firm for each of the projects identified in Exhibit B and will contract for scopes as services are needed. Additional services may be contracted with the selected firm by project as needed.

Once Qualification Statements are reviewed, a recommended ranking will be compiled by an Evaluation Committee appointed by Commissioners Court. Interviews may be conducted with the firms most qualified. Additional information may be required at that time. Commissioners Court will select the firm most qualified for the project upon review of the recommendations from the Evaluation Committee. Negotiations will begin with the firm determined to be most qualified for the project. Commissioners Court will make the final selection and approve the proposed contract.

Negotiations will include selection of specific services as in the best interest of Kaufman County. The selected firm must be prepared to enter negotiations with each service individually represented by costs and necessity to the overall project. Kaufman County may elect to contract for any or all of the proposed services after negotiations.

### **III. SCOPE OF SERVICES**

The intent of this solicitation is to obtain professional services of a qualified firm to work with Kaufman County to provide Engineering Services related to projects identified in Exhibit B. Projects are identified as follows:

1. Outer Loop
2. FM 460 and FM 740
3. FM 740 and FM 548
4. FM 741 Extension
5. US 175 Grade Separations
6. US 175 Southbound Frontage Roads

Firms will be selected as prime provider with possible services to develop and prepare schematics; route studies; environmental documents; hydrology and hydraulic studies; geotechnical testing; and plans, specifications, and estimate (PS&E) for Kaufman County Transportation Bond project. The scope of services may include the design of urban and rural roadways that involve major reconstruction or capacity improvements and may also include design of roadways on new locations. The project may include the design of conventional bridges, bridge replacements, bridge widening, railroad overpasses, and non-standard retaining walls. Provider(s) will be responsible for design for all required drainage facilities including bridges, culverts, and storm drain systems. For waterway bridge structures, the work includes a scour report and analysis. Other activities include design of traffic control plans; storm water pollution prevention plans (SW3P); and design of signals, illumination, signage, and striping. Other services which may be required are right-of-way maps, design and construction surveys, aerial mapping, subsurface utility engineering, and right-of-way acquisition services. Construction management and inspection services may also be required.

All services performed by the provider(s) on TxDOT roadways shall be in accordance with TxDOT's policies, guidelines, and procedures. All selected firms will be registered with the Texas Board of Professional Engineers, and key personnel will be licensed by the Texas Board of Professional Engineers. The Scope of Services will include coordination with the appropriate related entities of Kaufman County government, including, but not limited to, the Department of Public Works/Engineering, Commissioners Court, the office of the District Attorney, and support services related thereto.

#### **IV. QUALIFICATION STATEMENTS**

Submittals shall take the form of a bound 8½-inch by 11-inch report in portrait orientation with a Table of Contents and all pages numbered in sequence. Submittals shall include one original and five copies, for a total of six, as well as one electronic copy in PDF format submitted on flash drive. Binding must allow reports to lay flat when opened, but no 3-ring binders. Responses to this RFQ should be single sided and limited to the page limitations and format listed below. Section dividers and Table of Contents do not count in the page limitations. Minimum font type or font size on graphics and charts shall be 10 point. Type size for text shall be 12 point. Each section shall be clearly identified and tabbed. Respondents shall not submit pricing in this package.

Kaufman County will accept qualification statements on any or all of the Projects listed in Exhibit B. Your firm may submit on one or all. If submitting for more than one, only one qualification statement is required, but each Project must be responded to individually as indicated herein. Submittal shall be presented in order of Section A for the Firm and Section B for each Project your firm selects.

##### **A. Firm**

All firms submitting will be evaluated on Section A once, and that score will be combined with the scores received for Section B for each project that was submitted (not to exceed 16 pages).

1. Table of Contents (1 page)
2. Executive Summary (2 pages):
  - a. Include name, physical/mailling address, e-mail addresses, and telephone number of the firm submitting the proposal;
  - b. Include a summary of the firm's interest in this service; *and*
  - c. Include the name of one or more individuals authorized to represent the Respondent in its dealings on a contractual basis.
3. Company Qualifications (5 pages): Include information that demonstrates company's ability to fully represent the County for the specified projects and services.
4. Firm's Schedule Compliance and Firm's Commitment Statements (2 pages):
  - a. A statement concerning the firm's ability to comply with dedicated and accelerated schedules upon direction of the Kaufman County Commissioners Court; *and*
  - b. A statement concerning your firm's commitment to Kaufman County and how services will be prioritized in the best interest of Kaufman County.
5. Negotiation Requirements (2 pages):
  - a. Include a description of what information will be required during negotiations to finalize the contract with your firm; *and*
  - b. Identify any unacceptable provisions, exclusions, or omissions within

the example contract form included in Exhibit A.

6. Disclosure (4 pages)

- a. Respondents to this RFQ shall disclose all potential conflicts of interest or representation of any firm that could be involved in the proposed program and acknowledgement of compliance with Section 176.001 of the Government Code as required herein. The disclosure section of this RFQ must be addressed specifically in your response, even if no conflicts exist.
- b. Disclosure of Certain Relationship forms shall be submitted to the Kaufman County Clerk and not submitted with your response.
- c. Respond to each of the following:
  1. Address any litigation that your firm may be, or has been, involved in over the last five (5) years.
  2. Identify all contracts involving your firm that were terminated due to non-performance over the last five (5) years; *and*
  3. Identify adverse actions sanctioned by any regulatory authorities over the last five (5) years.

**B. Technical Qualifications**

For the Project identified in Exhibit B, respond to the items listed below. Each project shall be clearly identified by Project number and title and shall be limited to the page numbers per Project below (not to exceed 20 pages per Project for which Respondent submits).

1. Key Personnel Qualifications (7 pages):
  - a. Names, qualifications, and individual responsibilities of key personnel who will participate in the project;
  - b. An organization chart and required qualification documentation; *and*
  - c. A list of all proposed subcontractors, to the extent known, along with their current HUB status.
2. Verifiable Experience (5 pages):
  - a. Include details regarding firm's verifiable experience with projects of similar size and complexity, including a detailed list of responsibilities and summary of accomplishments per identified client; *and*
  - b. A list of projects completed within the last 5 years, to include the name and location of each project, the client, a contact person, and contact's phone number.

3. Understanding of Project Services and Exchange of Information (2 pages):
  - a. Include a summary statement identifying your understanding of the project services; *and*
  - b. Outline the manner in which coordination and the exchange of information will be assured between all parties to ensure a successful project.
4. Approach and Methodology (6 pages):
  - a. Describe the approach and/or methodology to be taken by your firm to represent the interests of Kaufman County during each project; *and*
  - b. Documentation should include overall approach, as well as the proposed methodology by identified tasks.



COUNTY OF KAUFMAN | PURCHASING DEPARTMENT  
100 N. Washington St. | Kaufman, Texas 75142  
469-376-4548 | purchasing@kaufmancounty.net

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**SOLICITATION RFQ 21-20: Engineering Design Services  
Kaufman County Transportation Bond Program On-System Projects**

**RESPONDENT SIGNATURE PAGE**

Kaufman County Purchasing Department  
Attn: Raylan Smith, Purchasing Agent  
100 N. Washington  
Kaufman, Texas 75142

Dear Ms. Smith,

This Statement of Qualifications is being submitted by the undersigned, on behalf of the Respondent:

\_\_\_\_\_ [Firm Name – Printed].

The person signing this letter on behalf of the Respondent represents to Kaufman County that the information provided herein is true, complete, and accurate to the best of the knowledge and belief of the undersigned.

Executed this the \_\_\_\_\_ day of \_\_\_\_\_, 2020.

RESPONDENT:

\_\_\_\_\_ [Signature]

Printed Name:		Title	
Company Name		Address City, State, Zip	
Email		Phone (office)	
Phone (cell)			

**This original, along with original signature MUST be returned with solicitation response.**

# **Exhibit A**

## **Standard Contract Form**



**AGREEMENT BETWEEN COUNTY AND ENGINEER**

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THIS DOCUMENT HAS IMPORTANT LEGAL CONSEQUENCES; CONSULTATION WITH AN ATTORNEY IS ENCOURAGED WITH RESPECT TO ITS COMPLETION OR MODIFICATION.

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**THIS AGREEMENT** is made on the \_\_\_\_\_ day of \_\_\_\_\_, 2021,

Between the **COUNTY:**                      KAUFMAN COUNTY, TEXAS  
  c/o Kaufman County Commissioners Court  
  Attention: County Judge  
  100 W. Mulberry  
  Kaufman, Texas 75142

and the **ENGINEER:**                      \_\_\_\_\_  
  \_\_\_\_\_  
  \_\_\_\_\_  
  \_\_\_\_\_

for the following **PROJECT:**            Professional Engineering and Surveying Services for  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

in an **AMOUNT** not to exceed:        \$ \_\_\_\_\_

The COUNTY and ENGINEER agree as set forth below.

**ARTICLE I**  
**ENGINEER’S RESPONSIBILITY**

1.1     The ENGINEER’S services consist of those services performed by the ENGINEER, ENGINEER’S employees, and the ENGINEER’S consultants as enumerated in Articles 2 and 3 of this Agreement.

1.2     The ENGINEER’S services shall be performed as expeditiously as is consistent with professional skill and care and the orderly progress of the Work. The ENGINEER shall submit for the COUNTY’S approval a schedule for the performance of the ENGINEER’S services which may be adjusted as the Project proceeds and shall include allowances for periods of time required for the COUNTY’S review and for approval of submissions by authorities having jurisdiction over the Project. Time limits established by this schedule approved by the COUNTY shall not, except for reasonable cause, be exceeded by the ENGINEER or the COUNTY.

**ARTICLE II**  
**SCOPE OF ENGINEER'S BASIC SERVICES**

2.1 The ENGINEER'S Basic Services consist of those described in attached Exhibit "A" and incorporated by reference hereto – SCOPE OF BASIC SERVICES TO BE PROVIDED BY \_\_\_\_\_, TO KAUFMAN COUNTY.

**ARTICLE III**  
**ADDITIONAL SERVICES**

3.1 The services described in attached Exhibit "B" as Additional Services are not included in the Basic Services. It is expressly understood and agreed that ENGINEER shall not furnish any of the additional services without the prior written authorization of the COUNTY or the COUNTY'S designee. The COUNTY shall have no obligation to pay for such additional services, which have been performed without the prior written authorization of the COUNTY as herein above provided.

3.2 Services which could possibly be required, but at the time of this Agreement were yet to be determined and which are not included in the Basic Services or Additional Services as identified and described in EXHIBIT "A" and EXHIBIT "B," respectively, shall be considered Contingent Additional Services. A list of possible Contingent Additional Services that could be needed as the Project proceeds is included at the end of Exhibit "B."

3.3 It is expressly understood and agreed that the ENGINEER shall not furnish any of the Contingent Additional Services without the prior written authorization of the COUNTY or the COUNTY'S designee. The COUNTY shall have no obligation to pay for such Contingent Additional Services, which have been performed without the prior written authorization of the COUNTY as herein above provided.

**ARTICLE IV**  
**COUNTY'S RESPONSIBILITY**

4.1 The COUNTY shall provide full information regarding requirements for the Project, including a program, which shall set forth the COUNTY's objective, schedules, constraints, and criteria.

4.2 The COUNTY shall establish and update an overall budget for the Project, including the Construction Cost, the COUNTY'S other costs, and reasonable contingencies related to all of these costs.

4.3 The COUNTY shall designate a representative authorized to act on the COUNTY'S behalf with respect to the Project. The COUNTY, or such authorized representative, shall render decisions in a timely manner pertaining to documents submitted by the ENGINEER in order to avoid unreasonable delay in the orderly and sequential progress of the ENGINEER'S service.

4.4 The COUNTY shall give prompt written notice to the ENGINEER if the COUNTY becomes aware of any fault or defect in the Project or non-conformance with the contract documents. Any delay by the COUNTY in providing said notice shall not constitute a waiver, a bar, or act to stop the COUNTY from exercising any of its rights under this contract.

4.5 Examine all studies, reports, sketches, drawings, specifications, proposals, and other documents presented by the ENGINEER; obtain advice of an attorney, insurance counselor, and other consultants as the COUNTY deems appropriate for such examination; and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of the ENGINEER.

4.6 The proposed language of certificates or certifications requested of the ENGINEER or the ENGINEER'S consultants shall be submitted to the ENGINEER for review and approval at least 14 days prior to execution. The COUNTY shall not request certifications that would require knowledge or services beyond the scope of this Agreement.

4.7 The COUNTY shall also provide those specific items identified in the attached Exhibit A incorporated by reference hereto – ITEMS TO BE PROVIDED BY THE COUNTY TO THE ENGINEER.

## **ARTICLE V**

### **CONSTRUCTION COST**

#### 5.1 DEFINITION

5.1.1 The Construction Cost shall be the total cost or estimated cost to the COUNTY of all elements of the Project designed or specified by the ENGINEER.

5.1.2 The Construction Cost shall include the cost at current market rates of labor and materials furnished by the COUNTY and equipment designed, specified, selected or specially provided by the ENGINEER, plus a reasonable allowance for the Contractor's overhead and profit. In addition, a reasonable allowance for contingencies shall be included for market conditions at the time of bidding and for changes in the work during construction.

5.1.3 Construction Cost does not include the compensation of the ENGINEER and the ENGINEER'S consultants, the costs of the land, right-of-way, financing, or other costs which are the responsibility of the COUNTY.

5.2 RESPONSIBILITY FOR CONSTRUCTION COSTS: Evaluations of the COUNTY'S Project budget, preliminary estimates of Construction Cost and detailed estimates of Construction Cost, if any, prepared by the ENGINEER, represent the ENGINEER'S best judgment as a design professional familiar with the construction industry. It is recognized, however, that neither the ENGINEER nor the COUNTY has control over the cost of labor, materials, or equipment; over the Contractor's methods of determining bid prices; or over competitive bidding, market, or negotiating conditions. Accordingly, the ENGINEER cannot and does not warrant or represent that bids or negotiated prices will not vary from the COUNTY'S Project budget or from any estimate of Construction Cost or evaluation prepared or agreed to by the ENGINEER.

## **ARTICLE VI**

### **USE OF ENGINEER'S DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS**

6.1 The COUNTY shall be the absolute and unqualified owner of all drawings, preliminary layouts, record drawings, sketches, and other documents prepared pursuant to this Agreement by the ENGINEER with the same force and effect as if the COUNTY prepared same. Copies of complete or partially completed mylar reproducible, preliminary layouts, record drawings, sketches, and other documents prepared pursuant to this Agreement shall be delivered to the COUNTY when and if this Agreement is terminated or upon completion of this Agreement, whichever occurs first. The ENGINEER may retain one set of reproducible copies of the documents, and these copies shall be for the ENGINEER'S sole use in preparation of studies or reports for the COUNTY. The ENGINEER is expressly prohibited from selling, licensing, or otherwise marketing or donating these documents, or using the documents in preparation of other work for any other client, without the prior express written permission of the COUNTY.

6.2 All documents including reports, drawings, and specifications prepared by the ENGINEER pursuant to this Agreement are instruments of service in respect of the Project. They are not intended or represented to be suitable for reuse by the COUNTY or others on extensions of the Project or on any other project. Any reuse without written verification or adaptation by the ENGINEER for the specific purposes intended will be at the COUNTY'S sole risk

and without liability or legal exposure to the ENGINEER. Any such verification or adaptation will entitle the ENGINEER to further compensation at rates to be agreed upon by the COUNTY and the ENGINEER.

6.3 Submission or distribution of documents to meet official regulatory requirements or for similar purposes in connection with the Project is not to be construed as publication in derogation of the ENGINEER'S reserved rights.

## **ARTICLE VII** **TERMINATION, SUSPENSION, OR ABANDONMENT**

7.1 This Agreement may be terminated by either party upon not less than fourteen (14) days written notice should the other party fail to substantially perform in accordance with the terms of this Agreement through no fault of the party initiating the termination.

7.2 If the COUNTY suspends the Project for more than thirty (30) consecutive days, the ENGINEER shall be compensated for services performed prior to notice of such suspension.

7.3 This Agreement may be terminated by the COUNTY upon not less than fourteen (14) days written notice to the ENGINEER in the event that the Project is permanently abandoned. If the COUNTY abandons the Project for more than ninety (90) consecutive days, the ENGINEER may terminate this Agreement by giving written notice.

7.4 If the COUNTY fails to give prompt written authorization to proceed with any phase of services after completion of the immediately preceding phase, the ENGINEER may, after giving seven (7) days written notice to the COUNTY, suspend services under this Agreement.

7.5 Failure of the COUNTY to make payments to the ENGINEER in accordance with this Agreement shall be considered substantial nonperformance and cause for termination.

7.6 If the COUNTY fails to make payment when due to the ENGINEER for services and expenses, the ENGINEER may, upon seven (7) days written notice to the COUNTY, suspend performance of services under this Agreement. Unless the ENGINEER receives payment in full within seven (7) days of the date of the notice, the suspension shall take effect without further notice. In the event of a suspension of services, the ENGINEER shall have no liability to the COUNTY for delay or damage caused by the COUNTY because of suspension of services.

7.7 In the event of termination that is not the fault of the ENGINEER, the ENGINEER shall be compensated for services performed prior to termination, together with Reimbursable Expenses, if any, then due.

7.8 All employees of the ENGINEER assigned to this contract shall have such knowledge and experience as will enable them to perform the duties assigned to them. The COUNTY may instruct the ENGINEER to remove any employee from association with work authorized in this contract if, in the sole opinion of the COUNTY, the work of that employee does not comply with the terms of this contract or if the conduct of that employee becomes detrimental to the work.

7.9 The ENGINEER must notify the COUNTY in writing as soon as possible, but no later than three business days after a project manager or other key personnel is removed from association with this contract, giving the reason for removal.

7.10 The ENGINEER may not replace the project manager or key personnel without prior consent of the COUNTY. The COUNTY must be satisfied that the new project manager or other key personnel is qualified to provide the authorized services. If the COUNTY determines that the new project manager or key personnel is not acceptable, the ENGINEER may not use that person in that capacity and shall replace him or her with one satisfactory to the COUNTY within forty-five (45) days.

**ARTICLE VIII**  
**MISCELLANEOUS PROVISIONS**

8.1 Unless otherwise provided, this Agreement shall be governed by the law of the principal place of business of the COUNTY. Venue for any dispute or disagreement regarding the terms of this Agreement shall be in Kaufman County, Texas.

8.2 Causes of action between the parties to this Agreement pertaining to acts or failures to act shall be deemed to have accrued and the applicable statutes of limitation shall commence to run not later than either the date of Substantial Completion, or the date of issuance of the final Certificate for Payment for acts or failures to act occurring after Substantial Completion.

8.3 The COUNTY and the ENGINEER, respectively, bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representative of such other party with respect to all covenants of this Agreement. Neither the COUNTY nor the ENGINEER shall assign this Agreement without the express written consent of the other party.

8.4 This Agreement represents the entire integrated agreement between the COUNTY and the ENGINEER and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both the COUNTY and the ENGINEER.

8.5 Nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the COUNTY or the ENGINEER.

8.6 Unless otherwise provided for in this Agreement, the ENGINEER and the ENGINEER'S consultants have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to, hazardous materials in any form at the Project site, including but not limited to asbestos, asbestos products, polychlorinated biphenyl (PCB) or other toxic substances.

8.7 The ENGINEER shall have the right to include representations of the design of the Project, including photographs, among the ENGINEER'S promotional professional materials. The ENGINEER'S materials shall not include the COUNTY'S confidential or proprietary information, if the COUNTY has previously advised the ENGINEER in writing of the specific information considered by the COUNTY to be confidential or proprietary.

8.8 **COMPLIANCE AND STANDARDS:** The ENGINEER agrees to perform the work hereunder in accordance with generally accepted standards applicable thereto, and shall use that degree of care and skill commensurate with the engineering profession to comply with all applicable state, federal and local laws, ordinances, rules, and regulations relating to the work to be performed hereunder and the ENGINEER'S performance.

8.9 **SURVEYING SERVICES:** In accordance with the Professional Land Surveying Practices Act of 1989, the COUNTY is informed that any complaints about surveying services may be forwarded to the Texas Board of Professional Land Surveying, 7701 North Lamar, Suite 400, Austin, Texas 78752, (512) 452-9427.

8.10 **INDEMNIFICATION:** ENGINEER shall save and hold harmless the COUNTY from and against any and all claims and liability due to activities of the ENGINEER, its agents or employees, performed under this Agreement and which result from any negligent act, error, or omission of the ENGINEER, or of any person employed by the ENGINEER. The ENGINEER shall also save harmless the COUNTY from and against any and all expenses, including attorney's fees, which might be incurred by the COUNTY in litigation, or otherwise, resisting said claims or liabilities which might be imposed on the COUNTY as the result of such activities by the ENGINEER, its agents, or employees.

**ARTICLE IX**  
**PAYMENTS TO THE ENGINEER**

9.1 **PAYMENTS ON ACCOUNT OF BASIC SERVICES:** Upon approval by the COUNTY, or the COUNTY'S designee, payment for Basic Services shall be made monthly and shall be in proportion to services performed that month within each phase of service.

9.2 **PAYMENTS ON ACCOUNT OF ADDITIONAL SERVICES:** Upon approval by the COUNTY or the COUNTY'S designee of the ENGINEER'S statement of services rendered or expenses incurred, payment on account of the ENGINEER'S Additional Services and for Reimbursable Expenses shall be made monthly.

9.3 **PAYMENTS WITHHELD:** No deductions shall be made from the ENGINEER'S compensation on account of penalty, liquidated damages or other sums withheld from payments to Contractors, or on account of the cost of changes in the Work other than those for which the ENGINEER has been found to be liable.

9.4 **ENGINEER'S ACCOUNTING RECORDS:** Records of Reimbursable Expenses pertaining to Additional Services and services performed on an hourly basis shall be available to the COUNTY or the COUNTY'S authorized representative at mutually convenient times.

9.5 **LIMIT OF APPROPRIATION:** Prior to the execution of this Agreement, the ENGINEER has been advised by the COUNTY and the ENGINEER fully understand and agrees, such understanding and agreement being of the absolute essence to this Agreement, that the total maximum compensation that ENGINEER may become entitled to hereunder, and the total maximum sum that the COUNTY shall become liable to pay to the ENGINEER hereunder, shall not, under any conditions, circumstances or interpretations hereof, exceed the sum certified as available by the County Auditor in the Auditor's Certificate attached hereto.

**ARTICLE X**  
**BASIS OF COMPENSATION**

The COUNTY shall compensate the ENGINEER from funds obtained through bond funds or current revenue of Kaufman County as follows:

10.1 **BASIC COMPENSATION:** For Basic Services, as described in Article 2, Basic Compensation shall be computed as follows:

In accordance with the attached Exhibit "B" incorporated by reference hereto, SCHEDULE OF FEES.

10.2 **COMPENSATION FOR ADDITIONAL SERVICES:** For Additional Services of the ENGINEER, as described in Article 3, compensation shall be computed as follows:

In accordance with the attached Exhibit "B" incorporated by reference hereto, SCHEDULE OF FEES.

10.3 **COMPENSATION FOR CONTINGENT ADDITIONAL SERVICES:**

10.3.1 For Contingent Additional Services of the ENGINEER, as described in Article 3, compensation shall be computed as follows:

In accordance with the attached Exhibit "B" incorporated by reference hereto, SCHEDULE OF FEES.

10.3.2 Payments shall be made by the COUNTY in accordance with Texas Government Code Chapter 2251. The COUNTY shall pay the ENGINEER'S statement as approved by the COUNTY's designee within thirty (30) days after the COUNTY'S designee's approval of the same, provided that the approval or payment of any such statement shall not be considered to be evidence of performance by the ENGINEER to the point indicated by such statement or of receipt or acceptance by the COUNTY of the work covered by such statement.

## **ARTICLE XI**

### **OTHER CONDITIONS OR SERVICES**

#### 11.1 INSURANCE

11.1.1 The ENGINEER shall file with the COUNTY a Certificate of Errors and Omissions Insurance having minimum limits of One Million and No/100 Dollars (\$1,000,000.00) for each occurrence and annual One Million and No/100 Dollars (\$1,000,000.00) aggregate. Such Errors and Omissions Insurance shall have a deductible not in excess of Two Hundred Thousand and No/100 Dollars (\$200,000.00) self-insured. Such Certificate shall bear the endorsement "Not to be canceled without thirty (30) days prior notice to KAUFMAN COUNTY, TEXAS." The ENGINEER shall maintain the Errors and Omissions Insurance at all times this Agreement is in effect and for a period of five (5) years after completion of the Project. Failure to maintain the required insurance shall be deemed to be a material breach of this Agreement.

11.1.2 The ENGINEER shall also provide Worker's Compensation, automobile and comprehensive general liability policies. The ENGINEER shall deliver the insurance certificates to the COUNTY. The coverage provided herein shall contain an endorsement providing thirty (30) days' notice to the COUNTY prior to any cancellation of coverage. Said coverage shall be written by an insurer acceptable to the COUNTY and shall be in a form acceptable to the COUNTY.

11.1.3 If the ENGINEER has canceled or allowed to lapse any of these insurance policies then the COUNTY may pay for such insurance and may hold the amount of such payment out of the ENGINEER's fees or be otherwise reimbursed. Failure to maintain the required insurance shall be deemed to be a material breach of this Agreement.

#### 11.2 PERIODS OF SERVICE

11.2.1 The ENGINEER shall begin work immediately upon receipt of the Notice-to-Proceed in writing by the COUNTY or the COUNTY's designee. The project will proceed according to the schedule shown in Exhibit "A." The schedule makes certain assumptions regarding review processes and other activities that are beyond the control of the ENGINEER.

11.2.2 Working days shall be defined as standard workdays between Monday and Friday, exclusive of holidays.

11.2.3 The schedule assumes an orderly progression of the ENGINEER'S services. Delays beyond the control of the ENGINEER may be cause for extension of this period of service, in which case the ENGINEER shall submit in writing to the COUNTY its request for such extensions a minimum of thirty (30) calendar days prior to the end of the affected service period.

11.2.4 If the COUNTY has requested significant modifications or changes in the general scope, extent or character of the Project, the time or performance of the ENGINEER'S services shall be adjusted equitably.

This Agreement entered into as of the day and year first written above.

The undersigned officers and/or agents of the parties hereto are the properly authorized officials and have the necessary authority to execute this Agreement on behalf of the parties hereto, and each party hereby certifies to the other that any necessary resolutions extending said authority have been duly passed and are now in force and effect.

**KAUFMAN COUNTY, TEXAS**

**ENGINEERING FIRM**

\_\_\_\_\_  
Hal Richards, County Judge

\_\_\_\_\_  
by:  
Principal

Acting by and through the authority of  
the Kaufman County Commissioners Court

Attest:

\_\_\_\_\_  
County Clerk

Approved as to Form:

\_\_\_\_\_  
Assistant District Attorney

**AUDITOR'S CERTIFICATE**

I hereby certify that funds are available in the amount of \$ \_\_\_\_\_ to accomplish  
and pay the obligation of Kaufman County under this contract.

\_\_\_\_\_  
Kaufman County Auditor



# **Exhibit B**

## **Projects**

# PROJECT #1

## EXHIBIT A

### SCOPE OF WORK

#### SERVICES TO BE PROVIDED BY THE ENGINEER

##### Kaufman County Outer Loop Phase 1

from SH 205 in ROCKWALL COUNTY LINE to IH 20

CSJ: TBD

The following generalized scope of services covers the work to prepare a Design Schematic, Environmental Document, and Preliminary Drainage Study through TxDOT and FHWA Design Schematic approval, and TxDOT and FHWA Environmental Clearance. The proposed improvements are to construct the proposed Kaufman County Outer Loop, in Kaufman County, on new location and incorporating some existing roadways to a six-lane divided controlled access freeway with continuous frontage roads. The design will allow for additional lanes in the future, as traffic warrants. The project is located between SH 205 in Rockwall County and IH 20 and is approximately 8.6 miles in length. The project alignment will generally follow that depicted in the Kaufman County Thoroughfare Plan. Storm drainage, bridges, grade separations for roadways and railroads, and interchanges at major highways will be involved in the design. The design will be consistent with any proposed TxDOT improvements at TxDOT highways, as well as local streets. The pavement design will be based on traffic projections and geo-technical analysis. Subsurface Utility Engineering (SUE) will be included during project development, as well as utility coordination activities. Project development activities must meet all requirements for federal funding eligibility.

#### I. Project Management (TxDOT Function Code 110)

- A. The ENGINEER will obtain and incorporate data made available by TxDOT, the cities, the North Central Texas Council of Governments, and the county.
- B. The ENGINEER will attend and provide meeting notes for status or coordination meetings.
- C. The ENGINEER will submit monthly invoices and progress reports.
- D. The ENGINEER will maintain a project schedule.

#### II. Route and Design Studies (TxDOT Function Code 110)

- A. The ENGINEER shall acquire all necessary data to prepare a controlled schematic. The schematic shall fully comply with the latest TxDOT process and procedure.
- B. The ENGINEER shall analyze applicable data, including, but not limited to, traffic counts, accident records, thoroughfare plans and produce traffic projections to determine the most appropriate design for the project. The ENGINEER will obtain TxDOT approval of all elements of the design.
- C. The ENGINEER shall work with local stakeholders and TxDOT to obtain TxDOT approval of the schematic.

#### III. Social, Economic, and Environmental Studies and Public Involvement (TxDOT Function Code 120)

- A. The ENGINEER shall prepare Environmental Documents according to TxDOT and FHWA guidelines. An Environmental Impact Statement is anticipated for the project.
- B. The ENGINEER shall conduct all necessary activities to obtain TxDOT and FHWA environmental clearance for the project.

# PROJECT #1

## EXHIBIT B

### SCOPE OF WORK

#### ADDITIONAL SERVICES TO BE PROVIDED BY THE ENGINEER

##### Kaufman County Outer Loop Phase 1

from SH 205 in ROCKWALL COUNTY LINE to IH 20

CSJ: TBD

The ENGINEER shall provide the necessary engineering and technical services for the preparation of plans, specifications, and estimates (PS&E) for the construction of the Kaufman County Outer Loop, in Kaufman County, on new location and incorporating some existing roadways, to a six-lane divided controlled access freeway with continuous frontage roads. The project will be prepared in conformance with state and federal requirements. The construction plan sets shall contain the required drawings, details, and applicable standards required to describe the grading, paving, drainage, structures, signing, pavement marking, delineation, sequence of construction, and traffic control for this construction project. The project will also require a TxDOT approved pavement design, additional SUE investigations, and preparation of ROW maps and deed descriptions, in accordance with the TxDOT approved schematics and environmental documents described in Exhibit A.

Under subsequent work authorizations, the engineer may provide some or all the following:

- Assistance with Right-of-Way Acquisition, including, but not limited to, testimony at eminent domain proceedings.
- Bidding services, including, but not limited to, responses to bidder questions, necessary plan addenda, bid analysis, and recommendation of award.
- Construction phase services, including, but not limited to, resident inspection, testing, verification of contractor pay requests, and recommendation for payments.
- Final inspections and project close-out activities, including, but not limited to, preparation of as-built plans and responsible engineer's certification of substantial compliance with plans and specifications.

The ENGINEER will be the single point of contact between the COUNTY and all contractors/subcontractors and will review all work performed, coordinate and conduct all meetings, and prepare and submit all project reports and documents.

# PROJECT #2

## EXHIBIT A

### SCOPE OF WORK

#### SERVICES TO BE PROVIDED BY THE ENGINEER

##### FM 460 and FM 740

from US 80 to FM 549

CSJ: TBD

The following generalized scope of services covers the work to prepare a Design Schematic, Environmental Document, and Preliminary Drainage Study through TxDOT and FHWA Design Schematic approval, and TxDOT and FHWA Environmental Clearance. The proposed improvements are to reconstruct FM 460 and FM 740, in Kaufman and Rockwall Counties, to four-lane divided urban roadways. Limits are on FM 460 from US 80 to the junction of FM 460/FM 740, and from that junction to north, on FM 740, to the intersection of FM 740/FM 549. The project is approximately 6.9 miles in length. The ENGINEER will determine the local and technically preferred design of the roadways in accordance with state and federal requirements and stakeholder feedback. Storm drainage, bridges, and modifications to the interchange at US 80 will be involved in the design, as well as locations where a raised median is required. The design will be consistent with any proposed improvements at intersections with TxDOT highways, as well as the public streets operated by other entities. The pavement design will be provided by TxDOT, using geotechnical data gathered by the ENGINEER. The ENGINEER will consider traffic handling requirements for phased construction and the locations of major utilities in the determination of vertical and horizontal elements of the project. Subsurface Utility Engineering (SUE) will be included during project development, as well as preliminary utility coordination activities. The ENGINEER will be required to closely coordinate all design activities with TxDOT and other entities and ensure these activities meet all requirements for state and federal funding.

The following scope of services is intended to cover the work necessary to prepare a Design Schematic, Environmental Document, and Preliminary Drainage Study through TxDOT Design Schematic approval and TxDOT Environmental Clearance for this project:

#### I. PROJECT MANAGEMENT (Function Code 110)

##### A. Incorporate data made available by TxDOT.

1. ENGINEER will receive data in MicroStation V8 DGN files (2-D and 3-D), with data files as appropriate.
2. ENGINEER will review information made available from TxDOT and ground truth this information with additional field investigations and surveys.

##### B. ENGINEER will attend and provide meeting notes for up to ten (10) status or coordination meetings with TxDOT.

##### C. ENGINEER will submit monthly invoices and progress reports.

##### D. ENGINEER will maintain a project schedule.

#### II. ROUTE AND DESIGN STUDIES (Function Code 110)

A. Data Collection

1. Obtain and review existing data made available by TxDOT.
2. Perform a field reconnaissance of the proposed project site.
3. Obtain “design-adequate” survey, orthographic photography, and DTM data from TxDOT and verify coordinate consistency and agreement with benchmark data.

B. Design Concept Conference (DCC)

1. Participate in and document the DCC prior to beginning preliminary schematic development.
2. Revise Design Summary Report (DSR) to reflect discussion and decisions at the DCC.

C. Develop Typical Sections

1. Existing typical sections will be based on as-built plans and existing traffic lane configurations.
2. Proposed typical sections will be based on pavement design and design traffic projections provided by TxDOT, functional classification, and the DSR approved by TxDOT.

D. Preliminary Schematic

1. Horizontal and Vertical Alignments
  - a) Horizontal alignments and horizontal roadway elements will be designed utilizing GEOPAK and based on the TxDOT Roadway Design manual and the DSR approved by TxDOT.
  - b) Vertical alignments will be designed utilizing GEOPAK and based on the TxDOT Roadway Design manual and the DSR approved by TxDOT.
  - c) Prepare an existing and projected Level of Service analysis to assist in sizing the intersections and facility.
2. Intersections
  - a) Develop intersection layout alternatives for major street crossings.
  - b) Evaluate intersection alternatives and present evaluation to TxDOT for approval of preferred alternative to include in Preliminary Schematic.
3. Driveway Access-Evaluate existing and proposed access as outlined in TxDOT's *Access Management Manual*.
4. Prepare Preliminary Cross Sections
  - a) Roadway cross sections will be created utilizing GEOPAK at a spacing no less than 100 feet with additional sections at points of interests to include, but not limited to, driveway locations, cross street locations, cross drainage structures, and pavement transition locations.
  - b) Existing ground cross sections will be developed based on the DTM data made available by TxDOT; however, the ENGINEER should not base the existing ground cross sections only on the DTM data, and additional survey will be required to acquire the changes that have occurred since the original DTM was prepared.
  - c) Proposed roadway cross sections will be developed based on the proposed typical sections and design horizontal and vertical alignments.
  - d) Preliminary earthwork calculations will be performed to include in the cost opinion.

5. ROW

- a) Existing ROW limits will be based on data made available by TxDOT and shown on the schematic and in the grading cross sections.
- b) Additional ROW needs will be shown on the schematic and in the grading cross sections.
- c) Property ownerships and parcel descriptions will be researched and depicted on the schematic.
- d) Drainage and construction easements will be determined and depicted on the schematic.

6. Utilities

- a) Identify probable horizontal and vertical conflicts based on major utility locates provided by the ENGINEER.
- b) Conflict identification shall be limited in scope and only for use in determining potential project costs associated with relocation.

7. Drainage

- a) Delineate limits of FEMA floodplains on schematic based on the latest available information from FEMA.
- b) Hydrology (discharge calculations) – Calculate discharges using rational method for drainage areas less than 200 acres, and TxDOT rural regression equations for drainage areas greater than 200 acres. ENGINEER will validate accuracy of rural regression equation discharges by providing HEC-HMS discharge calculations for drainage areas greater than 200 acres.
- c) Provide drainage area map in MicroStation V8 format based on USGS mapping for cross-drainage structures only. This file is for reference only, and the drainage areas will not be shown in the schematic.
- d) Provide HEC-RAS models of existing and proposed conditions at FEMA studied streams, bridges, and bridge class culverts. The proposed models will meet FEMA criteria of a maximum rise of one foot at any stream cross-section in comparison of proposed to existing conditions.
- e) Design cross-drainage structures using TxDOT Culvert Program (or other TxDOT approved program) for the proposed frontage roads and confirm that main-lane and ramp cross-drainage structures shown in the current schematic are adequately sized for the design storm and that these structures are adequately sized for the addition of proposed continuous frontage roads. ENGINEER will revise main-lane cross-drainage culverts, if needed, for compatibility with proposed frontage road cross-drainage structures.
- f) Generate culvert profiles for cross drainage box culvert structures to confirm adequate roadway cover and to confirm limits of construction at culvert ends. Culvert profiles will be used to confirm that proposed ROW is adequate at culvert ends or to determine limits of proposed grading easements, if applicable.
- g) Proposed drainage outfalls to existing streams will be checked for the potential of high velocities and erosion potential. Preliminary proposed contours at the outfalls will be developed to ensure that the limits of construction are within the ROW or to determine if additional proposed ROW or proposed easements are required at outfall locations.

- h) Preliminary ditch grades will be investigated to ensure that positive drainage is provided to outfalls and to ensure that the proposed ditch grading is contained within the proposed ROW.
- i) Design of water quality ponds or other water quality treatment features and SW3P controls (both temporary and permanent) will not be included in this scope.

8. ENGINEER will plan and execute a Value Engineering Study, if necessary, to meet TxDOT requirements.

#### E. Geometric Schematic

##### 1. Preliminary Schematic Review

The preliminary schematic will be submitted to the District Office as the Draft Geometric Schematic for review and comment by TxDOT.

##### 2. Prepare geometric schematic for submittal to District and Division adhering to the TxDOT Dallas Schematic Checklist. The ENGINEER will refine the preliminary schematic based on a compiled list of comments from the Dallas District, Area Office, Design Division, Public Meeting, and Public Hearing to produce the Final Geometric Schematic suitable for District and Division submittal.

- a) Refine proposed typical sections
- b) Refine horizontal and vertical alignments
- c) Refine preliminary cross sections
- d) Refine ROW
- e) Update utility conflicts
- f) Refine drainage analysis
- g) Update cost estimates

##### 3. Receive and address District and Division review comments.

##### 4. Prepare final Geometric Schematic for Division Approval.

##### 5. Secure TxDOT Design Schematic approvals.

### **III. SOCIAL, ECONOMIC, AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT (Function Code 120)**

A. ENGINEER will attend up to 15 City and/or County meetings and/or work sessions to present project status and resolve project issues.

B. ENGINEER will meet individual property owners as required.

C. If directed by TxDOT, ENGINEER will participate in public meetings, prepare the public meeting notices, mail out the notices as required, coordinate publishing the newspaper advertisements, secure the facility, provide meeting handouts and exhibits, provide staff for the public meeting, assist in responding to public meeting comments, and prepare the public meeting documentation for submission to ENV. Attendance at a pre-public meeting coordination meeting would be required, to be held at the TxDOT District office. If directed by TxDOT, ENGINEER will assist and participate in two noise wall workshop meetings.

D. If directed by TxDOT, ENGINEER will prepare the Notice Affording Opportunity for Public Hearing, mail out the notices as required, coordinate publishing the newspaper

advertisements, and prepare the Public Involvement Summary report. If directed by TxDOT, ENGINEER will participate in one public hearing, provide the public hearing notice, mail out the notices as required, coordinate publishing the newspaper advertisements, secure the facility, provide hearing handouts and exhibits, provide staff for the hearing, provide the public hearing transcript, prepare and deliver the technical presentation, assist in responding to public hearing comments, and prepare the Public Hearing Documentation for submission to ENV. Attendance at a pre-public hearing coordination meeting would be required, to be held at the TxDOT District office.

E. The ENGINEER will provide the environmental services for an Environmental Assessment and secure TxDOT environmental clearance through a Finding of No Significant Impact (FONSI). If directed by TxDOT, ENGINEER will prepare and coordinate the Notice of Availability Advertisements for the FONSI.

F. **PREPARATION OF THE ENVIRONMENTAL ASSESSMENT (EA) DOCUMENT.** ENGINEER will prepare the technical reports and EA according to TxDOT guidelines, as provided by TxDOT's Environmental Compliance Toolkits and the Dallas District. At a minimum, the EA will consist of the following information:

**1. Section I. Project Description, to include Description of Existing Facility and Description of Proposed Project.** The description of the existing facility will provide a description of the existing facility including length, width, and number of lanes, and existing right-of-way (ROW). This section will also address land use and include zoning information, if available. The description of the proposed facility will provide a description of the proposed facility, giving specific details on length, width, and number of lanes, and approximate total amount of ROW required or anticipated. This section will also discuss any proposed changes in alignment, temporary or permanent easements, functional roadway classification, and any available future zoning information.

**2. Section II. Need and Purpose for Proposed Project.** This section will provide a description of the need and purpose for the proposed project. If available, information on projected population growth, changing land use, adjacent new facilities, existing traffic and proposed projections, changing access needs, accident rates, current conditions, and environmental quality will be included in this section.

**3. Section III. Alternatives Including Proposed Action.** This section will discuss the alternatives considered for the proposed project, including a "No Build" option.

**4. Section IV. Affected Environment and Environmental Consequences.** This section will discuss the environmental impacts associated with social and economic issues, such as community impacts, environmental justice, right-of-way, relocations and displacements, land use, detours, utility relocations or adjustments, emergency services, bicycle and pedestrian facilities, and visual impacts. Also addressed in this section will be a description of the natural region



in which the project is located, and the potential impacts to natural resources, including vegetation, threatened and endangered species, farmland impacts, water quality issues (i.e., watershed basin, Federal Emergency Management Agency information, Texas Pollutant Discharge Elimination System, Notice of Intent, Storm Water Pollution Prevention Plan, wetlands, channel impacts, and permits), Corps of Engineers' Permits, indirect and cumulative impact/land use analysis, hazardous materials, air quality, qualitative MSAT analysis, noise, construction phase impacts, and cultural resources (archeology, historic properties, and 4(f) properties). It is anticipated this project will be covered under a NWP with notification to the Corps of Engineers, and the ENGINEER will provide all the technical data required for TxDOT to secure the NWP.

**a) Noise Modeling and Analysis**

- (1) As available, the project ENGINEER will provide drawings of the existing and proposed roadway segments in MicroStation or some other file formatted with a DGN extension. These drawings will be used in the assimilation of the noise model.
- (2) The existing roadway's baseline noise levels will be quantified by using FHWA's Traffic Noise Model (TNM). Site reconnaissance will be performed to identify noise receivers which exist within the project area; locate the receivers with respect to the right-of-way (ROW); and determine the locations, lengths, and heights of any existing masonry screening walls which would function as noise barriers. The existing roadway will be modeled to determine its expected influence on these nearby receivers.
- (3) The impacts of the proposed project will be determined by using projected design year traffic in conjunction with TNM to model the noise levels for the proposed roadway at the nearby receiver locations along the ROW. These values will be compared to the baseline levels to quantify the net increased/decreased noise levels resulting from the project. The resultant values will then be compared to the FHWA's Noise Abatement Criteria (NAC) to determine their acceptability.
- (4) If the TNM modeling indicates noise levels at specific receivers are in excess of the acceptable NAC, a noise barrier analysis of those receivers will be conducted to determine if noise mitigation is feasible and reasonable.
- (5) If noise walls are proposed, ENGINEER will schedule, prepare, participate, and execute Noise Wall Workshops with affected property owners, including mail-out notification of the meeting, mail-out of the noise wall surveys if directed by TxDOT, and responses to property owner/City comments associated with the proposed noise walls.

**b) Archeology**

- (1) Prepare an Archeological Background Study, in accordance with TxDOT in accordance with the *Review Standard for Archeological Background Studies*, available on TxDOT's Archeological Sites and Cemeteries Toolkit. If the background study indicates a survey is

warranted, and TxDOT ENV concurs with this finding, then a survey/cultural resource inventory would be performed as described below.

- (2) Conduct a cultural resource inventory within the Area of Potential Effect (APE). The cultural resource investigations will be regulated by the Texas Antiquities Committee (TAC) pursuant to the Texas Antiquities Code. Prior to fieldwork, THC maps and those at the Texas Archeological Research Laboratory (TARL) will be consulted to determine whether any previously recorded archeological sites are within the project APE or within 1 km of the project area, and whether buried, intact archeological deposits are likely.
- (3) The archeological inventory will consist of a pedestrian archeological survey of both sides of the ROW. Survey will involve careful examination of the ground surface and existing subsurface exposures. Pursuant to THC guidelines, approximately 17 shovel tests will be excavated per mile of APE, with the exception of disturbed areas. All tests will be manually excavated in 20 cm levels to 80 cm below the surface, or to the pre-cultural clay horizon, whichever is higher. Tests will be 30 cm in diameter and all excavated sediments will be screened through ¼-in mesh; all artifacts will be recovered for later analysis. The locations of all shovel tests will be recorded using a hand-held GPS receiver. Tests containing prehistoric or historic artifacts (exclusive of recent debris) will be further investigated with additional tests placed at 5-10 m intervals in radial directions; any location with more than two positive tests or with more than two different types of artifacts in the same test (ceramics, lithics, etc.) will be designated as an archeological site. In addition, mechanically excavated trenches will be dug within the existing ROW near major creeks to investigate the potential for deeply buried deposits. All sites will be assigned a temporary field number and will be recorded on State of Texas forms, photographed, sketch mapped, and plotted on the USGS topographic quadrangle. No artifacts will be collected. Following field work, sites will be logged with the registry at TARL and will be assigned a permanent site number.
- (4) ENGINEER will prepare a complete technical report, describing the work accomplished, and presenting the technical results. All archeological sites will be fully described, illustrated, and evaluated, and explicit management recommendations will be provided regarding eligibility for State Archeological Landmark designation and listing in the National Register of Historic Places. Site records will be prepared and submitted for permanent curation at the Texas Archeological Research Laboratory in Austin.
- (5) ENGINEER will prepare and mail out all right-of-entry (ROE) notifications to affected property owners per TxDOT guidelines.

### c) **Historic Resources**

- (1) Prepare a Historic Resources Project Coordination Request (PCR), utilizing TxDOT's Project Coordination Request for Historic Studies form.
- (2) If the PCR indicates that a reconnaissance-level survey is warranted, and TxDOT ENV Historians concur, then a survey would be conducted as described below.

d) **Field Investigation**

- (1) ENGINEER shall perform a reconnaissance survey conforming to the methodology outlined in guidance provided on TxDOT's Historic Resources Toolkit.
- (2) The survey shall document each historic-age resource (defined in 36 CFR 60 as a building, structure, object, historic district, or non-archeological site at least 50 years old at the time of letting) within the Study Area. The Study Area consists of the APE plus all parcels that are wholly or partially contained within the APE.

e) **Survey Report**

- (1) ENGINEER shall provide a letter report detailing the results and findings of the reconnaissance survey and the need, if any, to conduct intensive survey efforts. The report shall have sufficient detail and clarity to provide THC with the basis for making determinations of National Register of Historic Places (NRHP) eligibility or shall have sufficient detail and clarity to make recommendations concerning the scope of the intensive survey.
- (2) The report shall conform to the TxDOT Documentation Standard for a Reconnaissance Survey Report, which can be found in the TxDOT Historic Resources Toolkit.

**5. SECTION V. AGENCY COORDINATION.** This section will provide a discussion of agency coordination, and copies of coordination will be provided as an appendix to the EA.

**6. SECTION VI. PUBLIC INVOLVEMENT.** This section will provide a summary of public involvement activities undertaken for the project.

**7. SECTION VII. ENVIRONMENTAL PERMITS, ISSUES, AND COMMITMENTS.** This section will provide a summary of all permits, issues, and commitments identified in Section V of the EA.

**8. SECTION VIII. CONCLUSION.** The final section will address conclusions of the EA.

#### **IV. SURVEYS (Function Code 150)**

- A. The ENGINEER will utilize the DTM and Topographic data made available by TxDOT for the work associated with this project. The ENGINEER should not base the existing ground cross sections only on the DTM data, and should be aware that additional

survey will be required to get the changes that have occurred since the original DTM was prepared. The ENGINEER will review this information and perform spot checks in the field to verify the trueness of this information.

- B. The ENGINEER will provide supplemental topographic surveys to include cross streets, driveways, visible utilities, and drainage structures. The ENGINEER will provide X, Y, & Z values for cross streets extending from the existing right of way and to the termination point for driveways. The ENGINEER will endeavor to use reflector less total station technology for driveway surveys to eliminate the need to access private properties.
- C. Channel cross sections will be gathered for the use in the drainage analysis as required.
- D. For use in the public involvement process, property ownership information for adjacent tracts will be gathered. This information will include mailing addresses.

# PROJECT #2

## EXHIBIT B

### SERVICES TO BE PROVIDED BY THE ENGINEER

#### FM 460 and FM 740

from US 80 to FM 549

CSJ: TBD

The ENGINEER may be requested to provide the necessary engineering and technical services for the preparation of plans, specifications, and estimates (PS&E) for FM 460 from US 80 to the junction of FM 460/FM 740, and from that junction to north, on FM 740, to the intersection of FM 740/FM 549. The project PS&E will be prepared in accordance with the TxDOT approved schematics and environmental documents described in Exhibit A. The construction plan sets shall contain the required drawings, details, and applicable standards required to describe the grading, paving, drainage, structures, signing, pavement marking, delineation, sequence of construction, and traffic control for this construction project. Additional SUE investigations will be provided by the ENGINEER if necessary.

The ENGINEER may also be requested to provide the following if authorized by the COUNTY:

1. TxDOT approved pavement design(s),
2. TxDOT approved Right-of-Way maps and deed descriptions,
3. Utility Coordination, *and*
4. Construction Phase services to support TxDOT's staff.

The ENGINEER will be the single point of contact between the COUNTY and all subcontractors and will review all work performed by subcontractors, coordinate and conduct all meetings, and prepare and submit all project reports and documents.

The scope and fee for any additional services requested by the COUNTY will be determined at such time as the need is determined.

# PROJECT #3

## EXHIBIT A

### SCOPE OF WORK

#### SERVICES TO BE PROVIDED BY THE ENGINEER

##### FM 740 and FM 548

from IH 20 to US 80

CSJ: TBD

The following generalized scope of services covers the work to prepare a Design Schematic, Environmental Document, and Preliminary Drainage Study through TxDOT and FHWA Design Schematic approval, and TxDOT and FHWA Environmental Clearance. The proposed improvements are to reconstruct FM 740 and FM 548, in Kaufman County, to four-lane divided urban roadways, on FM 740 from IH 20 to the junction of FM 740/FM 548 and from that junction, on FM 548 to the intersection of FM 548/US 80. The project is approximately 4.4 miles in length. The ENGINEER will determine the local and technically preferred design of the roadways in accordance with state and federal requirements and stakeholder feedback. Storm drainage, bridges, and modifications to the interchanges at IH 20 and US 80 will be involved in the design, as well as locations where a raised median is required. The feasibility of a grade separation will be evaluated at the existing crossing of the Union Pacific Railroad, near Broad Street, and included in the project if it is found to be feasible. The design will be consistent with any proposed improvements at TxDOT highways, as well as the public streets operated by other entities. The pavement design will be provided by TxDOT, using geotechnical data gathered by the ENGINEER. The ENGINEER will consider traffic handling requirements for phased construction and the locations of major utilities in the determination of vertical and horizontal elements of the project. Subsurface Utility Engineering (SUE) will be included during project development, as well as preliminary utility coordination activities. The ENGINEER will be required to closely coordinate all design activities with TxDOT and other entities and ensure these activities meet all requirements for state and federal funding.

The following scope of services is intended to cover the work necessary to prepare a Design Schematic, Environmental Document, and Preliminary Drainage Study through TxDOT Design Schematic approval and TxDOT Environmental Clearance for this project:

#### **I. PROJECT MANAGEMENT (Function Code 110)**

- A. Incorporate data made available by TxDOT.
  - 1. ENGINEER will receive data in MicroStation V8 DGN files (2-D and 3-D), with data files as appropriate.
  - 2. ENGINEER will review information made available from TxDOT and ground truth this information with additional field investigations and surveys.
- B. ENGINEER will attend and provide meeting notes for up to ten (10) status or coordination meetings with TxDOT.
- C. ENGINEER will submit monthly invoices and progress reports.
- D. ENGINEER will maintain a project schedule.

## II. ROUTE AND DESIGN STUDIES (Function Code 110)

### A. Data Collection

1. Obtain and review existing data made available by TxDOT.
2. Perform a field reconnaissance of the proposed project site.
3. Obtain “design-adequate” survey, orthographic photography, and DTM data from TxDOT and verify coordinate consistency and agreement with benchmark data.

### B. Design Concept Conference (DCC)

1. Participate in and document the DCC prior to beginning preliminary schematic development.
2. Revise Design Summary Report (DSR) to reflect discussion and decisions at the DCC.

### C. Develop Typical Sections

1. Existing typical sections will be based on as-built plans and existing traffic lane configurations.
2. Proposed typical sections will be based on pavement design and design traffic projections provided by TxDOT, functional classification, and the DSR approved by TxDOT.

### D. Preliminary Schematic

1. Horizontal and Vertical Alignments
  - a) Horizontal alignments and horizontal roadway elements will be designed utilizing GEOPAK and based on the TxDOT Roadway Design manual and the DSR approved by TxDOT.
  - b) Vertical alignments will be designed utilizing GEOPAK and based on the TxDOT Roadway Design manual and the DSR approved by TxDOT.
  - c) Prepare an existing and projected Level of Service analysis to assist in sizing the intersections and facility.
2. Intersections
  - a) Develop intersection layout alternatives for major street crossings.
  - b) Evaluate intersection alternatives and present evaluation to TxDOT for approval of preferred alternative to include in Preliminary Schematic.
3. Driveway Access-Evaluate existing and proposed access as outlined in TxDOT’s *Access Management Manual*.
4. Prepare Preliminary Cross Sections
  - a) Roadway cross sections will be created utilizing GEOPAK at a spacing no less than 100 feet with additional sections at points of interests to include, but not limited to, driveway locations, cross street locations, cross drainage structures, and pavement transition locations.
  - b) Existing ground cross sections will be developed based on the DTM data made available by TxDOT; however, the ENGINEER should not base the existing ground cross sections only on the DTM data, and additional survey will be required to get the changes that have occurred since the original DTM was prepared.
  - c) Proposed roadway cross sections will be developed based on the proposed typical sections and design horizontal and vertical alignments.

- d) Preliminary earthwork calculations will be performed to include in the cost opinion.
5. ROW
- a) Existing ROW limits will be based on data made available by TxDOT and shown on the schematic and in the grading cross sections.
  - b) Additional ROW needs will be shown on the schematic and in the grading cross sections.
  - c) Property ownerships and parcel descriptions will be researched and depicted on the schematic.
  - d) Drainage and construction easements will be determined and depicted on the schematic.
6. Utilities
- a) Identify probable horizontal and vertical conflicts based on major utility locates provided by the ENGINEER.
  - b) Conflict identification shall be limited in scope and only for use in determining potential project costs associated with relocation.
7. Drainage
- a) Delineate limits of FEMA floodplains on schematic based on the latest available information from FEMA.
  - b) Hydrology (discharge calculations) – Calculate discharges using rational method for drainage areas less than 200 acres, and TxDOT rural regression equations for drainage areas greater than 200 acres. ENGINEER will validate accuracy of rural regression equation discharges by providing HEC-HMS discharge calculations for drainage areas greater than 200 acres.
  - c) Provide drainage area map in MicroStation V8 format based on USGS mapping for cross-drainage structures only. This file is for reference only, and the drainage areas will not be shown in the schematic.
  - d) Provide HEC-RAS models of existing and proposed conditions at FEMA studied streams, bridges, and bridge class culverts. The proposed models will meet FEMA criteria of a maximum rise of one foot at any stream cross section in comparison of proposed to existing conditions.
  - e) Design cross-drainage structures using TxDOT Culvert Program (or other TxDOT-approved program) for the proposed frontage roads and confirm that main-lane and ramp cross-drainage structures shown in the current schematic are adequately sized for the design storm and that these structures are adequately sized for the addition of proposed continuous frontage roads. ENGINEER will revise main-lane cross-drainage culverts, if needed, for compatibility with proposed frontage road cross-drainage structures.
  - f) Generate culvert profiles for cross drainage box culvert structures to confirm adequate roadway cover and to confirm limits of construction at culvert ends. Culvert profiles will be used to confirm that proposed ROW is adequate at culvert ends or to determine limits of proposed grading easements, if applicable.
  - g) Proposed drainage outfalls to existing streams will be checked for the potential of high velocities and erosion potential. Preliminary proposed contours at the outfalls will be developed to ensure that the limits of



- construction are within the ROW or to determine if additional proposed ROW or proposed easements are required at outfall locations.
- h) Preliminary ditch grades will be investigated to ensure that positive drainage is provided to outfalls and to ensure that the proposed ditch grading is contained within the proposed ROW.
  - i) Design of water quality ponds or other water quality treatment features and SW3P controls (both temporary and permanent) will not be included in this scope.
8. ENGINEER will prepare a preliminary design and cost estimate for providing a grade separated crossing at the Union Pacific Railroad for County and TxDOT consideration during schematic development. The design will conform to TxDOT and U/P guidelines. (Guidelines can be found at the following URL: <https://www.txdot.gov/inside-txdot/division/rail/guidelines.html>.) If feasible, the grade separation will be incorporated into the schematic design. If the grade separation is not feasible, ENGINEER will incorporate an at-grade crossing into the design in conformance with TxDOT and U/P guidelines.
  9. ENGINEER will plan and execute a Value Engineering Study, if necessary, to meet TxDOT requirements.

#### E. Geometric Schematic

1. Preliminary Schematic Review
  - The preliminary schematic will be submitted to the District Office as the Draft Geometric Schematic for review and comment by TxDOT.
2. Prepare geometric schematic for submittal to District and Division adhering to the TxDOT Dallas Schematic Checklist. The ENGINEER will refine the preliminary schematic based on a compiled list of comments from the Dallas District, Area Office, Design Division, Public Meeting, and Public Hearing to produce the Final Geometric Schematic suitable for District and Division submittal.
  - a) Refine proposed typical sections
  - b) Refine horizontal and vertical alignments
  - c) Refine preliminary cross sections
  - d) Refine preliminary railroad crossing details
  - e) Refine ROW
  - f) Update utility conflicts
  - g) Refine drainage analysis
  - h) Update cost estimates
3. Receive and address District and Division review comments.
4. Prepare final Geometric Schematic for Division Approval.
5. Secure TxDOT Design Schematic approvals.

### **III. SOCIAL, ECONOMIC, AND ENVIRONMENTAL STUDIES AND PUBLIC INVOLVEMENT (Function Code 120)**

- A. ENGINEER will attend up to 15 City and/or County meetings and/or work sessions to present project status and resolve project issues.
- B. ENGINEER will meet individual property owners as required.

- C. If directed by TxDOT, ENGINEER will participate in public meetings, prepare the public meeting notices, mail out the notices as required, coordinate publishing the newspaper advertisements, secure the facility, provide meeting handouts and exhibits, provide staff for the public meeting, assist in responding to public meeting comments, and prepare the public meeting documentation for submission to ENV. Attendance at a pre-public meeting coordination meeting would be required, to be held at the TxDOT District office. If directed by TxDOT, ENGINEER will assist and participate in two noise wall workshop meetings.
- D. If directed by TxDOT, ENGINEER will prepare the Notice Affording Opportunity for Public Hearing, mail out the notices as required, coordinate publishing the newspaper advertisements, and prepare the Public Involvement Summary report. If directed by TxDOT, ENGINEER will participate in one public hearing, provide the public hearing notice, mail out the notices as required, coordinate publishing the newspaper advertisements, secure the facility, provide hearing handouts and exhibits, provide staff for the hearing, provide the public hearing transcript, prepare and deliver the technical presentation, assist in responding to public hearing comments, and prepare the Public Hearing Documentation for submission to ENV. Attendance at a pre-public hearing coordination meeting would be required, to be held at the TxDOT District office.
- E. The ENGINEER will provide the environmental services for an Environmental Assessment and secure TxDOT environmental clearance through a Finding of No Significant Impact (FONSI). If directed by TxDOT, ENGINEER will prepare and coordinate the Notice of Availability Advertisements for the FONSI.
- F. **PREPARATION OF THE ENVIRONMENTAL ASSESSMENT (EA) DOCUMENT.** ENGINEER will prepare the technical reports and EA according to TxDOT guidelines, as provided by TxDOT's Environmental Compliance Toolkits and the Dallas District. At a minimum, the EA will consist of the following information:
1. **Section I. Project Description, to include Description of Existing Facility and Description of Proposed Project.** The description of the existing facility will provide a description of the existing facility including length, width, and number of lanes, and existing right-of-way (ROW). This section will also address land use and include zoning information, if available. The description of the proposed facility will provide a description of the proposed facility, giving specific details on length, width, and number of lanes, and approximate total amount of ROW required or anticipated. This section will also discuss any proposed changes in alignment, temporary or permanent easements, functional roadway classification, and any available future zoning information.
  2. **Section II. Need and Purpose for Proposed Project.** This section will provide a description of the need and purpose for the proposed project. If available, information on projected population growth, changing land use, adjacent new facilities, existing traffic and proposed projections, changing access needs, accident rates, current conditions, and environmental quality will be included in this section.

**3. Section III. Alternatives Including Proposed Action.** This section will discuss the alternatives considered for the proposed project, including a “No Build” option.

**4. Section IV. Affected Environment and Environmental Consequences.** This section will discuss the environmental impacts associated with social and economic issues, such as community impacts, environmental justice, right-of-way, relocations and displacements, land use, detours, utility relocations or adjustments, emergency services, bicycle and pedestrian facilities, and visual impacts. Also addressed in this section will be a description of the natural region in which the project is located, and the potential impacts to natural resources, including vegetation, threatened and endangered species, farmland impacts, water quality issues (i.e., watershed basin, Federal Emergency Management Agency information, Texas Pollutant Discharge Elimination System, Notice of Intent, Storm Water Pollution Prevention Plan, wetlands, channel impacts, and permits), Corps of Engineers’ Permits, indirect and cumulative impact/land use analysis, hazardous materials, air quality, qualitative MSAT analysis, noise, construction phase impacts, and cultural resources (archeology, historic properties, and 4(f) properties). It is anticipated this project will be covered under a NWP with notification to the Corps of Engineers, and the ENGINEER will provide all the technical data required for TxDOT to secure the NWP.

**a) Noise Analysis and Modeling**

- (1) As available, the project ENGINEER will provide drawings of the existing and proposed roadway segments in MicroStation or some other file formatted with a DGN extension. These drawings will be used in the assimilation of the noise model.
- (2) The existing roadway’s baseline noise levels will be quantified by using FHWA’s Traffic Noise Model (TNM). Site reconnaissance will be performed to identify noise receivers which exist within the project area, locate the receivers with respect to the right-of-way (ROW), and determine the locations, lengths, and heights of any existing masonry screening walls which would function as noise barriers. The existing roadway will be modeled to determine its expected influence on these nearby receivers.
- (3) The impacts of the proposed project will be determined by using projected design year traffic in conjunction with TNM to model the noise levels for the proposed roadway at the nearby receiver locations along the ROW. These values will be compared to the baseline levels to quantify the net increased/decreased noise levels resulting from the project. The resultant values will then be compared to the FHWA’s Noise Abatement Criteria (NAC) to determine their acceptability.
- (4) If the TNM modeling indicates noise levels at specific receivers are in excess of the acceptable NAC, a noise barrier analysis of those receivers will be conducted to determine if noise mitigation is feasible and reasonable.

- (5) If noise walls are proposed, ENGINEER will schedule, prepare, participate, and execute Noise Wall Workshops with affected property owners, including mail-out notification of the meeting, mail-out of the noise wall surveys if directed by TxDOT, and responses to property owner/City comments associated with the proposed noise walls.

**b) Archeology**

- (1) Prepare an Archeological Background Study, in accordance with TxDOT in accordance with the *Review Standard for Archeological Background Studies*, available on TxDOT's Archeological Sites and Cemeteries Toolkit. If the background study indicates a survey is warranted, and TxDOT ENV concurs with this finding, then a survey/cultural resource inventory would be performed as described below.
- (2) Conduct a cultural resource inventory within the Area of Potential Effect (APE). The cultural resource investigations will be regulated by the Texas Antiquities Committee (TAC) pursuant to the Texas Antiquities Code. Prior to fieldwork, THC maps and those at the Texas Archeological Research Laboratory (TARL) will be consulted to determine whether any previously recorded archeological sites are within the project APE or within 1 km of the project area, and whether buried, intact archeological deposits are likely.
- (3) The archeological inventory will consist of a pedestrian archeological survey of both sides of the ROW. Survey will involve careful examination of the ground surface and existing subsurface exposures. Pursuant to THC guidelines, approximately 17 shovel tests will be excavated per mile of APE, with the exception of disturbed areas. All tests will be manually excavated in 20 cm levels to 80 cm below the surface, or to the pre-cultural clay horizon, whichever is higher. Tests will be 30 cm in diameter and all excavated sediments will be screened through quarter-inch mesh; all artifacts will be recovered for later analysis. The locations of all shovel tests will be recorded using a hand-held GPS receiver. Tests containing prehistoric or historic artifacts (exclusive of recent debris) will be further investigated with additional tests placed at 5- to 10-meter intervals in radial directions; any location with more than two positive tests or with more than two different types of artifacts in the same test (ceramics, lithics, etc.) will be designated as an archeological site. In addition, mechanically excavated trenches will be dug within the existing ROW near major creeks to investigate the potential for deeply buried deposits. All sites will be assigned a temporary field number and will be recorded on State of Texas forms, photographed, sketch mapped, and plotted on the USGS topographic quadrangle. No artifacts will be collected. Following field work, sites will be logged with the registry at TARL and will be assigned a permanent site number.
- (4) ENGINEER will prepare a complete technical report, describing the work accomplished, and presenting the technical results. All archeological sites will be fully described, illustrated, and

evaluated, and explicit management recommendations will be provided regarding eligibility for State Archeological Landmark designation and listing in the National Register of Historic Places. Site records will be prepared and submitted for permanent curation at the Texas Archeological Research Laboratory in Austin.

- (5) ENGINEER will prepare and mail out all right-of-entry (ROE) notifications to affected property owners per TxDOT guidelines. The ENGINEER will comply with Union Pacific Railroad requirements and obtain the necessary ROE from the railroad for each activity requiring access to UPRR property.

c) **Historic Resources**

- (1) Prepare a Historic Resources Project Coordination Request (PCR), utilizing TxDOT's Project Coordination Request for Historic Studies form.
- (2) If the PCR indicates that a reconnaissance-level survey is warranted, and TxDOT ENV Historians concur, then a survey would be conducted as described below.

d) **Field Investigation**

- (1) ENGINEER shall perform a reconnaissance survey conforming to the methodology outlined in guidance provided on TxDOT's Historic Resources Toolkit.
- (2) The survey shall document each historic-age resource (defined in 36 CFR 60 as a building, structure, object, historic district, or non-archeological site at least 50 years old at the time of letting) within the Study Area. The Study Area consists of the APE plus all parcels that are wholly or partially contained within the APE.

e) **Survey Report**

- (1) ENGINEER shall provide a letter report detailing the results and findings of the reconnaissance survey and the need, if any, to conduct intensive survey efforts. The report shall have sufficient detail and clarity to provide THC with the basis for making determinations of National Register of Historic Places (NRHP) eligibility or shall have sufficient detail and clarity to make recommendations concerning the scope of the intensive survey.
- (2) The report shall conform to the TxDOT *Documentation Standard for a Reconnaissance Survey Report*, which can be found in the TxDOT Historic Resources Toolkit.

5. **Section V. Agency Coordination.** This section will provide a discussion of agency coordination, and copies of coordination will be provided as an appendix to the EA.

6. **Section VI. Public Involvement.** This section will provide a summary of public involvement activities undertaken for the project.

7. **Section VII. Environmental Permits, Issues, and Commitments.** This section will provide a summary of all permits, issues, and commitments identified in Section V of the EA.

8. **Section VIII. Conclusion.** The final section will address conclusions of the EA.

**IV. SURVEYS (Function Code 150)**

- A. The ENGINEER will utilize the DTM and Topographic data made available by TxDOT for the work associated with this project. The ENGINEER should not base the existing ground cross sections only on the DTM data, and should be aware that additional survey will be required to get the changes that have occurred since the original DTM was prepared. The ENGINEER will review this information and perform spot checks in the field to verify the trueness of this information.
- B. The ENGINEER will provide supplemental topographic surveys to include cross streets, driveways, visible utilities, and drainage structures. The ENGINEER will provide X, Y, & Z values for cross streets extending from the existing right-of-way and to the termination point for driveways. The ENGINEER will endeavor to use reflector-less total station technology for driveway surveys to eliminate the need to access private properties.
- C. Channel cross sections will be gathered for the use in the drainage analysis as required.
- D. For use in the public involvement process, property ownership information for adjacent tracts will be gathered. This information will include mailing addresses.

# PROJECT #3

## EXHIBIT B

### SERVICES TO BE PROVIDED BY THE ENGINEER

#### FM 740 and FM 548

from IH 20 to US 80

CSJ: TBD

The ENGINEER may be requested to provide the necessary engineering and technical services for the preparation of plans, specifications, and estimates (PS&E) for FM 740 from IH 20 to the junction of FM 740/FM 548, and from that junction, on FM 548 to the intersection of FM 548/US 80. The project PS&E will be prepared in accordance with the TxDOT approved schematics and environmental documents described in Exhibit A. The construction plan sets shall contain the required drawings, details, and applicable standards required to describe the grading, paving, drainage, structures, signing, pavement marking, delineation, sequence of construction, and traffic control for this construction project. Additional SUE investigations will be provided by the ENGINEER if necessary.

The ENGINEER may also be requested to provide the following if authorized by the COUNTY:

1. TxDOT approved pavement design(s),
2. TxDOT approved Right-of-Way maps and deed descriptions,
3. Utility Coordination, *and*
4. Construction Phase services to support TxDOT's staff.

The ENGINEER will be the single point of contact between the COUNTY and all subcontractors and will review all work performed by subcontractors, coordinate and conduct all meetings, and prepare and submit all project reports and documents.

The scope and fee for any additional services requested by the COUNTY will be determined at such time as the need is determined.

# PROJECT #4

## EXHIBIT A

### SCOPE OF WORK

#### SERVICES TO BE PROVIDED BY THE ENGINEER

##### FM 741 Extension

from North of US 175 to FM 3039

CSJ: TBD

The following generalized scope of services covers the work to prepare a Design Schematic, Environmental Document, and Preliminary Drainage Study through TxDOT and FHWA Design Schematic approval, and TxDOT and FHWA Environmental Clearance. The proposed improvements are to construct the proposed FM 741, in Kaufman County, on new location and incorporating some existing roadways to a six-lane divided urban roadway. The project design will allow for phased construction of the facility to include a lesser number of lanes initially, with minimal “throw away” construction and traffic disruption when widening to the six-lane ultimate facility occurs. The project is located between FM 741 north of US 175 in Crandall and FM 3039; it is anticipated to be approximately 2.6 miles in length; however, the exact length will be dependent on engineering studies, to include multiple alignments. The ENGINEER will determine the local and technically preferred alignment of the roadway based in accordance with state and federal requirements and stakeholder feedback. Storm drainage, bridges, and modifications to the interchange at US 175 will be involved in the design. The design will be consistent with any proposed TxDOT improvements at TxDOT highways, as well as local streets. The pavement design will be based on traffic projections and geo-technical analysis. Subsurface Utility Engineering (SUE) will be included during project development, as well as utility coordination activities. Project development activities must meet all requirements for federal funding eligibility.

#### I. Project Management (TxDOT Function Code 110)

- A. The ENGINEER will obtain, and incorporate data made available by TxDOT, the cities, the North Central Texas Council of Governments, and the COUNTY.
- B. The ENGINEER will attend and provide meeting notes for status or coordination meetings.
- C. The ENGINEER will submit monthly invoices and progress reports.
- D. The ENGINEER will maintain a project schedule.

#### II. Route and Design Studies (TxDOT Function Code 110)

- A. The ENGINEER shall acquire all necessary data to prepare a controlled schematic. The schematic shall fully comply with the latest TxDOT process and procedure.
- B. The ENGINEER shall analyze applicable data, including, but not limited to, traffic counts, accident records, and thoroughfare plans and produce traffic projections to determine the most appropriate design for the project. The ENGINEER will obtain TxDOT approval of all elements of the design.
- C. The ENGINEER shall work with local stakeholders and TxDOT to obtain TxDOT



approval of the schematic.

**III. Social, Economic, and Environmental Studies and Public Involvement (TxDOT Function Code 120)**

- A. The ENGINEER shall prepare Environmental Documents according to TxDOT and FHWA guidelines.
- B. The ENGINEER shall conduct all necessary activities to obtain TxDOT and FHWA environmental clearance for the project.

# **PROJECT #4**

## **EXHIBIT B**

### **SCOPE OF WORK**

#### **ADDITIONAL SERVICES TO BE PROVIDED BY THE ENGINEER**

##### **FM 741 Extension**

from **US 175** to **FM 3039**

CSJ: TBD

The ENGINEER shall provide the necessary engineering and technical services for the preparation of plans, specifications, and estimates (PS&E) for the construction of the FM 741 project, in Kaufman County, on new location and incorporating some existing roadways, to a six-lane divided urban roadway. The project will be prepared in conformance with state and federal requirements and will conform to the approved schematic and environmental requirements determined under the basic services (Exhibit A). The construction plan sets shall contain the required drawings, details, and applicable standards required to describe the grading, paving, drainage, structures, signing, pavement marking, delineation, sequence of construction, and traffic control for this construction project. The project will also require a TxDOT-approved pavement design, additional SUE investigations, and preparation of Right-of-Way maps and deed descriptions, in accordance with the TxDOT-approved schematics and environmental documents described in Exhibit A.

Under subsequent work authorizations, the ENGINEER may provide some or all the following:

1. Assistance with Right-of-Way Acquisition, including, but not limited to, testimony at eminent domain proceedings.
2. Bidding services, including, but not limited to, responses to bidder questions, necessary plan addenda, bid analysis, and recommendation of award.
3. Construction phase services, including, but not limited to, resident inspection, testing, verification of contractor pay requests, and recommendation for payments.
4. Final inspections and project close-out activities, including, but not limited to, preparation of as-built plans and responsible engineer's certification of substantial compliance with plans and specifications.

The ENGINEER will be the single point of contact between the COUNTY and all contractors/subcontractors and will review all work performed, coordinate and conduct all meetings, and prepare and submit all project reports and documents.

# PROJECT #5

## EXHIBIT A

### SCOPE OF WORK

#### SERVICES TO BE PROVIDED BY THE ENGINEER

##### **US 175 Grade Separations** at Business US 175 and FM 1895 CSJ: TBD

The following generalized scope of services covers the work to prepare a Design Schematic, Environmental Document, and Preliminary Drainage Study through TxDOT and FHWA Design Schematic approval, and TxDOT and FHWA Environmental Clearance. The proposed improvements are to construct grade separation structures, ramps, and main lane paving on US 175 at Business US 175 and at FM 1895 in Kemp. The project consists of a phased construction of the ultimate interchanges at both locations and must conform to TxDOT standards. Storm drainage, bridges, and modifications to the interchange at US 175 will be involved in the design. The design will be consistent with any proposed TxDOT improvements at TxDOT highways, as well as local streets. The pavement design will be based on traffic projections and geo-technical analysis. Subsurface Utility Engineering (SUE) will be included during project development, as well as utility coordination activities. Project development activities must meet all requirements for federal funding eligibility.

#### **I. Project Management (TxDOT Function Code 110)**

- A. The ENGINEER will obtain and incorporate data made available by TxDOT, the cities, the North Central Texas Council of Governments, and the COUNTY.
- B. The ENGINEER will attend and provide meeting notes for status or coordination meetings.
- C. The ENGINEER will submit monthly invoices and progress reports.
- D. The ENGINEER will maintain a project schedule.

#### **II. Route and Design Studies (TxDOT Function Code 110)**

- A. The ENGINEER shall acquire all necessary data to prepare a controlled schematic. The schematic shall fully comply with the latest TxDOT process and procedure.
- B. The ENGINEER shall analyze applicable data, including, but not limited to, traffic counts, accident records, and thoroughfare plans and produce traffic projections to determine the most appropriate design for the project. The ENGINEER will obtain TxDOT approval of all elements of the design.
- C. The ENGINEER shall work with local stakeholders and TxDOT to obtain TxDOT approval of the schematic.

#### **III. Social, Economic, and Environmental Studies and Public Involvement (TxDOT Function Code 120)**

- A. The ENGINEER shall prepare Environmental Documents according to TxDOT and FHWA guidelines.
- B. The ENGINEER shall conduct all necessary activities to obtain TxDOT and FHWA environmental clearance for the project.

# PROJECT #5

## EXHIBIT B

### SCOPE OF WORK

#### ADDITIONAL SERVICES TO BE PROVIDED BY THE ENGINEER

##### US 175 Grade Separations at Business US 175 and FM 1895 CSJ: TBD

The ENGINEER shall provide the necessary engineering and technical services for the preparation of plans, specifications, and estimates (PS&E) for the construction of grade separation structures, ramps, and main lane paving on US 175 at Business US 175 and at FM 1895 in Kemp. The project will be prepared in conformance with state and federal requirements and will conform to the approved schematic and environmental requirements determined under the basic services (Exhibit A). The construction plan sets shall contain the required drawings, details, and applicable standards required to describe the grading, paving, drainage, structures, signing, pavement marking, delineation, sequence of construction, and traffic control for this construction project. The project will also require a TxDOT-approved pavement design and additional SUE investigations, in accordance with the TxDOT-approved schematics and environmental documents described in Exhibit A. Two sets of plans may be needed to allow for the locations to be bid as separate projects.

Under subsequent work authorizations, the ENGINEER may provide some or all the following:

1. Preparation of Right-of-Way maps and documents.
2. Assistance with Right-of-Way Acquisition, including, but not limited to, testimony at eminent domain proceedings.
3. Bidding services, including, but not limited to, responses to bidder questions, necessary plan addenda, bid analysis, and recommendation of award.
4. Construction phase services, including, but not limited to, resident inspection, testing, verification of contractor pay requests, and recommendation for payments.
5. Final inspections and project close-out activities, including, but not limited to, preparation of as-built plans and responsible engineer's certification of substantial compliance with plans and specifications.

The ENGINEER will be the single point of contact between the COUNTY and all contractors/subcontractors and will review all work performed, coordinate and conduct all meetings, and prepare and submit all project reports and documents.

# PROJECT #6

## EXHIBIT A

### SCOPE OF WORK

#### SERVICES TO BE PROVIDED BY THE ENGINEER

##### US 175 Southbound Frontage Road

from approximately 0.5 miles south of SH 34 to Fair Road

CSJ: TBD

The following generalized scope of services covers the work to prepare a Design Schematic, Environmental Document, and Preliminary Drainage Study through TxDOT and FHWA Design Schematic approval, and TxDOT and FHWA Environmental Clearance. The proposed improvements are to construct the southbound frontage road of US 175 from 0.5 miles south of SH 34 to Fair Road in Kaufman. The project is approximately 1 mile in length and will include drainage structures, grading, paving, signage, and pavement markings. The project development must conform to all TxDOT requirements. The design will be consistent with any proposed TxDOT improvements to US 175, as well as local streets. The pavement design will be based on traffic projections and geo-technical analysis. Subsurface Utility Engineering (SUE) will be included during project development, as well as utility coordination activities. Project development activities must meet all requirements for federal funding eligibility.

#### I. Project Management (TxDOT Function Code 110)

- A. The ENGINEER will obtain and incorporate data made available by TxDOT, the city, the North Central Texas Council of Governments, and the COUNTY.
- B. The ENGINEER will attend and provide meeting notes for status or coordination meetings.
- C. The ENGINEER will submit monthly invoices and progress reports.
- D. The ENGINEER will maintain a project schedule.

#### II. Route and Design Studies (TxDOT Function Code 110)

- A. The ENGINEER shall acquire all necessary data to prepare a controlled schematic. The schematic shall fully comply with the latest TxDOT process and procedure.
- B. The ENGINEER shall analyze applicable data, including, but not limited to, traffic counts, accident records, and thoroughfare plans and produce traffic projections to determine the most appropriate design for the project. The ENGINEER will obtain TxDOT approval of all elements of the design.
- C. The ENGINEER shall work with local stakeholders and TxDOT to obtain TxDOT approval of the schematic.

#### III. Social, Economic, and Environmental Studies and Public Involvement (TxDOT Function Code 120)

- A. The ENGINEER shall prepare Environmental Documents according to TxDOT and FHWA guidelines.
- B. The ENGINEER shall conduct all necessary activities to obtain TxDOT and FHWA environmental clearance for the project.

# **PROJECT #6**

## **EXHIBIT B**

### **SCOPE OF WORK**

#### **SERVICES TO BE PROVIDED BY THE ENGINEER**

##### **US 175 Southbound Frontage Road**

from approximately **0.5 miles south of SH 34 to Fair Road**

CSJ: TBD

The ENGINEER shall provide the necessary engineering and technical services for the preparation of plans, specifications, and estimates (PS&E) for the construction of the southbound frontage road of US 175 from 0.5 miles south of SH 34 to Fair Road in Kaufman. The project will be prepared in conformance with state and federal requirements and will conform to the approved schematic and environmental requirements determined under the basic services (Exhibit A). The construction plan sets shall contain the required drawings, details, and applicable standards required to describe the grading, paving, drainage, structures, signing, pavement marking, delineation, sequence of construction, and traffic control for this construction project. The project will also require a TxDOT-approved pavement design and additional SUE investigations, in accordance with the TxDOT-approved schematics and environmental documents described in Exhibit A. Two sets of plans may be needed to allow for the locations to be bid as separate projects.

Under subsequent work authorizations, the ENGINEER may provide some or all the following:

1. Preparation of Right-of-Way maps and documents.
2. Assistance with Right-of-Way Acquisition, including, but not limited to, testimony at eminent domain proceedings.
3. Bidding services, including, but not limited to, responses to bidder questions, necessary plan addenda, bid analysis, and recommendation of award.
4. Construction phase services, including, but not limited to, resident inspection, testing, verification of contractor pay requests, and recommendation for payments.
5. Final inspections and project close-out activities, including, but not limited to, preparation of as-built plans and responsible engineer's certification of substantial compliance with plans and specifications.

The ENGINEER will be the single point of contact between the COUNTY and all contractors/subcontractors and will review all work performed, coordinate and conduct all meetings, and prepare and submit all project reports and documents.