Contract No. FM 110 (IH35/Harrington - SH123)
Utility Coordination
Cobb Fendley

Checklist

Prior to Initiation of Work

- ☐ Signed and Executed Agreement
- ☐ Scope of Services – Appendix A
  - ○ Exhibit A – Services to be provided by County
  - ○ Exhibit B – Services to be provided by Engineer
  - ○ Exhibit C – Work Schedule
  - ○ Exhibit D – Fee Schedule
- ☐ Production Schedule – Exhibit IV
- ☐ Hourly Rates of Engineer – Exhibit II
- ☐ Work Authorization - Attachment A to Exhibit I
  - ○ Supplemental Work Authorization for Additional Work (if applicable)
- ☐ Data to be provided to Engineer by County
  - ○ Plans
  - ○ Maps
  - ○ Studies
  - ○ Reports
  - ○ Field Notes
  - ○ Statistics
  - ○ Computations
  - ○ Other:_____
- ☐ Contractors Qualification Statement – Appendix B pre-qualified
- ☐ Insurance
  - ○ Worker's Compensation
  - ○ Commercial General Liability Insurance
  - ○ Automobile Liability Insurance
  - ○ Professional Liability Errors and Omissions Insurance
  - ○ Self Insurance Documentation
  - ○ Insurance Certificates for Subcontractors and/or Sub-consultants
  - ○ Approval of Insurance by County

Course of Work

- ☐ Original Engineering Work Product submittal
- ☐ "Completed" Engineering Work Product
- ☐ "Accepted" Engineering Work Product
- ☐ Modifications and/or Changes for Approval of Engineering Work Product
- ☐ "Approved" Engineering Work Product
- ☐ Revisions to Work Product
- ☐ Seal of Endorsement on all Engineering Work Product
- ☐ Data necessary for applications or documentation for permits and/or grants to be provided by Engineer to County

Contract No. _____

Notices (as applicable)

- ❑ Notice of Suspension
- ❑ Notice of Reinstatement
- ❑ Notice of Termination
- ❑ Notice of Staffing Changes
- ❑ Written Report of Accident

Documentation for Payment

- ❑ Internal Revenue Form W-9
- ❑ Invoice for Services Rendered
    - o Supporting Documentation
    - o Report of Completion Percentage
- ❑ Invoice for Reimbursables
    - o Proof of prior payment by Engineer of Reimbursables

Contract No. _____

PROFESSIONAL SERVICES AGREEMENT

TABLE OF CONTENTS

Contract No. _____

TABLE OF CONTENTS (cont'd)

PROFESSIONAL SERVICES AGREEMENT

STATE OF TEXAS §
§
HAYS COUNTY §

This Agreement is made and entered into this day by and between Hays County, Texas, a political subdivision of the State of Texas, (***the "County"***) and Cobb, Fendley & Associates, Inc. (***the "Engineer"***).

WHEREAS, ***County*** proposes to construct a roadway improvements along FM 110 from SH 123 to IH-35/Yarrington Road;

WHEREAS, ***County*** desires to obtain professional services for utility coordination, management and oversight of proposed roadway improvements (***the "Project"***);

WHEREAS, ***Engineer*** has the professional ability and expertise to fulfill the requirements of the ***Project***, and to counsel ***County*** in the selection and analysis of cost-effective alternatives.

NOW, THEREFORE, ***County*** and ***Engineer*** agree to the performance of the professional services by ***Engineer*** and the payment for these services by ***County*** as set forth herein.

Section I
Employment of the Engineer

County agrees to employ ***Engineer*** and ***Engineer*** agrees to perform professional engineering services for the ***Project*** as stated in the Sections to follow. As a condition to employment, it is specifically agreed that any disputes arising hereunder shall be submitted to the agent as designated in the Scope of Services in Appendix A, or as otherwise designated by the Hays County Commissioners Court (***individually or collectively the "County Designee"***). The ***County Designee*** shall have complete authority for the purpose of resolving technical matters. In all other cases, the decision of the Hays County Commissioners Court shall be final and binding, subject to any civil remedies otherwise deemed appropriate by the parties hereto.

Section II
Basic Services of the Engineer

A. In consideration of the compensation herein provided, ***Engineer*** shall perform professional engineering services for the ***Project***, which are acceptable to the ***County Designee***, based on standard engineering practices and the scope of work described on the Exhibits attached to this Agreement. ***Engineer*** shall also serve as ***County's*** professional engineer in those phases of the ***Project*** to which this Agreement applies and will consult with and give advice to ***County*** during the performance of ***Engineer's*** services.

B. ***Engineer*** shall not commence work until ***Engineer*** has been thoroughly briefed on the scope

of the ***Project*** and has been notified in writing by the ***County Designee*** to proceed, as evidenced by a Work Authorization substantially in the form of Attachment A to Exhibit I.

C. ***County*** shall provide ***Engineer*** with all existing plans, maps, studies, reports, field notes, statistics, computations, and other data in its possession relative to existing facilities and to this particular ***Project*** at no cost to ***Engineer***; however, any and all such information shall remain the property of ***County*** and shall be returned, if the ***County Designee*** so instructs ***Engineer***.

D. ***Engineer*** shall perform the following Basic Scope of Services:

1. The basic Scope of Services shall generally consist of all elements of work, materials and equipment required for the development of the ***Project***, including any Public Hearings, satisfactory to the ***County Designee*** and the County's Commissioners Court, in accordance with the requirements, policies, and general practices of Hays County.

2. The following documents shall be used in the development of the ***Project***:

   a. TxDOT 1980 Texas Manual of Uniform Traffic Control Devices for Streets and Highways, Revision 5, including:
      i) The 1998 reprint of the Texas Manual on Uniform Traffic Control Devices for Streets and Highways
      ii) The September 31, 1998, Federal Highway Administration (FHWA) Mandate from the National Cooperative Highway Research Program (NCHRP), Report 350
   b. Texas Department of Transportation Construction Manual
   c. Texas Department of Transportation's Standard Specifications for Construction of Highways, Streets, and Bridges, 2004 (English units)
   d. National Environmental Policy Act (NEPA)
   e. Texas Accessibility Standards (TAS) of the Architectural Barriers Act, Article 9102, Texas Civil Statutes, Effective April 4, 1994
   f. Americans with Disabilities Act (ADA) Regulations
   g. U.S. Army Corps Regulations
   h. Southern Building Code
   i. Uniform Building Code. Note: Hays County will use the 1997 Uniform Building Code (May 1, 1997) as a guide for design.
   j. National Electrical Code (most current version)
   k. Hays County Bond Program Standard Procedures Manual
   l. TxDOT Bridge Division Foundation Manual

3. As part of the Scope of Services, ***Engineer*** shall submit its work products to ***County*** for review at regular intervals.

4. The detailed Scope of Services for the ***Project*** is set forth herein as Appendix A to this Agreement, and is expressly incorporated and made a part hereof.

Section III
Fee schedule

A. For and in consideration of the performance by ***Engineer*** of the work described in the Scope of Services, ***County*** shall pay and ***Engineer*** shall receive the fee set forth in Exhibit I. The fee is based upon the hourly rates set forth in Exhibit II. Exhibits I and II are attached hereto and made a part hereof. Invoices shall be submitted by ***Engineer*** on a monthly basis and are due upon presentation of all items required hereunder, and shall be considered past due if not paid within thirty (30) calendar days of the due date.

B. For the performance of services not specifically described in the Scope of Services ***Engineer*** shall receive the additional services compensation described in Exhibit III, which is attached hereto and made a part hereof. In the event of any dispute over the classification of ***Engineer's*** services as basic or additional services under this agreement, the decision of the ***County Designee*** shall be final and binding on ***Engineer***.

Section IV
Period of Service

A. ***Engineer*** shall perform the professional services described in Appendix A, the Scope of Services, in accordance with the Production Schedule attached hereto as Exhibit IV and made a part hereof.

B. This Agreement shall become effective upon the date approved by ***County*** and will remain in full force and effect for the period required for the design, construction contract award and construction of the ***Project***, including warranty periods and any extensions of time, unless terminated earlier as provided for herein. ***Engineer*** shall complete all design work as described in the Scope of Services within 550 calendar days from receipt by ***Engineer*** of ***County's*** written Work Authorization and in accordance with the production timeline included in the Scope of Services.

C. Neither ***Engineer*** nor ***County*** shall be responsible for delays caused by "Acts of God", non-county governmental processes, national emergency, or any other causes beyond ***Engineer's*** or ***County's*** reasonable control. Upon the discovery of such an event, ***Engineer*** shall notify ***County***, and attend a special meeting with the ***County Designee*** to propose a program for a solution to the problem, and, if necessary, to establish an estimated period of time of suspension or extension of the work. A written request for an extension of time, when properly documented and justified by the circumstances, will be granted by the ***County Designee***.

D. ***County*** may suspend the work at any time for any reason without terminating this Agreement by giving written Notice of Suspension and the work may be reinstated and this Agreement resumed in full force and effect within sixty (60) days of receipt by ***Engineer*** of written Notice of Reinstatement from ***County***. ***Engineer***, upon receipt of a Notice of Suspension

shall follow the procedures described in the attached Exhibit V, which is attached hereto and made a part hereof. In the event such suspension of the ***Project*** or the ***Engineer's*** services hereunder extends for a period of ninety (90) days or more, consecutive or in the aggregate, ***Engineer*** may terminate this Agreement in writing and such termination shall be treated as a Notice of Termination as provided herein.

E. Either party may terminate this Agreement for the substantial failure of the other party to perform in accordance with the terms of this Agreement (the substantiality of such failure to be based on standard engineering practices and the scope of work described on the Exhibits attached to this Agreement), through no material fault of the terminating party, and ***County*** may terminate this Agreement for reasons other than substantial failure by ***Engineer*** to perform by delivering a written Notice of Termination which shall take effect on the tenth day following receipt. If mutually agreed upon, the obligation to provide services under this Agreement may be terminated without cause upon thirty (30) days written notice. ***Engineer*** shall follow the procedures specified in Exhibit V upon issuance or receipt of such notice. In the event of termination of this Agreement because of the substantial failure of ***Engineer*** to perform, ***County*** may prosecute the work to completion by contract or otherwise and, in such a case, ***Engineer*** shall be liable for any additional costs incurred by ***County***.

F. ***Engineer*** specifically acknowledges that ***County*** will sustain damages for each day beyond the required dates of completion of the Preliminary and Design Phases as defined in the Scope of Services that the work has not been accepted and approved. Because of the impracticality and extreme difficulty of fixing and ascertaining ***County's*** actual damages, ***Engineer*** agrees that One Hundred and No/100 Dollars ($100) per day shall be retained by ***County*** from any amounts due ***Engineer*** for every day that ***Engineer*** does not meet the production requirements set forth in Exhibit IV.

G. Periods of time (i) during which a Notice of Suspension is in effect, or (ii) during which a submitted and complete engineering work product is in technical review, as described in Section VI, or (iii) during which a delay directly related to matters described in section IV(C) above, shall not be taken into account in computing the amount of liquidated damages. In the event that an engineering work product received by ***County*** is found to be incomplete, as defined in SectionVI, Paragraph B, the period of time from the original submittal of the engineering work product to the receipt of subsequent submittal necessary to produce a completed submittal will be taken into account in computing the number of days and the amount of liquidated damages

H. All references to time in this Agreement shall be measured in calendar days unless otherwise specified.

Section V
Coordination with the County

A. The ***County Designee*** will act on behalf of ***County*** with respect to the work to be performed under this Agreement. The ***County Designee*** shall have complete authority to interpret and

define ***County's*** policies and decisions with respect to ***Engineer's*** services. The ***County Designee*** may designate representatives to transmit instructions and receive information.

B. ***Engineer*** shall not commence work on any phase of the ***Project*** until a thorough briefing on the scope of the ***Project*** is received and a written Work Authorization is issued by the ***County Designee*** in substantially the form of Attachment A to Exhibit I.

C. ***Engineer*** shall furnish all available data and reasonable assistance necessary for the development of applications or supporting documentation for any permits, grants, or planning advances as applicable to the professional services to be rendered pursuant to this Agreement, provided that ***Engineer*** shall not be obligated to develop additional data, appear at hearings, or prepare extensive reports, unless compensated for such work under other provisions of this Agreement.

D. ***Engineer*** shall have the responsibility at all times under the terms of this Agreement to advise ***County*** whether in ***Engineer's*** judgment it is feasible to proceed with the recommendations given any constraints affecting the ***Project***.

E. ***Engineer*** shall cooperate and coordinate with ***County's*** staff, and other engineers and contractors as reasonable and necessary and as required by the ***County Designee***.

Section VI
Review of Work Product

A. ***Engineer's*** engineering work product will be reviewed by ***County*** under its applicable technical requirements and procedures.

B. Reports, plans, specifications, and supporting documents, (the "engineering work products"), shall be submitted by ***Engineer*** on or before the dates specified in the Production Schedule set forth in Exhibit IV. Upon receipt of the engineering work products, the submission shall be checked for completion. "Completion" shall be defined as: all of the required items (as defined by the scope of services described herein) have been included in the engineering work products in compliance with the requirements of this Agreement. . The completeness of any engineering work product submitted to ***County*** shall be determined by ***County*** within thirty (30) days of such submittal and ***County*** shall notify ***Engineer*** in writing within such 30-day period if such work product has been found to be incomplete.

C. If the submission is complete, ***County*** shall notify ***Engineer*** and ***County's*** technical review process will begin.

D. If the submission is incomplete, ***County*** shall notify ***Engineer***, who shall perform such professional services as are required to complete the work and resubmit it to ***County***. This process shall be repeated until a submission is complete.

E. ***County*** shall review the completed work for compliance with the scope of work. If

necessary, the completed work shall be returned to ***Engineer***, who shall perform any required work and resubmit it to ***County***. This process shall be repeated until the work is accepted. "Acceptance" shall mean that in the ***County Designee's*** opinion substantial compliance with the requirements of this Agreement has been achieved.

F. After acceptance, ***Engineer*** shall perform any required modifications, changes, alterations, corrections, redesigns, and additional work necessary to receive final approval by the ***County Designee***. "Approval" in this sense shall mean formal recognition that the work has been fully carried out.

G. After approval of final engineering work products, ***Engineer*** shall without additional compensation perform any work required as a result of ***Engineer's*** development of the products which is found to be in error or omission due to ***Engineer's*** negligence. However, any work required or occasioned for the convenience of ***County*** after approval of a final product shall be paid for as Additional Services.

H. In the event of any dispute over the classification of ***Engineer's*** work products as complete, accepted, or approved under this Agreement, the decision of the ***County Designee*** shall be final and binding on ***Engineer,*** subject to any civil remedy or determination otherwise available to the parties and deemed appropriate by the parties.

Section VII
Revision to Work Product

Engineer shall make without expense to ***County*** such revisions to the work product as may be required to correct negligent errors or omissions so the work product meets the needs of ***County***, but after the approval of the work product any revisions, additions, or other modifications made at ***County's*** request which involve extra services and expenses to ***Engineer*** shall entitle ***Engineer*** to additional compensation for such extra services and expenses, provided however, that ***Engineer*** agrees to perform any necessary corrections to the work products, which are found to be in negligent error or omission as a result of the ***Engineer's*** development of the work product, at any time, without additional compensation. If it is necessary due to such error or omission by ***Engineer*** to revise the plans in order to make the ***Project*** constructible, ***Engineer*** shall do so without additional compensation. In the event of any dispute over the classification of ***Engineer's*** services as Basic or Additional Services under this Agreement, the decision of the ***County Designee*** shall be final and binding on ***Engineer,*** subject to any civil remedy or determination otherwise available to the parties and deemed appropriate by the parties.

Section VIII
Engineer's Responsibility and Liability

A. ***Engineer*** covenants to undertake no task in which a professional license or certificate is required unless he or someone under his direction is appropriately licensed. In the event such licensed individual's license expires, is revoked, or is canceled, ***Engineer*** shall inform ***County*** of such event within five working days.

B. ***Engineer*** shall be responsible for conformance with applicable federal and state laws, county permitting requirements, and city ordinances currently in effect, except as otherwise directed by the ***County Designee*** regarding county permitting or similar requirements properly waivable by the ***County Designee***.

C. Acceptance and approval of the final plans by ***County*** shall not release ***Engineer*** of any responsibility or liability for the accuracy and competency of his designs, working drawings, specifications, or other documents or work performed under this Agreement. Neither acceptance nor approval by ***County*** shall be an assumption of responsibility or liability by ***County*** for any defect, error, or omission in the designs, working drawings, specifications, or other documents prepared by ***Engineer***.

D. ***Engineer*** shall indemnify, protect, and save harmless ***County***, its officials and employees and its agents and agents' employees from and against all claims, suits, actions, liability, loss, damage, reasonable attorney's fees, costs, and expenses (including, but not limited to expenses related to expert witnesses) of any kind whatsoever, to the extent arising from any negligent act, error or omission of ***Engineer*** or any of its subcontractors in connection with the performance of services under this Agreement; provided, however, ***Engineer*** shall not be responsible for the negligence of any other party, other than its subcontractors.

E. ***Engineer's*** opinions of probable ***Project*** cost or construction cost represent ***Engineer's*** professional judgment as a design professional familiar with the construction industry, but ***Engineer*** does not guarantee that proposals, bids, or the construction cost, itself, will not vary from ***Engineer's*** opinions of probable cost.

F. ***Engineer*** shall perform all services and responsibilities required of ***Engineer*** under this Agreement using at least that standard of care which a reasonably prudent engineer in Texas, who is licensed by the State Board of Engineers, or the State Board of Registered Professional Surveyors, as applicable, would use in similar circumstances.

G. ***Engineer*** represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for performance of the services required under this Agreement and that ***Engineer*** shall furnish and maintain, at its own expense, adequate and sufficient personnel and equipment, in the reasonable opinion of ***County***, to perform the services when and as required and without delays. It is understood that ***County*** will approve assignment and release of all key ***Engineer*** and professional personnel.

H. All employees of ***Engineer*** shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of ***Engineer***, who in the opinion of ***County*** is incompetent or whose conduct becomes detrimental to the work or coordination with ***County***, shall upon ***County's*** and/or ***County Designee's*** request be immediately removed from association with the ***Project***.

I. If the procurement of adequate qualified personnel by Engineer would result in taxable professional services being charged to Engineer (e.g. Surveying), then the charges for such

services shall be paid by County directly so that County may assert tax exemption under Section 151.309 of the Texas Tax Code, or other applicable law. Any such direct payment by County is hereby granted, by the Hays County Commissioners Court, a discretionary exemption from the competitive requirements set out in Section 232.023 of the Texas Local Government Code.

J. ***Engineer*** shall furnish all equipment, transportation, supplies, and materials required for its operations under this Agreement.

K. ***Engineer*** shall place his Texas Professional Engineer's seal of endorsement on all documents and engineering data furnished to ***County***, as required by law.

L. ***Engineer*** is an independent contractor under this Agreement. Neither he nor any officer, agent nor employee of ***Engineer*** shall be classified as an employee of ***County***.

Section IX
Ownership of Documents

A. Any and all documents, including the original drawings, estimates, computer tapes, graphic files, tracings, calculations, analyses, reports, specifications, field notes, and data prepared by ***Engineer*** are the property of ***County*** and upon completion of the work or termination of this Agreement or as otherwise instructed by ***County*** and/or ***County Designee,*** shall be delivered to ***County*** in an organized fashion with ***Engineer*** retaining a copy.

B. Any reuse by ***Engineer*** of any such documents described in subsection A above, without the specific written consent of ***County*** shall be at ***Engineer's*** sole risk and without liability or legal exposure to ***County***. Should ***Engineer*** be terminated, ***Engineer*** shall not be liable for ***County's*** use of partially completed designs, plans, or specifications on this ***Project*** or any other project, except to the extent such documents were deemed complete or otherwise "Accepted" or "Approved" as provided herein or represent completed work sealed by ***Engineer***, or Surveyor, as applicable, as specified by professional standards.

C. ***Engineer*** will not be responsible for any use or any modifications to the plans and documents described in subsection A performed by any entity other than Hays County, and ***County's*** respective engineers and contractors, without the specific written consent of ***Engineer***. Any modification as described in this paragraph shall be made in accordance with all applicable professional standards.

Section X
Maintenance of and Right of Access to Records

A. ***Engineer*** agrees to maintain appropriate accounting records of costs, expenses, and payrolls of employees working on the ***Project***, together with documentation of evaluations and study results for a period of three (3) years after final payment for completed services and all other pending matters concerning this Agreement have been closed.

B. ***Engineer*** further agrees that ***County*** or its duly authorized representatives shall, until the expiration of three (3) years after final payment under this Agreement, have access to and the right to examine and photocopy any and all books, documents, papers and records of ***Engineer***, which are directly pertinent to the services to be performed under this Agreement for the purposes of making audits, examinations, excerpts, and transcriptions. ***Engineer*** agrees that ***County*** shall have access during normal working hours to all necessary ***Engineer*** facilities and shall be provided adequate and appropriate work space in order to conduct audits in compliance with the provisions of this section. ***County*** shall give ***Engineer*** reasonable advance notice of intended audits.

C. ***Engineer*** further agrees to include in all its sub-consultant agreements hereunder a provision to the effect that the sub-consultant agrees that ***County*** shall, until the expiration of three (3) years after final payment under the subcontract, have access to and the right to examine and photocopy any directly pertinent books, documents, papers and records of such sub-consultant, involving transactions to the subcontract, and further, that ***County*** shall have access during normal working hours to all sub-consultant facilities, and shall be provided adequate and appropriate work space, in order to conduct audits in compliance with the provisions of this section together with subsection (D) hereof. ***County*** shall give sub-consultant reasonable advance notice of intended audits.

D. ***Engineer*** and sub-consultant agree to photocopy such documents as may be requested by ***County***. ***County*** agrees to reimburse ***Engineer*** for the cost of copies at the rate published in the Texas Administrative Code in effect as of the time copying is performed.

Section XI
Miscellaneous

A. ***Severability.*** Any clause, sentence, provision, paragraph, or article of this Agreement held by a court of competent jurisdiction to be invalid, illegal, or ineffective shall not impair, invalidate, or nullify the remainder of this Agreement, but the effect thereof shall be limited to the clause, sentence, provision, paragraph or article so held to be invalid, illegal, or ineffective.

B. ***Venue.*** It is contemplated that this Agreement shall be performed in Hays County, Texas, and the venue and jurisdiction of any suit, right, or cause of action arising out of or in connection with this Agreement shall lie exclusively in Hays County, Texas. This Agreement shall be governed by and construed in accordance with the laws of the State of Texas.

C. ***Equal Opportunity in Employment. Engineer*** agrees, during the performance of the services under this Agreement, to comply with the equal opportunity in employment provisions cited in Exhibit VI, which is attached hereto and made a part hereof.

D. ***Certificate of Engineer. Engineer*** certifies that neither ***Engineer*** nor any members of ***Engineer's*** firm has:

(1) Employed or retained for a commission, percentage, brokerage, contingency fee, or other consideration, any firm or person (other than a bonafide employee working solely for ***Engineer***) to solicit or secure the work provided by the Agreement.

(2) Agreed, as an expressed or implied condition for obtaining this contract, to employ or retain the services of any firm or person other than in connection with carrying out the work to be performed under this Agreement.

(3) Paid or agreed to pay to any firm, organization, or person (other than bonafide employees working solely for ***Engineer***) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out the work provided under this Agreement.

Engineer further agrees that this certification may be furnished to any local, state or federal governmental agencies in connection with this Agreement and for those portions of the ***Project*** involving participation of agency grant funds and is subject to all applicable state and federal, criminal and civil laws.

E. ***Notice.*** Any notice to be given hereunder shall be in writing and may be affected by personal delivery in writing or by registered or certified mail, return receipt requested, addressed to the proper party, at the following address:

ENGINEER:
Corporate Office:
Cobb, Fendley & Associates, Inc.
13430 Northwest Freeway, Ste 1100
Houston, TX 77040
Attn: Sandra Khoury, P.E.

COUNTY:
Hays County Judge
111 E. San Antonio Street
Suite 300
San Marcos, Texas 78666
Attn: Judge Bert Cobb (or successor)

OK
MG 5/8/2013

with copy to:
Hays County District Attorney – Civil Division Chief
111 E. San Antonio, Suite 204
San Marcos, Texas 78666
Attn: Mark Kennedy (or successor)

and to:
Prime Strategies, Inc.
1508 South Lamar Blvd.
Austin, Texas 78704
Attn: Michael Weaver

and to: [Hays County Designee]
Commissioner Debbie Ingalsbe - Precinct 1
111 E. San Antonio Street, Suite 304
San Marcos, Texas 78666

F. ***Insurance Requirements.*** ***Engineer*** agrees during the performance of the services under this Agreement to comply with the INSURANCE REQUIREMENTS provisions described in Exhibit VII, which is attached hereto and made a part hereof.

G. ***Property Taxes.*** Notwithstanding anything to the contrary herein, to the extent ***County*** becomes aware that ***Engineer*** is delinquent in the payment of property taxes related to property located in Hays County at the time of invoicing, ***Engineer*** hereby assigns any payments to be made for services rendered hereunder to the Hays County Tax Assessor-Collector for the payment of said delinquent taxes. Notwithstanding the above, ***County*** shall not have an affirmative duty to determine if ***Engineer*** is delinquent in the payment of property taxes.

H. ***Successors and Assigns.*** This Agreement shall be binding upon and inure to the benefit of ***County*** and ***Engineer*** and their respective successors, executors, administrators, and assigns. Neither ***County*** nor ***Engineer*** may assign, sublet, or transfer his interest in or obligations under this Agreement without the written consent of the other party hereto.

I. ***Bidding Exemption.*** This Agreement is exempted from the bidding requirements of the County Purchasing Act pursuant to Section 262.024(a)(4) of the Local Government Code as this is a contract for professional services.

J. ***Taxpayer Identification.*** ***Engineer*** shall provide to ***County Designee*** upon submittal of ***Engineer's*** initial invoice requesting payment Internal Revenue Form W-9 Request for Taxpayer Identification Number and Certification that is completed in compliance with the Internal Revenue Code, its rules and regulations.

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

L. ***Reports of Accidents.*** Within 24 hours after ***Engineer*** becomes aware of the occurrence of any accident or other event which results in, or might result in, injury to the person or property of any third person (other than an employee of the ***Engineer***), whether or not it results from or involves any action or failure to act by the Engineer or any employee or agent

of the Engineer and which arises in any manner from the performance of this Agreement, the Engineer shall send a written report of such accident or other event to the County, setting forth a full and concise statement of the facts pertaining thereto. The Engineer shall also immediately send the County a copy of any summons, subpoena, notice, or other documents served upon the Engineer, its agents, employees, or representatives, or received by it or them, in connection with any matter before any court arising in any manner from the Engineer's performance of work under this Agreement.

M. ***Entire Agreement.*** This Agreement represents the entire and integrated Agreement between ***County*** and ***Engineer*** and supersedes all prior negotiations, representations, or agreements, either oral or written. This Agreement may be amended only by written instrument signed by both ***County*** and ***Engineer***. NO OFFICIAL, EMPLOYEE, AGENT, OR REPRESENTATIVE OF THE COUNTY HAS ANY AUTHORITY, EITHER EXPRESS OR IMPLIED, TO AMEND THIS CONTRACT, EXCEPT PURSUANT TO SUCH EXPRESS AUTHORITY AS MAY BE GRANTED BY THE COUNTY COMMISSIONERS COURT.

N. ***Captions Not a Part Hereof.*** The captions or subtitles of the several sections and divisions of this Agreement constitute no part of the content hereof, but are only labels to assist in locating and reading the provisions hereof.

O. ***Incorporation of Exhibits and Attachments.*** All of the Exhibits and Attachments, and Appendices referred to in the Agreement are incorporated by reference as if set forth verbatim herein.

P. ***Entity Status.*** By my signature below, I certify that ***Engineer*** is a Corporation, duly authorized to transact and do business in the State of Texas.

Q. ***Acknowledgement.*** As a duly authorized representative of ***Engineer***, I acknowledge by my signature below that I have read and understand the above paragraphs and that ***Engineer*** has the obligation to ensure compliance with its provisions by itself and its employees, agents, and representatives.

R. ***Definition of Engineer.*** The term "Engineer" as used herein is defined as including Registered Professional Surveyors, as applicable to the work to be performed under this Agreement, and any reference to professional standards in regards to a Registered Professional Surveyor shall relate to those standards promulgated by the State Board of Registered Professional Surveyors.

EXECUTED this_____ day of _____, 201___.

THE ENGINEER:

BY: _____

Printed Name: Sandra G. Khoury, P.E.

Title: Principal

HAYS COUNTY:

BY: _____

BERT COBB, M.D.

Hays County Judge

Reviewed as to Form By: _____

County Attorney

Funds Verified By: _____

County Auditor

OK 5/8/2013

EXHIBIT I

COMPENSATION FOR PROFESSIONAL SERVICES

ACTUAL COST OF SERVICES METHOD

[Note: A separate Compensation Agreement will be attached for Compensation on a Work-Order Basis]

SECTION 1 - BASIS FOR COMPENSATION

1.1 The not-to-be-exceeded fee for the performance of the Scope of Services described in the Agreement shall be the sum of $ 295,580.94.

1.2 The basis of compensation for the services of principals and employees engaged in the performance of the work shall be the hourly rates set forth in attached Exhibit II.

1.3 ***Engineer*** shall be reimbursed for actual non-labor and subcontract expenses incurred in the performance of the services under this Agreement at the Engineer's invoice cost.

SECTION 2 - NOT-TO-BE-EXCEEDED FEE

2.1 ***Engineer*** and ***County*** acknowledge the fact that the not-to-be-exceeded fee is the total estimated costs of services to be rendered under this Agreement. This not-to-be-exceeded fee is based upon the labor and non-labor costs set forth in Exhibit II to this Agreement and described above, estimated to be required in the performance of the various phases of work provided for under this Agreement. Should the actual costs of the services rendered under this Agreement be less than such estimated cost, then ***Engineer*** shall receive compensation for only those services actually rendered.

SECTION 3 – WORK AUTHORIZATIONS

3.1 ***County*** will prepare and issue Work Authorizations, in the form identified and attached hereto as Attachment A to authorize the ***Engineer*** to perform one or more tasks. Each Work Authorization will include a description of the work to be performed, a description of the tasks and milestones, a work schedule for the tasks, and a fee amount agreed upon by the ***County*** and ***Engineer***. The amount payable for a Work Authorization shall be supported by the estimated cost of each work task as described in the Work Authorization. The Work Authorization will not waive the ***Engineer's*** responsibilities and obligations established in this Agreement. The executed Work Authorizations shall become part of this Agreement.

3.2 Work included in a Work Authorization shall not begin until ***County*** and ***Engineer*** have signed the Work Authorization. All work must be completed on or before the completion date specified in the Work Authorization. The ***Engineer*** shall promptly notify the ***County*** of any event which will affect completion of the Work Authorization, although such notification

specifically required in direct connection with an insurance claim or threat of claim under an insurance policy required under this Exhibit which absolutely requires arbitration or mediation of such claim, or as otherwise required by law or a court of law with jurisdiction over the provisions of this Agreement.

shall not relieve the ***Engineer*** from costs or liabilities resulting from delays in completion of the Work Authorization. Any changes in the Work Authorization shall be enacted by a written Supplemental Work Authorization before additional work may be performed or additional costs incurred. Any Supplemental Work Authorization must be executed by both parties within the period specified in the Work Authorization. The ***Engineer*** shall not perform any proposed work or incur any additional costs prior to the execution, by both parties, of a Supplemental Work Authorization.

SECTION 4 - ADDITIONAL SERVICES

4.1 For additional services, compensation shall be negotiated in accordance with Exhibit III.

4.2 ***Engineer*** shall be compensated for extra services not included in the Scope of Services described in the Agreement on the basis specified in Exhibit III; however, ***Engineer*** shall not be compensated for work made necessary by ***Engineer's*** negligent errors or omissions.

4.3 The maximum amount payable under this Agreement without modification (the "***Compensation Cap***") is $ 300,000.00, provided that any amounts paid or payable shall be solely pursuant to a validly issued Work Authorization or any Supplemental Work Authorization related thereto. In no event may the aggregate amount of compensation authorized under Work Authorizations and Supplemental Work Authorizations exceed the ***Compensation Cap***.

SECTION 5 – REQUIRED SUPPORTING DOCUMENTATION

5.1 Upon submittal of the initial invoice for service, ***Engineer*** shall provide ***the Hays County Auditor*** with an Internal Revenue Form W-9, Request for Taxpayer Identification Number and Certification that is complete in compliance with the Internal Revenue Code, its rules and regulations.

5.2 All invoices submitted to ***the Hays County Auditor*** will be accompanied by an original, complete packet of supporting documentation. Invoices should detail hours worked by staff person, with a description of the work performed by individuals. Invoices should also contain a representation of the percentage of completion relative to that segment of the ***Project***.

5.3 For additional services performed pursuant to Section III B of this Agreement, a separate invoice or itemization of this work will be presented with the same requirements for supporting documentation as in Section 5.2 of this Exhibit.

5.4 Invoices requesting reimbursement for expenditures related to the project (reimbursables) must be accompanied by copies of the provider's invoice which was previously paid by ***Engineer.***

ATTACHMENT A

WORK AUTHORIZATION NO. *_TEMPLATE_*

This Work Authorization is made pursuant to the terms and conditions of the Agreement entered into by and between Hays County, Texas, a political subdivision of the State of Texas, (***the "County"***) and _____ (***the "Engineer"***).

Part1. The ***Engineer*** will provide the following engineering services:

Part 2. The maximum amount payable for services under this Work Authorization without modification is _____.

Part 3. Payment to the ***Engineer*** for the services established under this Work Authorization shall be made in accordance with the Agreement.

Part 4. This Work Authorization shall become effective on the date of final acceptance of the parties hereto and shall terminate on _____, unless extended by a Supplemental Work Authorization.

Part 5. This Work Authorization does not waive the parties' responsibilities and obligations provided under the Agreement.

ATTACHMENT A (con't.)

Part 6. This Work Authorization is hereby accepted and acknowledged below.

ENGINEER:
_____

By:_____
Signature

_____
Printed Name

_____
Title

_____
Date

COUNTY:
Hays County, Texas

By:_____
Signature

_____
Printed Name

_____
Title

_____
Date

LIST OF EXHIBITS

Exhibit A - Services to be Provided by County

Exhibit B - Services to be Provided by Engineer

Exhibit C - Work Schedule

Exhibit D - Fee Schedule

EXHIBIT II

HOURLY RATES

Project Manager	$190.00/HR
Project Engineer III	$150.00/HR
Project Engineer II	$130.00/HR
Project Engineer I	$105.00/HR
Senior Engineer	$225.00/HR
Senior Technician	$120.00/HR
Technician III	$105.00/HR
Technician II	$90.00/HR
Technician I	$75.00/HR
Licensed State Land Surveyor	$200.00/HR
Registered Professional Land Surveyor	$145.00/HR
4- Man Survey Crew	$165.00/HR
3- Man Survey Crew	$145.00/HR
2- Man Survey Crew	$125.00/HR
Construction Manager	$150.00/HR
Senior Field Construction Observer	$100.00/HR
Field Construction Observer	$88.00/HR
Utility Specialist	$125.00/HR
Telecommunications Designer	$95.00/HR
Telecommunications Fieldman	$75.00/HR
GIS Manager	$130.00/HR
GIS Analyst	$90.00/HR
Right-of-Way Agent	$110.00/HR
Administrative	$90.00/HR
Clerical	$65.00/HR
GPS	$32.00/HR/Receiver

SUBSURFACE UTILITY ENGINEERING

Level C & D (Without Level B)	$0.45/Foot
Level B – Designation (Without Level C & D)	$1.43/Foot

Level A – Location (Non-Destructive Excavation):

- Vertical Depth:
  - 0 Ft. – 5 Ft. $1,125/Hole
  - 5 Ft. – 8 Ft. $1,580/Hole
  - 8 Ft. – 13 Ft. $1,825/Hole
  - 13 Ft. – 20 Ft. $2,510/Hole
  - > 20 Ft. $3,600/Hole

Ground Penetrating Radar $250/HR

SUE Technician (With Equipment) $98/HR

Vacuum Excavation Truck with 2 Technicians $250/HR

Traffic Control Officer ..... @ Cost

Traffic Control (Lane Closures, etc.) ..... To Be Negotiated

Permits (Local, State, etc.) ..... @ Cost

Designation & Traffic Control Vehicles $3.40/Mile

Location Vehicles $6.80/Mile

Designation Vehicle Mobilization $500/Each

Location/Vac Truck Mobilization $900/Each

REIMBURSABLE EXPENSES

Technology Fee (*) $3.75/HR

Consultant or Specialty Contractor (Outside Firm) ..... @ Cost + ~~10%~~ MRW

Courier, Special Equipment Rental ..... @ Cost

Reasonable Out of Town Travel Expenses (Air, Hotel, Rental, etc.) ..... @ Cost

Mileage (Standard Car or Truck) ..... IRS Approved Rate

Per Diem for Out of Town Travel (Per Day/Person) $35/Day

Title Plant Charges ..... @ Cost

Other Misc. Expenses Related to the Project ..... @ Cost

In-House Reproduction:

- Copies (Up to 11" x 17") $0.15/Each
- Color Prints (Up to 11" x 17") $1.50/Each
- Color Prints (Larger than 11" x 17") ..... $3.00/Sq. Ft.
- Bluelines (All Sizes) $1.00/Each
- Bond Prints (All Sizes) $2.00/Each
- Mylar Prints $12.00/Each
- Vellum Prints $9.00/Each

(*) Technology charges added to each billable man-hour.

EXHIBIT III

COMPENSATION FOR ADDITIONAL PROFESSIONAL SERVICES

1. The fees described in Exhibits I and II to this Agreement shall provide compensation to ***Engineer*** for the work described in the Basic Scope of Services of the Agreement.

2. For the performance of work not described in the Basic Scope of Services of the Agreement, ***County*** shall pay and ***Engineer*** shall receive, under a negotiated contract modification, compensation based upon the method and rates set forth in Exhibits I and II to the Agreement.

3. The performance of any additional services must be authorized in writing in advance by the ***Hays County Commissioners Court***.

4. In the event of any dispute over the classification of ***Engineer's*** services as either basic or additional services, the decision of the ***Hays County Commissioners Court*** shall be final and binding.

EXHIBIT IV

PRODUCTION SCHEDULE

This Agreement shall become effective upon the date approved by ***County*** and will remain in full force and effect for the period required for the design, construction contract award and construction of the ***Project***, including warranty periods and any extensions of time, unless terminated earlier as provided for herein. ***Engineer*** shall complete all design work as described in the Scope of Services within the timeline and/or schedule provided in the Scope of Services.

The number of days expiring from the date of submittal to ***County*** of a complete work product to the date the review is finished and comments returned to ***Engineer*** shall not be included within the days allowed for completion.

EXHIBIT V

PROCEDURES FOR TERMINATION OR SUSPENSION

Procedures for ***Engineer*** to follow upon receipt of Notice of Termination:

1. Upon receipt of a Notice of Termination and prior to the effective date of the termination, ***Engineer*** shall, unless the Notice otherwise directs, immediately begin to phase out and discontinue all services in connection with the performance of this Agreement and shall proceed to promptly cancel all existing orders and contracts insofar as such orders and contracts are chargeable to this Agreement. Within thirty (30) days after receipt of the Notice of Termination ***Engineer*** shall submit a statement, showing in detail the services performed under this Agreement prior to the effective date of termination.

2. Copies of all completed or partially completed designs, plans, and specifications prepared under this Agreement prior to the effective date of termination shall be delivered to ***County*** as a pre-condition to final payment.

3. Upon the above conditions being met, ***County*** shall pay ***Engineer*** for approved services actually performed under this Agreement, less previous payments.

4. Failure by ***Engineer*** to submit the required statement and to comply with the above stated conditions without good and reasonable cause shall constitute a waiver by ***Engineer*** of any and all rights or claims to collect the fee that ***Engineer*** may rightfully be entitled to for services performed under this Agreement.

Procedures for ***Engineer*** to follow upon receipt of Notice of Suspension:

1. Upon receipt of a Notice of Suspension and prior to the effective date of the suspension, ***Engineer*** shall, unless the Notice otherwise directs, immediately begin to phase-out and discontinue all services in connection with the performance of this Agreement and shall prepare a statement detailing the services performed under this Agreement prior to the effective date of suspension. Copies of all completed or partially completed designs, plans and specifications prepared under this Agreement prior to the effective date of suspension shall be prepared for possible delivery to ***County***, but shall be retained by ***Engineer*** unless requested by ***County***.

2. During the period of suspension, ***Engineer*** may submit the above-referenced statement to ***County*** for payment of the approved services actually performed under this Agreement, less previous payments.

Procedures for ***Engineer*** to follow upon exercise of right to terminate for substantial failure of ***County*** to perform:

1. In the event that ***Engineer*** exercises such right to terminate, within thirty (30) days after receipt by ***County*** of ***Engineer's*** Notice of Termination, ***Engineer*** shall submit a statement detailing the services performed under this Agreement prior to the effective date of termination.

2. Copies of all completed or partially completed reports, designs, plans, studies, specifications and other work product shall be delivered to ***County*** as a pre-condition to final payment. Upon the above conditions being met, ***County*** shall pay ***Engineer*** for approved services actually performed under this Agreement, less previous payments.

3. Failure by ***Engineer*** to submit the required statement and to comply with the above stated conditions without good and reasonable cause shall constitute a waiver by ***Engineer*** of any and all rights or claims to collect the fee that ***Engineer*** may rightfully be entitled to for services performed under this Agreement.

EXHIBIT VI

EQUAL OPPORTUNITY IN EMPLOYMENT

A. ***Engineer*** will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. ***Engineer*** will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; termination; rates of pay or other forms of compensation, and selection for training, including apprenticeship. ***Engineer*** agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this non-discrimination clause.

B. ***Engineer*** will, in all solicitations or advertisements for employees placed by or on behalf of ***Engineer***, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

C. ***Engineer*** will send to the labor union representative or workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the Contract Compliance Officer advising the said labor union or worker's representatives of ***Engineer's*** obligations under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

D. ***Engineer*** will comply with the Regulations of the Department of Transportation (49 CFR 21 and 23 CFR 710.405) and all provisions of Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 (41 CFR 60) and of the rules, regulations and relevant order of the Secretary of Labor.

E. ***Engineer*** will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations and orders of the Secretary of Labor, or pursuant thereto; and will permit access to his books, records, and accounts by the Department and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.

F. In the event of ***Engineer's*** non-compliance with the non-discrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and ***Engineer*** may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 (41 CFR 60) or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

G. ***Engineer*** will include the provisions of paragraph (A.) through (F.) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 or Executive Order 11246 of September

24, 1965, as amended by Executive Order 11375 (41 CFR 60), so that such provisions will be binding upon each subcontractor or vendor. ***Engineer*** will take such action with respect to any subcontractor purchase order as the Department may direct as a means of enforcing such provisions, including sanctions for non-compliance: provided, however, that in the event ***Engineer*** becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by ***County*** or Federal Agency, ***Engineer*** may request ***County*** and United States to enter into such litigation to protect the interest of the United States.

EXHIBIT VII

INSURANCE REQUIREMENTS

During the life of this Agreement, ***Engineer*** agrees to provide and maintain the following insurance:

A. Worker's Compensation in accordance with statutory requirements.

B. Commercial General Liability Insurance with a combined minimum Bodily Injury and Property Damage limits of $ 1,000,000.00 per occurrence and $ 2,000,000.00 in the aggregate, including coverage on same for independent subcontractor(s). HAYS COUNTY SHALL BE NAMED AS AN ADDITIONAL INSURED UNDER THIS COVERAGE.

C. Automobile Liability Insurance for all owned, non-owned, and hired vehicles with combined minimum limits for Bodily Injury and Property Damage limits of $ 1,000,000.00 per occurrence and $ 1,000,000.00 in the aggregate. ***Engineer*** shall require any subcontractor(s) to provide Automobile Liability Insurance in the same minimum amounts.

D. Professional Liability Errors and Omissions Insurance in the amount of $ 1,000,000.00 .

E. In the event ***Engineer*** is self-insured in connection with any or all of the above-required insurance policies, ***Engineer*** shall submit proof of such self-insurance and all financial statements as reasonably required by the ***County*** in order to determine the acceptability of such self-insurance.

Engineer shall not commence any field work under this Agreement until he has obtained all required insurance and such insurance or self-insurance has been approved by ***County***. ***Engineer*** shall not allow any subcontractor(s) to commence work to be performed in connection with this Agreement until all required insurance has been obtained and approved. Approval of the insurance by ***County*** shall not relieve or decrease the liability of ***Engineer*** hereunder.

The required insurance must be written by a company approved to do business in the State or Texas with a financial standing of at least an A- rating, as reflected in Best's insurance ratings or by a similar rating system recognized within the insurance industry at the time the policy is issued. ***Engineer*** shall furnish ***County*** with a certification of coverage issued by the insurer. ***Engineer*** shall not cause any insurance to be canceled nor permit any insurance to lapse. ALL INSURANCE CERTIFICATES SHALL INCLUDE A CLAUSE TO THE EFFECT THAT THE POLICY SHALL NOT BE CANCELED OR REDUCED, RESTRICTED OR LIMITED UNTIL TEN (10) DAYS AFTER COUNTY HAS RECEIVED WRITTEN NOTICE AS EVIDENCED BY RETURN RECEIPT OF REGISTERED OR CERTIFIED LETTER.

It is the intention of the ***County*** and the ***Hays County Commissioners Court***, and agreed to and hereby acknowledged by the ***Engineer***, that no provision of this Professional Services Agreement shall be construed to require the ***County*** or ***any agent of Hays County*** to submit to mandatory arbitration or mediation in the settlement of any claim, cause of action or dispute, except as

APPENDIX A

SCOPE OF SERVICES

THE ATTACHED SCOPE OF SERVICES IS INTENDED TO BE CONSISTENT WITH THE HAYS COUNTY PROFESSIONAL SERVICES AGREEMENT. TO THE EXTENT THE SCOPE IS INCONSISTENT WITH THE PROFESSIONAL SERVICES AGREEMENT, THE PROFESSIONAL SERVICES AGREEMENT WILL SUPERSEDE THE SCOPE AND WILL BE CONTROLLING.

THE ENGINEER SHALL PROVIDE EXPERT TESTIMONY IN ANY ADMINISTRATIVE OR COURT PROCEEDINGS THROUGH AN APPROPRIATE ENGINEERING PROFESSIONAL TO BE DETERMINED BY COUNTY AS ADDITIONAL SERVICES AT THE RATE OF COMPENSATION SET FORTH IN EXHIBIT II.

EXCEPT AS PROVIDED FOR FEE SERVICES OR WORK-ORDER BASED SERVICES, THE ATTACHED SCOPE OF SERVICES SHALL INCLUDE A PRODUCTION SCHEDULE REFLECTING A TIMELINE FOR THE EXECUTION OF THE PROJECT.

THE COUNTY DESIGNEE THAT SHALL BE THE PRIMARY POINT OF CONTACT UNDER THIS AGREEMENT SHALL BE Commissioner Debbie Ingalsbe, Precinct 1.

SERVICES TO BE PROVIDED BY THE ENGINEER

Scope of Services provided by Cobb, Fendley & Associates, Inc. (the ***Utility Coordinator/ Engineer***), involves utility coordination management services in Williamson County, Texas, (the County) as described below:

This scope includes the following major tasks:

1. PROJECT MANAGEMENT AND COORDINATION
2. UTILITY ADJUSTMENT COORDINATION
3. SUBSURFACE UTILITY ENGINEERING (SUE)
4. UTILITY ENGINEERING AND DESIGN
5. FIELD SURVEYING FOR UTILITY RELOCATION
6. RIGHT-OF-WAY (ROW) COORDINATION FOR UTILITY RELOCATIONS
7. MISCELLANEOUS

1. PROJECT MANAGEMENT AND COORDINATION

1.1. The ***Utility Coordinator/Engineer***, in association with the County and its Designated Representatives, will be responsible for managing, directing, and/or coordinating all activities associated with utility coordination for all assigned projects.

The ***Utility Coordinator/Engineer's*** Project Manager is:

Mrs. Sandra (Sandee) Khoury, P.E.
Cobb, Fendley & Associates, Inc.
Telephone: 512-834-9798

The ***Utility Coordinator/Engineer's*** Utility Coordinator is:

Mrs. Melissa Horn
Cobb, Fendley & Associates, Inc.
Telephone: 512-834-9798

1.2. Project Quality Assurance / Quality Control (QA/QC). The ***Utility Coordinator /Engineer*** will provide internal and comprehensive quality assurance/quality control reviews throughout the Project development in order to appraise design, technical and business performance and provide real-time direction and objective solutions. All reports, agreements, and supporting documents, ("utility coordination work products") submitted to the County shall undergo QC reviews prior to submittal. A project manager/engineer will perform the QA/QC function.

1.3. Utility Status Report. The ***Utility Coordinator/Engineer*** will create and maintain a utility status report and submit on a bi-weekly basis. The status report will include, at a minimum, per each Roadway Segment:

1.3.1. Project Segment with Limits
1.3.2. Roadway Segment Design Engineer
1.3.3. Roadway Segment Design Status
1.3.4. Estimated Start or Letting Date
1.3.5. Utility Owners within Roadway Segment
1.3.6. Utility Design Status
1.3.7. Utility Agreement or Permit Status
1.3.8. Utility Relocation Status

1.4. Monthly Project Status Meetings. The ***Utility Coordinator/Engineer*** will participate in monthly project status meetings with the County and/or its Designated Representatives.

The meetings will review:

1.4.1. Activities completed since the last meeting.
1.4.2. Issues encountered.
1.4.3. Late activities.
1.4.4. Activities required by the next progress meeting.
1.4.5. Solutions for unresolved and/or anticipated problems.
1.4.6. Information or items required from other agencies/consultants.
1.4.7. Review of Utility's Proposed Adjustments

1.5. Project Documentation. The ***Utility Coordinator/Engineer*** will upload all project related documents including, but not limited to, utility agreements, meeting minutes, tracking reports, relocation plans, etc. in designated project folder in Project Wise, or other approved County documentation system.

2. **UTILITY ADJUSTMENT COORDINATION** activities include, but are not limited to, meeting and contact with utilities on the project, initial project notifications, providing progress reports, preparation of contact lists, preparation of master utility agreements, preparation of utility joint use agreements, assistance with permits, reviewing conflicts between the utilities and the Project, resolutions of utility conflicts, creating a utility tracking report, review of the proposed utility adjustments, and recommending the proposed locations of the utility adjustments. The above list of services is general in nature and should not be considered inclusive to the ***Utility Coordinator/Engineer's*** responsibilities, as listed in the following scope.

2.1. ***Utility Coordinator/Engineer*** shall perform utility coordination and liaison activities with involved utility owners, their consultants, Designated Representative, and the County to achieve timely project notifications, formal coordination meetings, conflict analysis and resolution.

2.2. ***Utility Coordinator/Engineer*** shall coordinate all activities with the County and/or Designated Representative to facilitate the orderly progress and timely completion of the utility coordination phase. The ***Utility Coordinator/Engineer*** will be responsible for the following:

2.2.1. Initial Project Meeting. Attend an initial meeting and an on-site inspection (when appropriate) to ensure familiarity with existing conditions, project requirements and prepare a written report of the meeting.

2.2.2. Project Notifications. Prepare written notification letters at each design milestone, with associated project information and files, and send to utility owners

2.2.3. Group & Individual Meetings with Utility Companies, as required, to facilitate utility conflict identification and resolution.

2.2.4. Establish contact with existing Utility Companies within and adjacent to the Project and set up utility coordination meetings to discuss concepts and options for construction.

2.2.5. Schedule and conduct design milestone meetings (i.e., 30%, 60%, 90%, etc.)

2.3. External Communications: The ***Utility Coordinator/Engineer*** will coordinate all activities with the County, Designated Representative, County contracted design firms, County utility providers, or other contractors or representatives, as authorized by the County or Designated Representative. The ***Utility Coordinator/Engineer*** will also provide copies of reports, correspondence and other documentation of work-related communications between the ***Utility Coordinator/Engineer***, utility owners and other outside entities when requested by the County.

2.4. Permits and right of entry. Obtain all necessary permits from city, county, municipality, railroad or other jurisdiction (not already obtained byte design engineer) to allow the *Engineer* to work within existing streets, roads or private property for additional designating and/or subsurface utility locating

2.5. The ***Utility Coordinator/Engineer*** shall determine which utilities will conflict with proposed Construction and make the utility company aware of these conflicts. The ***Utility Coordinator/Engineer*** shall assist the utility companies in the preparation of required agreements associated with the funding of adjustments and the occupation of public right of way.

2.6. Utility Agreement Assemblies: A packaged agreement consisting of (if Applicable) a Utility Completion Checklist, Master Utility Adjustment Agreement, Utility Joint Use Agreement, Affidavit, Quitclaim, Easement Documents, Field Notes for quitclaim portion of easement, Contractor Statement, Plans, Specifications, and detailed cost estimates.

2.6.1. The ***Utility Coordinator/Engineer***, in coordination with the County and its Designated Representative, shall determine the appropriate forms to be used and which utilities will be installed by "Agreement" or by "Permit". The ***Utility Coordinator/Engineer*** shall review and process all agreement and permit requests and forward to the County or its Designated Representative for final approval.

2.6.2. Utility Agreements: If a utility is located within an easement, the utility Company may have a compensable interest. The utility company must furnish a copy of their easement to the ***Utility Coordinator/Engineer***. The ***Utility Coordinator/Engineer*** shall determine whether or not a compensable interest exists and the owner's degree of eligibility. The ***Utility Coordinator/Engineer*** shall assist the utility company with adjustment plans and cost estimate for these adjustments. The ***Utility Coordinator/Engineer*** shall review plans to ensure that the proposed adjustments will not conflict with highway construction. The ***Utility Coordinator/Engineer*** will submit a copy of the easement, plans, and estimate to the County or its Designated Representative by letter recommending approval. The utility should be reimbursed all cost included within their easement limits for replacement in kind unless otherwise negotiated terms by the ***Utility Coordinator/Engineer.*** The ***Utility Coordinator/Engineer*** will work with the County and/or its Designated Representative to determine the appropriate agreement form to use for each assigned project.

2.6.3. Non-Reimbursable Utility Adjustments. The ***Utility Coordinator/Engineer*** will furnish the appropriate Utility Installation Permit form to the utility company and assist them with adjustment plan preparation. The utility company should submit the permit and adjustment plans to the ***Utility Coordinator/Engineer*** for review. The ***Utility Coordinator/Engineer*** shall review plans to ensure compliance with the County Utility Design Criteria Guidelines and the TxDOT UAR, if applicable, and to ensure that the proposal will not conflict with roadway construction. The ***Utility Coordinator/Engineer*** will submit the permit to the County or its Designated Representative by letter recommending approval.

2.6.4. Interlocal Agreements (ILA): If it is determined that the utility will be adjusted as part of the roadway contract, the County or its Designated Representative shall be notified immediately. The ***Utility Coordinator*** shall determine what funding amount is required based upon the applicable betterment or eligibility ratio. The County or its Designated Representative shall be notified immediately of the need for an ILA by the

Utility Coordinator/Engineer. The ***Utility Coordinator/Engineer*** will assist in the preparation and coordination of the ILA, as needed.

2.7. Utility Tracking Reports. The ***Utility Coordinator/Engineer*** will prepare and maintain a utility tracking report for each assigned project. The tracking report will in a spreadsheet format and will be updated on a monthly basis. The utility tracking report will include the following:

2.7.1. Utility Owner and Contact Information
2.7.2. Meetings and Written Notifications
2.7.3. Agreement Information
2.7.4. Utility Billings

2.8. Utility Billings. The ***Utility Coordinator/Engineer*** will receive and review all invoices sent by reimbursable utilities for accuracy and compliance with the executed utility agreements. If needed, the ***Utility Coordinator/Engineer*** will request any missing documentation required to support the invoice from the utility. After completion of the review, the invoice with supporting documentation, recommendation for payment, partial payment form and a payment summary will be forwarded to the County or its Designated Representative for approval and payment.

2.9. County Payment Requests to TxDOT. The ***Utility Coordinator/Engineer*** will assist in preparing the invoice package for the County's payment request to TxDOT. The payment request includes invoice package from the utility to the City, cancelled checks from the City to utility, utility relocation plans, utility agreement, and quitclaim (if applicable). The ***Utility Coordinator/Engineer*** will coordinate with the County auditor or its Designated Representative on payment request invoice format, prepare required forms and assist in packaging payment request for submittal to TxDOT.

3. **SUBSURFACE UTILITY ENGINEERING** including utility investigations subsurface and above ground prepared in accordance with AASHTO standards and Utility Quality Levels as follows.

Based on the review of existing utilities and proposed roadway design, bridge design, drainage design, and other potential conflicts for utilities, the ***Utility Coordinator/Engineer*** will recommend required test holes. The ***Utility Coordinator/Engineer*** will coordinate with the appropriate Utility Owner to utilize internal work forces to perform required test holes for verification of its facilities.

If requested, the ***Utility Coordinator/Engineer*** will coordinate with the County and/or its Designated Representative to provide the required test holes. A sketch of the area to be included for the proposed test hole locations "Level A" will be provided prior to the start of the work and must be approved by the County and/or its Designated Representative.

Utility Quality Levels are defined in cumulative order (least to greatest) as follows:

Quality Level D - Existing Records: Utilities are plotted from review of available existing records.

Quality Level C - Visible Surface Feature Survey: Quality level "D" information from existing records is positively correlated with surveyed visible surface features. Includes Quality Level D information. If there are variances in the designated work area of Level D then a new schematic or plan layout, if needed, is required showing the limits of the proposed project and limits of the work area required for the Project; including highway stations, limits within existing or proposed right-of-way, additional areas outside the proposed right-of-way, and distances or areas to be included down existing intersecting roadways.

Quality Level B - Designate: Two-dimensional horizontal mapping. This information is obtained through the application and interpretation of appropriate non-destructive surface geophysical methods. Utility indications are referenced to established survey control. Incorporates quality levels C and D information to produce Quality Level B. If there are variances in the designated work area of Level D then a new schematic or plan layout, if needed, is required showing the limits of the proposed project and limits of the work area required for the Project; including highway stations, limits within existing or proposed right-of-way, additional areas outside the proposed right-of-way, and distances or areas to be included down existing intersecting roadways.

Quality Level A - Locate (Test Hole): Three-dimensional mapping and other characterization data. This information is obtained through exposing utility facilities through test holes and measuring and recording (to appropriate survey control) utility/environment data. Incorporates quality levels B, C and D information to produce Quality Level A.

3.1. Permits and rights of entry. Obtain all necessary permits from city, county, municipality, railroad or other jurisdiction to allow the engineer to work within existing streets, roads or private property for additional designating and/or subsurface utility locating.

3.2. Subsurface Utility Designate Service (Quality Level B). Designate means to indicate the horizontal location of underground utilities by the application and interpretation of appropriate non-destructive surface geophysical techniques and reference to established survey control. Designate (Quality Level B) Services are inclusive of Quality levels C and D. The ***Utility Coordinator/Engineer*** shall:

3.2.1. As requested by the State compile "As Built" information from plans, plats and other location data as provided by the utility owners.

3.2.2. Coordinate with utility owner when utility owner's policy is to designate their own facilities at no cost for preliminary survey purposes. The ***Utility Coordinator/Engineer*** will examine utility owner's work to ensure accuracy and completeness.

3.2.3. Designate, record and mark the horizontal location of the existing utility facilities and their service laterals to existing buildings u sing n on-destructive surface geophysical techniques. No storm sewer facilities are to be designated unless authorized by the State. A non-water base paint, utilizing the APWA color code scheme, must be used on all surface markings of underground utilities.

3.2.4. Correlate utility owner records with designating data and resolve discrepancies using professional judgment. A color-coded composite utility facility plan with utility owner names, quality levels, line sizes and subsurface utility locate (test hole) locations, if applicable will be prepared and delivered to the County or its Designated Representative. It is understood by both the ***Utility Coordinator/Engineer*** and the County that the line sizes of designated utility facilities detailed on the deliverable are from the best available records and that an actual line size is normally determined from a test hole vacuum excavation. A note must be placed on the designate deliverable only that states "lines sizes are from best available records". All above ground appurtenance locations must be included in the deliverable to the County. This information will be provided in Microstation, Geopak or other applicable County/County's Design Consultant CADD system. The electronic file will be delivered on floppy disk or C.D., as required by the County. A hard copy is required and must be sealed and dated by the ***Utility Coordinator/Engineer***. When requested by the County or its Designated Representative, the designated utility information must be over laid on the County design plans.

3.2.5. Determine and inform the County of the approximate utility depths at critical locations as determined by the County or its Designated Representative. This depth indication is understood by both the ***Utility Coordinator/Engineer*** and the County and its Designated Representative to be approximate only and is not intended to be used preparing the right of way and construction plans.

3.2.6. Clearly identify all utilities that were discovered from quality levels C and D investigation, but cannot be depicted in quality level B standards. These utilities must have a unique line style and symbology in the designate (Quality Level B) deliverable.

3.3. Subsurface Utility Locate (Test Hole) Service (Quality Level A). Locate means to obtain precise horizontal and vertical position, material type, condition, size and other data that may be obtainable about the utility facility and its surrounding environment through exposure by non-destructive excavation techniques that ensures the integrity of the utility facility. Subsurface Utility Locate (Test Hole) Services (Quality Level A) are inclusive of Quality Levels B, C, and D. The ***Utility Coordinator/Engineer*** shall:

3.3.1. Review requested test hole locations and advise the County and/or its Designated Representative in the development of an appropriate locate (test hole) work plan relative to the existing utility infrastructure and proposed highway design elements.

3.3.2. Coordinate with utility owner inspectors as may be required by law or utility owner policy

3.3.3. Neatly cut and remove existing pavement material, such that the cut not exceed 1 square foot unless unusual circumstances exist.

3.3.4. Measure and record the following data, as required, on an appropriately formatted test hole data sheet that has been sealed and dated by the ***Utility Coordinator/Engineer***:

3.3.4.1. Elevation of top and/or bottom of utility tied to the datum of the furnished plan.

3.3.4.2. Identify a minimum of two benchmarks utilized. Elevations shall be within an accuracy of 0.05 feet of utilized benchmarks.

3.3.4.3. Elevation of existing grade over utility at test hole location.

3.3.4.4. Horizontal location referenced to project coordinate datum.

3.3.4.5. Outside diameter of pipe or width of duct banks and configuration of non-encased multi-conduit systems.

3.3.4.6. Utility facility material(s).

3.3.4.7. Utility facility condition.

3.3.4.8. Pavement thickness and type.

3.3.4.9. Coating/Wrapping information and condition.

3.3.4.10. Unusual circumstances or field conditions.

3.3.4.11. Excavate test holes in such a manner as to prevent any damage to wrappings, coatings, cathodic protection or other protective coverings and features.

3.3.5. Be responsible for any damage to the utility during the locating process. In the event of damage, the ***Utility Coordinator/Engineer*** shall stop work, notify the appropriate utility facility owner, the County, Designated Representative, and appropriate regulatory agencies. The regulatory agencies include, but are not limited to the Texas Railroad Commission and the Texas Commission on Environmental Quality. The ***Utility Coordinator/Engineer*** will not resume work until the utility facility owner has determined the corrective action to be taken. The ***Utility Coordinator/Engineer*** shall be liable for all costs involved in the repair or replacement of the utility facility.

3.3.6. Backfill all excavations with appropriate material, compact backfill by mechanical means and restore pavement and surface material. The ***Utility Coordinator/Engineer*** shall be responsible for the integrity of the backfill and surface restoration for a period of three years. Install a marker ribbon throughout the backfill.

3.3.7. Furnish and install a permanent above ground marker directly above center line of the utility facility.

3.3.8. Provide complete restoration of work site and landscape to equal or better condition than before excavation. If a work site and landscape is not appropriately restored, the ***Utility Coordinator/Engineer*** shall return to correct the condition at no extra charge to the County.

3.3.9. Plot utility location position information to scale and provide a comprehensive updated utility plan. This information will be provided in Microstation, Geopak or other CADD System format used by the County.

4. **UTILITY ENGINEERING AND DESIGN**. Includes the identification of utility conflicts, coordination, and resolution of utility conflicts, preparation of utility layouts and exhibits, review of utility relocation plans and estimates, and assisting in the utility adjustment coordination effort. The ***Utility Coordinator/Engineer*** shall coordinate all activities with the County and/or Designated Representative to facilitate the orderly progress and timely completion of the utility coordination phase. Coordination of utility engineering activities includes:

4.1. Utility Layout: The ***Utility Coordinator/Engineer*** shall maintain a utility layout in the latest version of Microstation V8 or AutoCAD. This layout shall include all existing utilities which are to remain in place, be relocated, or be abandoned. This layout will be utilized to confirm and evaluate alternatives. The ***Utility Coordinator/Engineer's*** Project Manager or registered Professional Engineer (P.E). will utilize the layout of existing utilities and make a determination of the following:

4.1.1. Facilities in conflict with the proposed project that are to be relocated.

4.1.2. Facilities to be abandoned in place.

4.1.3. Facilities to remain in service and in place.

4.2. The ***Utility Coordinator/Engineer*** shall be responsible for determining if there are additional facilities, not shown in the Subsurface Utility Engineering (SUE) documents, which require relocation. The ***Utility Coordinator/Engineer*** shall coordinate this information with the County and/or its Designated Representative immediately upon discovery.

4.3. Conflict Assessment. The ***Utility Coordinator/Engineer*** will utilize the Utility Layout and prepare a summary list of utility conflicts by owner and station limits. This conflict assessment will be forwarded to the utility owners within the project limits along with the utility layout.

4.4. Group & Individual Meetings with Utility Companies, as required, to facilitate utility conflict identification and resolution.

4.4.1. Establish contact with existing Utility Companies within and adjacent to the Project and set up utility coordination meetings to discuss concepts and options for construction.

4.4.2. Set agenda for all coordination meetings as directed by the County and/or Designated Representative.

4.4.3. Evaluate alternatives in the adjustment of utilities balancing the needs of both the County and the Utility.

4.4.4. Establish and promote the desired agenda and methodologies for utility construction within the project.

4.5. Proposed Utility Layout. The ***Utility Coordinator/Engineer*** will prepare a Proposed Utility Layout in the latest version of Microstation or AutoCAD, as needed, that can be overlaid on the County's or County's contracted design firm's roadway base files and determine the following:

4.5.1. Stakeholders have concurred with the various alignments.

4.5.2. Determine which utilities will be built as part of the contract.

4.5.3. Establish the sequence of construction for all utility relocation work, whether it is included as a part of the Project construction or not.

4.5.4. Determine which facilities will be relocated prior to construction

4.5.5. Facilities conflicts have been resolved.

4.6. Review of Utility's Proposed Adjustments

4.6.1. Evaluate Alternatives: The ***Utility Coordinator/Engineer*** will evaluate relocation plans and consider alternatives in the adjustment of utilities that balances the needs of both the County and the Utility.

4.6.2. Review Estimates and Schedules: The ***Utility Coordinator/Engineer*** will review the utility adjustment estimates for reasonableness of cost and the timely scheduling of the adjustment.

4.6.3. Review Plans for compliance with County Utility Design Criteria Guidelines, TxDOT Utility Accommodation Rules, if applicable, and proposed location data. The responsibility for quality and accuracy of Utility adjustment plans will remain with the Utility Company.

4.6.4. Review Traffic Control Plans. The ***Utility Coordinator/Engineer*** shall ensure traffic control plans meet with the regulations of the most recent edition of the "Texas Manual on Uniform Traffic Control Devices". The ***Utility Coordinator/Engineer*** must coordinate approval from the County or its Designated Representative concerning the proposed method of handling traffic prior to allowing commencement of work.

4.7. The ***Utility Coordinator/Engineer*** will coordinate, develop and/or review PS&E for all utilities included in the construction contract.

4.8. Utility Certification/Special Provisions: The ***Utility Coordinator/Engineer*** shall submit upon request from the County, a Utility Clearance Certification. Utility Clearance Certification will certify that utilities are clear for roadway construction. However, if the utility adjustments are not complete prior to roadway project letting, a letter will be required outlining all outstanding utility conflicts and their affects on roadway construction.

5. **FIELD SURVEYING FOR UTILITY RELOCATIONS.** The ***Utility Coordinator/Engineer*** will provide field surveying, at the request of the County or its Designated Representative, to assist in utility coordination during any phase of a County Project – planning, design, and/or construction. The ***Utility Coordinator/Engineer*** will only provide such services to the County when requested and authorized. Field surveying services include, but are not limited to:

5.1. Metes and Bounds Descriptions. The ***Utility Coordinator/Engineer*** will prepare metes and bounds descriptions and exhibits for utility easements, as requested and authorized by the County and/or its Designated Representatives

5.2. Right-of-Way (ROW) Staking. The ***Utility Coordinator/Engineer*** will provide ROW staking services for Utility Relocations, as requested and authorized by the County and/or its Designated Representatives

5.3. Utility Relocation Verification. The ***Utility Coordinator/Engineer*** can provide survey of utility relocations at critical locations, as requested and authorized by the County and/or its Designated Representatives.

6. **RIGHT-OF-WAY (ROW) COORDINATION FOR UTILITY RELOCATIONS.** The ***Utility Coordinator/Engineer*** will coordinate with the County or its Designated Representative in regards to right-of-way and easement acquisitions for each project assigned. This coordination will include, but is not limited to:

6.1. Identifying utility easement acquisition needs

6.2. Utility structure clearance as a result of ROW acquisition

6.3. Priorities in ROW acquisition schedule and for utility relocations

6.4. Preparation of exhibits to assist in ROW or easement acquisition process

6.5. Monthly Meetings with the County of its Designated Representative to review ROW acquisition and utility status

MISCELLANEOUS

The proposed scope of basic services is based on the following assumptions and/or qualifications:

ANY ADDITIONAL SERVICES REQUIRED BEYOND THOSE SPECIFICALLY IDENTIFIED IN THIS PROPOSAL ARE BEYOND THE SCOPE OF SERVICES TO BE PROVIDED UNDER THIS PROPOSAL. ANY REQUIRED ADDITIONAL SERVICES WILL BE SEPARATELY IDENTIFIED AND NEGOTIATED AND SUCH ADDITIONAL SCOPE AND COMMENSURATE FEE WILL BE EXECUTED/AUTHORIZED UNDER A SUPPLEMENTAL AGREEMENT TO THIS PROPOSAL/CONTRACT.

APPENDIX B

CONTRACTOR'S QUALIFICATIONS STATEMENT

See Attached Resumes

Sandra G. Khoury, P.E.

Senior Project Manager

CobbFendley

Years of Experience 14

Education
B.S., Civil Engineering, Texas A&M University, 1993

Professional Licenses and Certifications
Professional Engineer, Texas, No. 93777

Professional Experience
Ms. Khoury has over 14 years of experience involving utility coordination, civil engineering, surveying, and construction projects. Her experience includes project management, coordination, and engineering design for both public and private utility owners, governmental agencies, and municipal entities. Her design experience in both dry and wet utilities provides a unique perspective and understanding of the utility coordination and relocation process. She has extensive knowledge of the UAR, right-of-way policies and procedures, utility agreement assemblies and their preparation, utility conflict analysis and utility corridor planning. Ms. Khoury has worked on a variety of projects and has served clients such as the City of Cedar Park, Texas Department of Transportation, Williamson and Hays County, City of San Antonio, CapMetro, AT&T-Texas, AT&T-Metro, Texas Gas Service and Verizon MCI Business.

Project Experience

Utility Coordination

- **Hays County, Utility Coordination.** Project Manager providing Subsurface Utility Engineering, Utility Coordination and Utility Engineering Services for five different roadway improvement projects within the County. Projects assigned include FM 1626 (North) from Brodie Lane to FM 967; FM 1626 (South) from FM 2770 to FM 967; RM 12 at RM 32, CR 214, and Sink Creek; intersection improvements for SH 21 at FM 2001; and FM 110 improvements.
- **SH 21 at FM 2001, Hays County Bond Project.** Project Manager providing utility coordination and subsurface utility engineering services for this TxDOT project that falls within Hays County. Seven different utility companies were impacted by the proposed roadway improvements, including telecommunications, cable, electric distribution, gas and water. CobbFendley's tasks include researching and identifying conflicts with the proposed roadway and drainage design, preparing a Utility Corridor Conceptual Plan for the project, conducting coordination meetings with each utility owner, TxDOT, and the design team, reviewing utility agreement assemblies for each utility, providing constructability reviews for each relocation design, coordinating utility relocation schedules with the roadway construction schedule, and reimbursing utilities for relocation work.
- **Loop 82 – IH 35 to Charles Austin Street, San Marcos, TxDOT Austin District.** Project Manager providing utility coordination and subsurface utility engineering services for this TxDOT project. Nine different utility companies are impacted by the proposed roadway improvements, including telecommunications, cable, gas, electric distribution, water and wastewater. CobbFendley's tasks included researching and identifying utilities within the project corridor, performing Level B&C subsurface utility engineering, preparing a utility layout map, and identifying potential utility conflicts based on schematic design.

- **Williamson County, Utility Coordination.** Project Manager providing Utility Coordination Services for all the 2006 Road Bond Project, pass-thru projects, Unified Road System projects, and facilities projects. Tasks include identifying utilities within project corridors, preparing project notifications for each design milestone to send to utilities, preparing conflict assessments and exhibits, conducting utility coordination meetings, coordinating resolutions to utility conflicts, reviewing relocation designs, assisting with utility permits and agreements required for relocations, coordinating with the County design team on construction phasing and sequencing, and assisting the County with utility billings throughout relocation construction. Over 40 projects assigned, ranging from small county road projects to large highway improvement projects, including SH 195 from S. of Bell County Line to IH 35, SH 29 in Liberty Hill, CR 138, CR 108, Sam Bass Road/CR 175, Chandler Road Ph III, Ronald Reagan North Phase IV, CR 110, and CR 119.

- **FM 685 – US 79 to SH 130, City of Hutto.** Project Manager providing utility coordination and subsurface utility engineering services for this roadway improvement project (Advance Funding Agreement between the City of Hutto and TxDOT Austin District). Seven different utility companies were impacted by the proposed roadway improvements, including telecommunications, cable, electric distribution, gas and water. Utility companies include Oncor Electric (distribution and transmission), AT&T-Texas, CenturyLink, Time Warner Cable, City of Hutto, Manville WSC, and Atmos Gas. Tasks include researching and identifying conflicts with the proposed roadway and drainage design, preparing utility exhibits, conducting coordination meetings with each utility owner, the City, TxDOT, and the design team, reviewing utility agreement assemblies for each utility, and coordinating utility relocation schedules with the roadway construction schedule

- **TxDOT, Austin District, Utility Coordination Evergreen.** Project Manager providing Utility Coordination Services for seven different TxDOT roadway projects in the Austin District, ranging in size from a bridge replacement project to a 19-mile road widening project. Services included Subsurface Utility Engineering, Utility Coordination, Utility Engineering, and Utility Construction Management and Verification. Over 25 different utilities were impacted by the proposed roadway improvement projects. Projects assigned include IH 35 at Lakeway Drive; SH 195 from Bell County line to IH 35; RM 2338 from FM 3405 to Scenic Brook; FM 1979 at San Marcos River; SH 71 from east of Montopolis to US 183; and Loop 82 in San Marcos.

- **SH 71 at Riverside, TxDOT Austin District.** Project Manager and Utility Engineering Task Lead for this intersection improvement (grade separation) project. Her tasks included researching and identifying conflicts with the proposed roadway and drainage design, preparing a Utility Corridor Conceptual Plan for the project, conducting coordination meetings with each utility owner, TxDOT, and the design team, reviewing utility agreement assemblies for each utility, providing constructability reviews for each relocation design, and coordinating utility relocation schedules with the roadway construction schedule. Project corridor included seventeen different utility providers, including water, gas, electric, telecommunications and cable all within existing TxDOT right-of-way. Responsibilities also included coordinating the inclusion of City of Austin water relocations into the roadway PS&E, a joint trench telecommunication relocation, abandonment and removal of lines in areas of proposed grade cuts, and assistance with construction sequencing for utility relocations. Major component of the project included a thirty plus foot grade and retaining walls for the proposed underpass.

- **SH 195 - South of Bell County Line to IH 35, TxDOT Austin District.** Project Manager responsible for utility coordination and subsurface utility engineering for this 17-mile road-widening project that initially started as part of a TxDOT Austin District, Utility Coordination

Evergreen Contract, and was taken over by Williamson County. Tasks include researching and identifying conflicts with the proposed roadway and drainage design, preparing a Utility Corridor Conceptual Plan for the project, conducting coordination meetings with each utility owner, TxDOT, and the design team, reviewing utility agreement assemblies for each utility, providing constructability reviews for each relocation design, coordinating utility relocation schedules with the roadway construction schedule, and reimbursing utilities for relocation work. Ten different utility providers are being relocated along this corridor, including water (transmission and distribution), electric (distribution and transmission), telecommunications, and cable.

- **IH 35 AT BI 35 North and Lakeway Drive, TxDOT Austin District.** Project Manager providing utility coordination and subsurface utility engineering services for this TxDOT project that falls within Williamson County. Six different utility companies were impacted by the proposed roadway improvements, including telecommunications, cable, electric distribution, and water. CobbFendley's tasks include researching and identifying conflicts with the proposed roadway and drainage design, preparing a Utility Corridor Conceptual Plan for the project, conducting coordination meetings with each utility owner, TxDOT, and the design team, reviewing utility agreement assemblies for each utility, providing constructability reviews for each relocation design, coordinating utility relocation schedules with the roadway construction schedule, and reimbursing utilities for relocation work.
- **SH 45 SE, Hays and Travis Counties, TxDOT.** Deputy Project Manager providing utility relocation and coordination for 14 different utility companies on the SH 45 SE design-build project from IH 35 to US 183. Utilities impacted include electric distribution and transmission, cable television, telecommunications, water, and major gas pipelines. Includes researching and identifying conflicts with the proposed roadway and drainage design, preparing a Utility Corridor Conceptual Plan for the project, conducting coordination meetings with each utility owner, TxDOT, and the design team, preparing and reviewing utility agreement assemblies for each utility, providing constructability reviews for each relocation design, designing relocation plans for some utilities, coordinating utility relocation schedules with the roadway construction schedule, and reimbursing utilities for relocation work. Utility companies included Verizon, Charter Communications, AT&T-Texas, Qwest Communications, Level (3) Communications, Time Warner Cable, Houston Pipeline, Enterprise Pipeline, LCRA, Austin Energy, Bluebonnet Electric, and Creedmoor Maha Water Supply.
- **Intersection Improvements, Cedar Park, Texas.** Project Manager providing utility engineering services for the intersection improvement design of FM 1431 at Lakeline Blvd. and US 183 at Cypress Creek Road. Services provided included coordination of subsurface utility engineering, preparing utility conflict list with recommendations, and coordination with roadway design firm on redesign alternatives to avoid utility relocations.
- **CAPMETRO Commuter Rail, Utility Coordination, Leander to Austin, Texas.** Project Manager providing Utility Coordination and Subsurface Utility Engineering Services on this 32-mile Commuter Rail project. In addition, she also prepared utility relocation plans for seven different utility companies, including telecommunications, electric, and water, to be included in the rail construction package.
- **C-13 Broadway Corridor – Josephine Street to South Alamo Street, San Antonio Water System (SAWS), San Antonio, Texas.** Project Principal responsible for overseeing the Subsurface Utility Engineering, Surveying, and Utility Coordination services for this SAWS rehabilitation project. The C-13 Broadway Corridor Project is located in central San Antonio,

including the well known downtown area and world-renowned River Walk. The project is broken into three segments and includes streets such as Josephine, Avenue B, Broadway, North and South Alamo, Pereida and S. St. Mary's. Subsurface Utility Engineering tasks include over 114,000 linear feet of Level C & D Services (records research), 95,000 linear feet of Level B (designation) and 50 test holes (Level A). Survey tasks include research of property ownership, securing necessary right-of-entries, right-of-way determination and mapping, setting and establishing project survey control network, aerial mapping and supplemental topographic survey for the corridor. Utility coordination tasks include securing utility as-builts, preparing project notifications to all utilities at milestone deliverables, conducting utility coordination meetings, preparing conflict assessments and exhibits, evaluation of relocation alternatives, conflict resolution, coordination with non-joint bid utilities and construction phase sequencing.

- **Market Street Realignment, City of San Antonio Capital Improvement Management Services (CIMS), San Antonio, Texas.** Project Principal responsible for overseeing the Subsurface Utility Engineering, Surveying, Utility Coordination and Joint-Bid Utility Design Services for this high profile CIMS project. This project is the first significant piece in the City of San Antonio's plans for the redevelopment of HemisFair Park and the Henry B. Convention Center. The project includes the realignment of Market Street to the north of the Convention Center and the realignment of Bowie Street on the east side of the Convention Center. Subsurface Utility Engineering tasks include over 33,000 linear feet of Level C & D Services (records research), with additional services for Level B (designation) and Level A (test holes). Survey tasks include research of property ownership, securing necessary right-of-entries, right-of-way determination and mapping, setting and establishing project survey control network, and topographic survey and base mapping (2D & 3D) for the corridor. Utility coordination tasks include assisting with securing utility as-builts, utility corridor layouts, conflict assessments, conflict resolution, coordination with non-joint bid utilities, participating in utility meetings, and construction phase sequencing. Joint bid utility design services include researching existing facilities and preparing relocation design, specifications and estimates for AT&T-Texas, both structure and cable, and CPS Electric/Lighting duct bank. AT&T-Texas design will be completed and submitted in AT&T's OptiNT CAD platform.

- **IH 35, Woodlawn to FM 2063 (Segment 3B), TxDOT Waco.** Utility Engineering Task Lead for this 9.8-mile corridor improvement project providing utility engineering and utility design services. Responsibilities included researching and identifying utility conflicts with the proposed roadway improvements, coordinating with project team on recommended Level A SUE test hole locations, preparing utility corridor exhibits for each major design milestone submittal and supporting TxDOT Utility Coordinator with design milestone and individual utility meetings, preparing preliminary utility cost estimates for requesting U-numbers, and preparing utility conflict exhibits. She was also responsible for the management of preparing the plans, specifications and estimates for several relocating utilities to be included as part of the roadway construction, including AT&T-Texas, City of Robinson, and Time Warner Cable. She assisted the Project Team in coordinating owner-designed utilities to be included in the roadway PS&E, including the City of Lorena and the City of Bruceville-Eddie.

Melissa Horn
Senior Utility Specialist

CobbFendley

Years of Experience 15

Education
33 Credit Hours, Austin Community College, Austin, Texas

Professional Experience
Ms. Horn has over 15 years of experience involving utility coordination and construction projects. Her experience with the Texas Attorney General's Office, Texas Department of Transportation (TxDOT) and in the private sector provides a unique perspective and understanding of the utility coordination and relocation process. While with TxDOT, Ms. Horn developed training courses to provide direct assistance and training to utility agents, utility companies and consultants. Training courses and workshops focused on Utility Assembly, Utility Manual Updates, Payments and the "Fastest Ways to Agreement Approval". She has extensive knowledge of the UAR, right-of-way policies and procedures, utility agreement assemblies and their preparation, utility conflict analysis and utility corridor planning. **Ms. Horn has worked on a variety of projects and has served clients such as the Texas Department of Transportation, Williamson and Hays County.**

Project Experience

- **Hays County, Utility Coordination.** Senior Utility Coordinator responsible for coordinating Reimbursable and Non Reimbursable utility relocation for three different County roadway projects. Over twenty-one utilities were impacted by the proposed roadway improvement projects. Project assigned include IH 35: From FM 2001 to FM 1626; FM 1626: From FM 2770 to FM 967; FM 1626: From FM 967 to Brodie Lane; FM 110 at SH 123

- **Williamson County, Utility Coordination.** Senior Utility Coordinator providing Utility Coordination Services for all the 2006 Road Bond Project, pass-thru projects, Unified Road System projects, and facilities projects. Tasks include identifying utilities within project corridors, preparing project notifications for each design milestone to send to utilities, preparing conflict assessments and exhibits, conducting utility coordination meetings, coordinating resolutions to utility conflicts, reviewing relocation designs, assisting with utility permits and agreements required for relocations, coordinating with the County design team on construction phasing and sequencing, and assisting the County with utility billings throughout relocation construction. Over 40 projects assigned, ranging from small county road projects to large highway improvement projects, including SH 29 in Liberty Hill, CR 138, CR 108, Sam Bass Road/CR 175, Chandler Road Ph III, Ronald Reagan North Phase IV, CR 110, CR 119, CR 245, and Lakeline Blvd Extension.

- **TxDOT, Austin District, Utility Coordination.** Utility Coordination Task Leader coordinating Reimbursable and Non Reimbursable utility relocations for ten different TxDOT roadway projects in the Austin District. Over 64 different utilities were impacted by the proposed roadway improvement projects. Project assigned include Loop 360 @ Westlake Drive; RM 2769: From RM 620, West 0.70 MI to Proposed Anderson Mill Road; RM 2222: From 1222' West of Loop 360 to 1063' East of Lakewood Drive; FM 2304: From Ravenscroft Drive to FM 1626; FM 535 @ Piney Creek and Cedar Creek; IH 35: From FM 620 to McNeil Road; IH 35: From FM 2001 to FM 1626; SH 71: From Upland Ridge Drive to Southwest Parkway; SH 21 @ SW Draw and NE Draw; SH 71 W: From 0.3 MI East of RO Drive to Bee Creek Road.

- **TxDOT, Waco District, Utility Coordination Evergreen.** Utility Coordination Task Leader coordinating Reimbursable and Non Reimbursable utility relocations for nine different TxDOT roadway projects in the Waco District. Over 26 different utilities were impacted by the proposed roadway improvement projects. Project assigned include Loop 363: From 57th Street to 5th Street; IH 35: From Williamson County Line to FM 2843; IH 35: From FM 2063 to Loop 340 / SH 6; SH 31: From SH 31 and US 84 WYE to Hill County Line; SH 195: From 1-mile south of FM 2484 to Bell/Williamson County line; SH 6: From SH 7 to 0.738-mile south of SH 7; SH 164: From Limestone County line to 0.114 mile north of FM 3529; FM 712: From BS 6 to Brazos River; IH 35 at Loop 340 / SH 6.
- **TxDOT, Bryan District, Utility Coordination Evergreen.** Utility Coordination Task Leader coordinating Reimbursable and Non Reimbursable utility relocations for two different TxDOT roadway projects in the Bryan District. Over 23 different utilities were impacted by the proposed roadway improvement projects. Project assigned include SH 6: From FM 1644 in Calvert to US 79 Interchange; FM 1179: From Kent Street to SH 6.
- **TxDOT, Fort Worth District, Utility Coordination Evergreen.** Utility Coordination Task Leader #2 coordinating Reimbursable and Non Reimbursable utility relocations for four different TxDOT roadway projects in the Forth Worth District. Over 36 different utilities were impacted by the proposed roadway improvement projects. Project assigned include US 380: From Denton County Line to FM 51; SH360 at SH 180; FM 3029: From SH 26 to SH 121; SH 360 at SH 180 Interchange.
- **TxDOT, Dallas District, Utility Coordination Evergreen.** Utility Coordination Task Leader #2 coordinating Reimbursable and Non Reimbursable utility relocations for three different TxDOT roadway projects in the Dallas District. Over 23 different utilities were impacted by the proposed roadway improvement projects. Project assigned include IH 30: From south of Hill Street to north of Carrier Parkway; SH 161: From West Fork of Trinity River to Rock Island Road; SH 161: From North of IH 30 to North of Conflans Road
- **TxDOT, Corpus Christi District, Utility Coordination Evergreen.** Utility Coordination Task Leader coordinating Reimbursable and Non Reimbursable utility relocations a TxDOT roadway project in the Corpus Christi District. Over 10 different utilities were impacted by the proposed roadway improvement project. Project assigned include SH 188: From IH 37 to FM 630.

Thomas P. Hansell, P.E., RPLS

Senior Engineer

CobbFendley

Years of Experience 41

Education

B.S., Civil Engineering, University of Texas, 1971

Professional Registration

Professional Engineer, Texas, No. 40624
Registered Professional Land Surveyor, Texas, No.3284

Professional Experience

Mr. Hansell has more than 41 years experience in transportation and public works engineering, including four years with the Texas Department of Transportation and 25 years with the City of Austin. He worked in a number of divisions of the Austin Public Works Department including Architecture and Engineering Services, Construction Inspection, Design, and Land Development Services. Mr. Hansell has spent the last 11 years with providing utility coordination and design for various agencies which include the City of Cedar Park, Texas Department of Transportation, Williamson and hays County, Capitol Metro and the Texas Turnpike Authority.

Project Experience

- **Hays County, Utility Coordination.** Utility Project Engineer providing Subsurface Utility Engineering, Utility Coordination and Utility Engineering Services for five different roadway improvement projects within the County. Projects assigned include FM 1626 (North) from Brodie Lane to FM 967; FM 1626 (South) from FM 2770 to FM 967; RM 12 at RM 32, CR 214, and Sink Creek; intersection improvements for SH 21 at FM 2001; and FM 110 improvements.
- **Williamson County, Utility Coordination.** Utility Project Engineer providing Utility Coordination Services for all the 2006 Road Bond Project, pass-thru projects, Unified Road System projects, and facilities projects. Tasks include identifying utilities within project corridors, preparing project notifications for each design milestone to send to utilities, preparing conflict assessments and exhibits, conducting utility coordination meetings, coordinating resolutions to utility conflicts, reviewing relocation designs, assisting with utility permits and agreements required for relocations, coordinating with the County design team on construction phasing and sequencing, and assisting the County with utility billings throughout relocation construction. Over 40 projects assigned, ranging from small county road projects to large highway improvement projects, including SH 195 from S. of Bell County Line to IH 35, SH 29 in Liberty Hill, CR 138, CR 108, Sam Bass Road/CR 175, Chandler Road Ph III, Ronald Reagan North Phase IV, CR 110, and CR 119.
- **TxDOT, Austin District, Utility Coordination Evergreen.** Deputy Project Manager providing Utility Coordination Services for seven different TxDOT roadway projects in the Austin District, ranging in size from a bridge replacement project to a 19-mile road widening project. Services included Subsurface Utility Engineering, Utility Coordination, Utility Engineering, and Utility Construction Management and Verification. Over 25 different utilities were impacted by the proposed roadway improvement projects. Projects assigned include IH 35 at Lakeway Drive; SH

195 from Bell County line to IH 35; RM 2338 from FM 3405 to Scenic Brook; FM 1979 at San Marcos River, SH 71 from east of Montopolis to US 183; and Loop 82 in San Marcos.

- **SH 71 at Riverside, TxDOT Austin District.** Deputy Project Manager for this intersection improvement (grade separation) project. Her tasks included researching and identifying conflicts with the proposed roadway and drainage design, preparing a Utility Corridor Conceptual Plan for the project, conducting coordination meetings with each utility owner, TxDOT, and the design team, reviewing utility agreement assemblies for each utility, providing constructability reviews for each relocation design, and coordinating utility relocation schedules with the roadway construction schedule. Project corridor included seventeen different utility providers, including water, gas, electric, telecommunications and cable all within existing TxDOT right-of-way. Responsibilities also included coordinating the inclusion of City of Austin water relocations into the roadway PS&E, a joint trench telecommunication relocation, abandonment and removal of lines in areas of proposed grade cuts, and assistance with construction sequencing for utility relocations. Major component of the project included a thirty plus foot grade and retaining walls for the proposed underpass.

- **SH 195 - South of Bell County Line to IH 35, TxDOT Austin District.** Deputy Project Manager responsible for utility coordination and subsurface utility engineering for this 17-mile road-widening project that initially started as part of a TxDOT Austin District, Utility Coordination Evergreen Contract, and was taken over by Williamson County. Tasks include researching and identifying conflicts with the proposed roadway and drainage design, preparing a Utility Corridor Conceptual Plan for the project, conducting coordination meetings with each utility owner, TxDOT, and the design team, reviewing utility agreement assemblies for each utility, providing constructability reviews for each relocation design, coordinating utility relocation schedules with the roadway construction schedule, and reimbursing utilities for relocation work. Ten different utility providers are being relocated along this corridor, including water (transmission and distribution), electric (distribution and transmission), telecommunications, and cable.

- **IH 35 AT BI 35 North and Lakeway Drive, TxDOT Austin District.** Deputy Project Manager providing utility coordination and subsurface utility engineering services for this TxDOT project that falls within Williamson County. Six different utility companies were impacted by the proposed roadway improvements, including telecommunications, cable, electric distribution, and water. CobbFendley's tasks include researching and identifying conflicts with the proposed roadway and drainage design, preparing a Utility Corridor Conceptual Plan for the project, conducting coordination meetings with each utility owner, TxDOT, and the design team, reviewing utility agreement assemblies for each utility, providing constructability reviews for each relocation design, coordinating utility relocation schedules with the roadway construction schedule, and reimbursing utilities for relocation work.

- **Loop 82 – IH 35 to Charles Austin Street, San Marcos, TxDOT Austin District.** Deputy Project Manager providing utility coordination and subsurface utility engineering services for this TxDOT project. Nine different utility companies are impacted by the proposed roadway improvements, including telecommunications, cable, gas, electric distribution, water and wastewater. CobbFendley's tasks included researching and identifying utilities within the project corridor, performing Level B&C subsurface utility engineering, preparing a utility layout map, and identifying potential utility conflicts based on schematic design.

- **IH 35, Woodlawn to FM 2063 (Segment 3B), TxDOT Waco.** Utility Coordinator for this 9.8-mile corridor improvement project providing utility engineering and utility design services.

Responsibilities included researching and identifying utility conflicts with the proposed roadway improvements, coordinating with project team on recommended Level A SUE test hole locations, preparing utility corridor exhibits for each major design milestone submittal and supporting TxDOT Utility Coordinator with design milestone and individual utility meetings, preparing preliminary utility cost estimates for requesting U-numbers, and preparing utility conflict exhibits.

- **CAPMETRO Commuter Rail, Leander to Austin, Texas.** Utility Project Engineer on the CMTA commuter rail project which involved 32 miles of rail with 9 stations. Duties include identifying and meeting with utilities, researching and identifying conflicts, preparing Utility Conflict list and meeting with utilities to coordinate the design and relocation of their facilities. Assisted with the design of joint trench telecommunications duct bank on 4th Street for AT&T, Time Warner and MCI.
- **Williamson County 2001 Road Bond Program, Williamson County, Texas.** Utility Coordination Specialist for $350 million county road bond program, with 42 road projects. Mr. Hansell coordinated with more than 21 utility companies throughout project areas. Managed conflict identification and resolution. Reviews and recommended approval of utility agreements, utility adjustment plans, and permits. Utility relocation design services for telecommunications, gas and water.
- **SH 45 SE, Hays and Travis Counties, TxDOT.** Utility Project Manager providing utility relocation and coordination for 14 different utility companies on the SH 45 SE design-build project from IH 35 to US 183. Utilities impacted include electric distribution and transmission, cable television, telecommunications, water, and major gas pipelines. Includes researching and identifying conflicts with the proposed roadway and drainage design, preparing a Utility Corridor Conceptual Plan for the project, conducting coordination meetings with each utility owner, TxDOT, and the design team, preparing and reviewing utility agreement assemblies for each utility, providing constructability reviews for each relocation design, designing relocation plans for some utilities, coordinating utility relocation schedules with the roadway construction schedule, and reimbursing utilities for relocation work. Relocation design included joint trenches for AT&T, Broadwing, Charter, Qwest, Time Warner Cable and Verizon.
- **SH 45 and Loop 1, Austin, Texas, Texas Turnpike Authority.** Utility Coordination Specialist for 17.5-mile, $40 million toll road project. Mr. Hansell worked directly with private utilities to negotiate, coordination, and relocate over $40 million of utilities along three corridors. Tasks included design of 375,000 linear feet of utility structures, review and approval of each utility agreement, and relocation design. Mr. Hansell worked to maintain the agency's utility maps, reports and costs data, and reimbursed utilities for relocation work.

Robert G. Nagel, P.E.

Senior Project Manager, Subsurface Utility Engineering

CobbFendley

Years of Experience 30

Education

B.S., Civil Engineering, Texas A&M University, 1983

Professional Licenses and Certifications

Professional Engineer, Texas, No. 65432
TxDOT Precertification, No. 10111

Publications, Speaking Engagements, and Committees

"Case Study on SUE: I-30 at Dallas Cowboys Stadium" Damage Prevention Professional, Summer 2012, Volume 1, Number 3
"SUE Reduce Costs Minimize Delays," Alabama 811, Volume 2, Issue 2,
SHRP II R-01 B&C User Panel, SHRP Developing a multi-sensor geographical platform and developing geophysical methods for deep or stacked utilities
"Subsurface Utility Engineering - A Cost and Time Effective Option", ASCE Spring 22 011 Conference, invited speaker
"A Case Study on SUE: I-30 at Dallas Cowboys Stadium", Damage Prevention Professional, Summer 2010
"A Case Study on SUE: I-30 at Dallas Cowboys Stadium", Texas Damage Prevention Conference, February 2010, invited speaker
"Subsurface Utility Engineering - Enhancing Projects through SUE", City of San Antonio, February 2008, invited speaker
"Benefits of Subsurface Utility Engineering", various presentations to TxDOT, Metropolitan Transit Authority, Harris County (METRO), and City of Austin

Professional Experience

Mr. Nagel has over 29 years of combined experience in subsurface utility engineering (SUE), civil engineering and construction management. He has completed projects throughout the States of Texas and New Mexico for departments of transportation, municipalities and private utilities. His SUE expertise coupled with construction management and design experience on more than $700 million in projects gives him a unique understanding of the value of SUE and how and when to use it. All projects were completed in compliance with ASCE/CI 38-02 and appropriate DOT standards.

Project Experience

SUE

- **CADIZ Street, City of Dallas.** Performed two test holes on an existing sanitary sewer force main approximately 20 feet deep, other SUE providers could not locate the line. Information needed so that the design of the bridge columns would avoid the existing line.
- **Intersection Improvements, City of Cedar Park, Texas.** Mr. Nagel provided SUE services for the intersection improvement design of FM 1431 at Lakeline Blvd. and US 183 at Cypress Creek Road. Services provided included SUE Quality Levels A, B, C and D.

- **SH 45, Austin, Texas Turnpike Authority.** Project Manager responsible for the designation of approximately 60,000 LF of utility lines (Quality Level B) and 65 test holes (Quality Level A). Utility coordination was also provided. Information from SUE investigation used for PS&E for construction of new turnpike.
- **Rio Grande Street, City of Austin.** Provided SUE services for 14 test holes (Quality Level A) in connection with street reconstruction.
- **Loyola Road, City of Austin.** Managed project that included Quality Levels D, C, B and A on utilities. Information from SUE investigation used for PS&E for roadway improvements.
- **Nueces Street, City of Austin.** Managed SUE project that included 20 test holes (Quality Level A).
- **East 51st Street, City of Austin.** Managed SUE project that included 3 test holes (Quality Level A), CADD services and utility coordination.
- **South First Street, City of Austin.** Managed subsurface utility engineering project that included 3 test holes (Quality Level A).
- **Upper Tannehill Wastewater Improvements, City of Austin.** Managed SUE project that included 23 test holes (Quality Level A) and 800 LF of designation.
- **Seaholm Power Plant, Austin Energy, Austin, Texas.** Performed SUE levels A, B, C and D on utilities at abandoned power plant. SUE plans used for the preparation of plans for site redevelopment.
- **East Stassney Lane, IH 35 to Nichols Crossing, City of Austin.** Provided SUE services for 50 tests holes (Quality Level A) in connection with installation of communications conduit.
- **Pleasant Valley Road, City of Austin.** Managed project that included designation (Quality Level B) on approximately 2,000 LF of utility lines and 6 test holes (Quality Level A). Information form SUE investigation used for advance planning of channel depth.
- **President George Bush Turnpike, NTTA.** Performed SUE Quality Levels B, C and D along the 26-mile length of the PGBT and the northern portion of the North Dallas Tollway to locate 240,000 LF of NTTA-owned utilities. The work consisted of locating water, gas, sewer, telephone, and electric utilities at all of the toll plazas on the PBGT and buried conduit along the two toll roads.
- **Utility Mapping, University of Houston, Houston, Texas.** Mr. Nagel performed Level B SUE on existing fiber, telecommunication, gas, water and sewer lines. Existing records were minimal. University of Houston wanted to know what they had to help minimize conflicts with utilities during expansion. Information is being brought into a GIS system.
- **METRO Southeast Rail Corridor, Houston, Texas.** CobbFendley performed surveying services along MLK Boulevard, Capital, Rusk, York, Scott, Wheeler and Griggs Streets, in all a total length of approximately 5 miles. Mr. Nagel provided utility research and SUE Quality Level B on over 50,000 LF of existing gas, telecommunication, fiber, water and sewer lines. The utilities were graphically represented on specific layers indicating depths, pipe sizes and flowlines.
- **Hobby Airport, Houston, Texas.** Mr. Nagel performed SUE Quality Level B on existing sewer lines. The City of Houston had poor records online. CobbFendley was able to determine the location and direction of the lines, and provide a City map showing lowliness and directions of the lines. SUE

technicians televised the lines and provided condition reports. All work was performed during non-flight hours from 11 pm to 5 am.

- **Baylor College of Medicine, Houston.** Managed project that included designation (Level B) on approximately 3,000 LF utility lines, including chilled water lines. Information from SUE to be used for advanced planning of flood wall design.
- **Bexar County Courthouse, AT&T.** Provided SUE to determine horizontal and vertical information on AT&T facilities surrounding the Bexar County Courthouse. Information was used to determine possible conflicts with drainage improvements around the Courthouse.
- **San Antonio, Texas, Various Locations, AT&T-Texas.** Provided 500 test holes for AT&T to determine horizontal and vertical information on AT&T facilities. Information was used to determine potential conflicts with AT&T facilities on various roadway and drainage projects throughout the San Antonio area.
- **SH 35 at Spur 422, San Antonio, Texas.** Provided SUE quality levels B, C and D. In addition, provided professional engineering and surveying services in connection with a topographic survey for proposed entrance/exit ramps and interchange. Information was used for the design of proposed improvements.
- **IH 35 at Cibolo Creek, Selma, Texas.** Professional engineering and surveying services, including topographic survey, in connection with SUE Levels D, C, B and A, and the survey of SUE Levels B, C and D. This information was used for roadway widening design.
- **Northside Independent School District, San Antonio, Texas.** Project Manager providing SUE services on multiple construction and engineering projects. Services ranged from utility designating to vacuum excavation as necessary to resolve conflicts with underground utilities and proposed design. The projects include more than 25 different school locations and more than 30 different projects.
- **I10 at North Lee Trevino Drive, TxDOT El Paso.** Preformed Level B on approximately 15,000 lf of utilities and Level C and D on approximately 5,000 LF of utilities. Also performed 37 test holes (Level A services) on the project. SUE used in PS&E development for frontage road and ramp improvements.
- **Loop 375 from US 54 to Zaragoza Road, City of El Paso.** Performed Level B services on approximately 4,000 LF of utilities and Level C and D on approximately 4,000 LF on utilities. SUE used in PS&E development for improvements along the right-of-way.

TxDOT SUE

- **IH 35 at BI 35 N and Lakeway Drive, TxDOT Austin.** Mr. Nagel was the SUE Task Leader for this project, which included utility records research of 16,000 LF (Quality Level D and C), designation (Quality Level B) of approximately 4,000 LF of utility lines, and 19 test holes (Quality Level A). Information from SUE investigation used for plans, specifications and estimates for roadway construction.
- **RM 2338 from West of FM 3406 to Cedar Breaks Road, TxDOT Austin District.** Mr. Nagel was the SUE Task Leader for this project, which included utility records research of 25,000 LF (Quality Level D and C), designation (Quality Level B) of approximately 20,000 LF of utility lines, and 27 test holes (Quality Level A). Information from SUE investigation used for plans, specifications and estimates for roadway construction.
- **SH 45, Austin, Texas Turnpike Authority.** Project Manager responsible for the designation of approximately 60,000 LF of utility lines (Quality Level B) and 65 test holes (Quality Level A). Utility coordination was also provided. Information from SUE investigation used for PS&E for construction of new turnpike.
- **SH 45 SE, Hays and Travis Counties, TxDOT Austin.** Performed SUE services on 7 miles of SH 45 SE. Project included Quality Levels A, B, C and D. SUE used in preparation of design of roadway and relocation of utilities.
- **SH 195, South of Bell County Line to IH 35, TxDOT Austin.** Mr. Nagel performed SUE as part of the Utility Coordination services provided by CobbFendley for several TxDOT roadway projects in the Austin District. Utilities impacted by the proposed roadway improvements included electric distribution and transmission, cable television, telecommunications, water and wastewater, and gas distribution and transmission. This project was one of several projects completed by Mr. Nagel and included utility records research of 46,000 linear feet (Quality Levels D and C), designation of approximately 1,000 linear feet of utility lines (Quality Level B), and 15 test holes (Quality Level A). Information from SUE investigation used for plans, specifications and estimates for roadway construction.
- **FM 1460, TxDOT Austin.** Mr. Nagel was the Construction Management and Verification Task Leader for this project, which included the relocation of gas and electric distribution lines. Also, he oversaw the relocation of a City of Round Rock water line. Mr. Nagel's team conducted status meetings with the contractor, provided on site observation and surveying to ensure the proper placement of the utility. As-built drawings will be provided of the constructed utilities.
- **Loop 281, TxDOT North Region.** Project manager providing SUE services that included designation of over 50,000 LF of utilities and approximately 100 test holes (Quality Level A). Information was used for preparation of PS&E for roadway improvements.
- **US 290 Program Management Consultant, TxDOT Houston.** Mr. Nagel served as SUE Task Leader for the US 290 Project from IH 610 to W. 34th Street and US 290 at FM 1960. He led SUE services including Quality Levels D, C, B and A for approximately 150,000 LF of utilities and over 75 test holes, including 12 pipeline companies, 4 Municipal Utility Districts and the City of Houston, 14 telecommunication companies and TxDOT Computerized Traffic Management System. All SUE information is tied to a GIS database. The SUE investigation is being completed for the widening of US 290 and the reconstruction of frontage roads.
- **FM 529 from Fry Road to Greenhouse Road, TxDOT Houston.** Mr. Nagel served as PM and SUE Task Leader. He performed utility records research (Quality Level D and C), designation of approximately 50,000 LF of utility lines (Quality Level B), and 19 test holes (Quality Level A) for this

project. Information from the SUE investigation was used for development of PS&E for roadway widening.

- **FM 2978 from Spring Creek to FM 2920, TxDOT Houston.** Mr. Nagel served as PM and SUE Task Leader. He performed utility records research (Quality Level D and C), designation of approximately 23,000 LF of utility lines (Quality Level B), and 26 test holes (Quality Level A) for this project. Information from the SUE investigation was used for development of PS&E for roadway widening.
- **IH 35 from FM 2484 to US 190, TxDOT Waco.** Mr. Nagel served as SUE Task Leader and managed SUE services for all utilities along IH 35 from FM 2484 to US 190. Services included utility records research on 350,000 LF of utilities (Quality Level D and C), designation of 100,000 LF of utility lines (Quality Level B), and over 50 test holes (Quality Level A). CobbFendley provided SUE plan sheets and test hole data sheets. Information from the SUE investigation will be used for preparation of PS&E for the widening of the main lanes and reconstruction of the frontage roads.
- **SH 71 from US 183 to East of Montopolis, TxDOT Austin.** Project Manager for approximately 20,000 linear feet of Levels B, C, and D. In addition, CobbFendley performed and approximately 20 test holes for a roadway improvement project with TxDOT.
- **US 69 from SH 347 to Spurlock Road, TxDOT Beaumont.** Project Manager. Managed project that included designation (Quality Level B) of approximately 125,000 LF of utility lines and 140 test holes (Quality Level A). Information from SUE investigation used for PS&E package. Work performed in accordance with CI/ASCE 38-02.
- **SH 288 Business, Clute, TxDOT Houston.** Project Manager. Provided SUE services on approximately 40,000 LF of utilities including Quality Levels D, C, B, and 19 test holes (Quality Level A). While digging for a wastewater line, uncovered a .29" steel natural gas line. The steel line was toned and Entex was contacted to confirm their ownership of the line. Since there was a question of ownership, CobbFendley met with Entex representatives in the field, showing them the exposed gas line tying into Entex lines. The SUE information will be used in the preparation of the PS&E for future roadway and bridge improvements.
- **SH 249, Detention Pond, TxDOT Houston.** Provided SUE services on pipelines in abandoned oil pipeline gathering field. Provided Quality Levels A, B, C and D. Included designation (Quality Level B) of 8,000 LF of utility lines and 6 test holes (Quality Level A). SUE information used in preparation of PS&E and for relocation/removal of pipelines.
- **SH 332, Brazoria, TxDOT Houston.** Project Manager. Managed project that included designation (Quality Level B) of approximately 70,000 LF of utility lines and 20 test holes (Quality Level A). SUE information used for preparation of PS&E for roadway and bridge improvements.
- **FM 1764, Santa Fe, TxDOT Houston.** Project Manager. Managed project that included approximately 40,000 LF of designation (Quality Level B) on utilities and 27 test holes (Quality Level A). Information from SUE investigation used for PS&E for roadway improvements.
- **IH 635 from Luna to Coit, TxDOT Dallas.** Mr. Nagel performed SUE services including designation (Quality Level B) of approximately 190,000 linear feet of utility lines and 70 test holes (Quality Level A). SUE information was used for the preparation of PS&E for roadway and bridge improvements.
- **Loop 12, SH 114 to IH 35, TxDOT Dallas.** Mr. Nagel was the SUE Task Manager for this project where he provided SUE services on approximately 8,900 LF of utilities including Quality Levels D, C, B and A in connection with roadway improvements.

- **US 380, from CR 557 to CR 690, Farmersville, TxDOT Dallas.** Performed SUE levels A, B, C and D on an approximate 5-mile length of US 380. Located over 80,000 LF of utilities and 66 test holes. SUE plans used in preparation of plans, specifications and estimates.
- **IH 30, Fielder Road to Dallas County Line, TxDOT Fort Worth.** Mr. Nagel was responsible for the utility records research (Quality Levels D and C), designation (Quality Level B) of approximately 70,000 linear feet of utility lines and 24 test holes (Quality Level A) for IH 30 between Davis Boulevard and SH 360. SUE drawings will be used for bridge and roadway improvements along this section of roadway.
- **SH 10 at IH 820, TxDOT Fort Worth District.** As the SUE Task Leader for this project, Mr. Nagel performed SUE Quality levels D, C and B for the SH 10 bridge crossing IH 820. SUE data was used in the preparation of SH 10 bridge improvements.
- **IH 35W from Alsbury to North of FM 1187, TxDOT Fort Worth District.** Mr. Nagel managed project that included designation of 20,000 linear feet of utility lines (Quality Level B) and 15 test holes (Quality Level A), including an abandoned City of Fort Worth 16-inch water line that could not be located by other SUE providers. Information from SUE investigation used for preparation of PS&E.
- **US 175 from SH 155 to FM 347, TxDOT Tyler.** Mr. Nagel performed SUE services including utility records research (Quality Levels D and C), designation of approximately 80,000 linear feet of utility lines (Quality Level B), and 20 test holes (Quality Level A). SUE information was used for the preparation of PS&E for roadway and bridge improvements.
- **US 69, FM 2795 to SH 34, TxDOT Tyler.** Mr. Nagel was the SUE Task Leader for this project. He provided Quality Levels D, C, B and A. Responsibilities included designation (Quality Level B) of approximately 55,000 LF of utility lines and 30 test holes (Quality Level A). SUE information was used for the preparation of PS&E for roadway and bridge improvements.
- **US 281, TxDOT Pharr.** Managed project that included designation (Quality Level B) of approximately 90,000 LF of utility lines and 65 test holes (Quality Level A). Information from SUE investigation used to resolve conflicts with future roadway and bridge improvements. In June 2002 with the TxDOT SUE evergreen contract expiring, CFA was asked to perform SUE services on this project with the fieldwork complete by the end of July. All fieldwork was completed by mid-July and the US 281 information was completed at the end of July. US 281 documents were provided to TxDOT at the beginning of August.
- **US 83, Mercedes, TxDOT Pharr.** Managed project that included designation (Quality Level B) of approximately 60,000 LF of utility lines and 88 test holes (Quality Level A). Information from SUE investigation used for preparation of PS&E for roadway widening and bridge improvements. Scope included providing clearance of overhead lines crossing US 83for the entire project, as well as calculated quantities for the pay items associated with the project. In June 2002 with the TxDOT SUE evergreen contract expiring, CFA was asked to perform SUE services on this projects with the fieldwork complete by the end of July. All fieldwork was completed by mid-July and the US 83 information was completed at the end of July.
- **Cuatro Vientos Road, TxDOT Laredo.** Performed Levels B, C and D on approximately 20,000 LF of utilities. Project length was approximately 6 miles.
- **Loop 20 at SH 359, TxDOT Laredo.** Subsurface utility engineering including quality levels C and D on 24,000 LF of utilities.

Contract No: _____

FM 110: From SH 123 to IH 35/Yarrington Road

Hays County
Utility Coordination Services
Exhibit D
Fee Schedule

Summary of Services

	Segment 1	Segment 2	Segment 3	Total
Project Management and Coordination	$ 7,080.00	$ 7,840.00	$ 12,380.00	$ 27,300.00
Utility Adjustment Coordination	$ 25,930.00	$ 29,275.00	$ 44,510.00	$ 99,715.00
Utility Engineering	$ 20,870.00	$ 23,765.00	$ 35,720.00	$ 80,355.00
SUE Services	$ 13,800.00	$ 16,050.00	$ 55,320.00	$ 85,170.00
Other Direct Costs	$ 775.78	$ 874.60	$ 1,390.56	$ 3,040.94
Total Fee	$ 68,455.78	$ 77,804.60	$ 149,320.56	$ 295,580.94

Total Fee - FM 110: From SH 123 to IH 35/Yarrington Road $ 295,580.94

Hays County
Utility Coordination Services
Exhibit D
Fee Schedule

Summary of Services

	CobbFendley UC Total
Project Management and Coordination	$ 7,080.00
Utility Adjustment Coordination	$ 25,930.00
Utility Engineering	$ 20,870.00
SUE Services	$ 13,800.00
Other Direct Costs	$ 775.78
Total Fee	$ 68,455.78

Total Fee
FM 110: From SH 123 to FM 621 - Segment 1 **$ 68,455.78**

Utility Coordination & Engineering Services

Description of Work Task	Project Manager	Project Engineer III	Project Engineer II	Project Engineer I	Utility Specialist	Technician III	Technician II	Technician I	Adm/Clerical	Total Hours	Total Cost
	$190.00	$150.00	$130.00	$105.00	$125.00	$105.00	$90.00	$75.00	$65.00		
Project Management and Coordination											
Project Quality Assurance / Quality Control (QA/QC)	8									**8**	$ 1,520.00
Prepare and Maintain Utility Status Report (bi-weekly) - 15 months	4				4				4	**12**	$ 1,520.00
Monthly Project Status Meetings (15 total)	4				8					**12**	$ 1,760.00
External communications/maintain project documentation	4				8				8	**20**	$ 2,280.00
Total Hours	**20**	**0**	**0**	**0**	**20**	**0**	**0**	**0**	**12**	**52**	
Cost	$3,800	$0	$0	$0	$2,500	$0	$0	$0	$780		**$ 7,080.00**
Utility Adjustment Coordination											
Coordinate Activities/Meetings											
Initial Project Meeting	2	2		2	2					**8**	$ 1,140.00
Project Notifications - design milestones (4 anticipated)	2				8				8	**18**	$ 1,900.00
Group Utility Meetings - design milestone - (4 anticipated)	4	4		8	12		4		4	**36**	$ 4,320.00
Individual Utility Coordination Meetings (up to 2 meetings)	2	2		4	6		4		2	**20**	$ 2,340.00
Utility Agreement Assemblies Preparation											
Secure Utility Agreement and plans for reimbursable utilities (2 anticipated)	2	4		8	40		4		4	**62**	$ 7,440.00
Secure Utility Acknowledgement and plans for nonreimbursable (2 anticipated)	4	4		8	20		8		4	**48**	$ 5,680.00
Utility Billings (2 anticipated)	2	4			16				2	**24**	$ 3,110.00
Total Hours	**18**	**20**	**0**	**30**	**104**	**0**	**20**	**0**	**24**	**216**	
Cost	$3,420	$3,000	$0	$3,150	$13,000	$0	$1,800	$0	$1,560		**$ 25,930.00**
Utility Engineering											
Coordination of Engineering Activities											
Create and Maintain Existing Utility Layout		2	4	12		8				**26**	$ 2,920.00
Identify Conflicts and Resolutions	2	4	6	20	4					**36**	$ 4,360.00
Conflict resolution meetings with Utility Companies (up to 2 meetings)	2	8		4		4			2	**20**	$ 2,550.00
Create and Maintain a Proposed Utility Layout	2	2	4	8		8				**24**	$ 2,880.00
Review of Utility's Proposed Adjustments											
Review plans for compliance with County Design Guidelines and/or UAR (4 anticipated)	2	4	12		4					**22**	$ 3,040.00
Review relocation estimates and schedules (2 anticipated)	2	2	4		4					**12**	$ 1,700.00
Review Traffic Control Plans (2 anticipated)	1	2								**3**	$ 490.00
Utility Certification/Special Provisions											
Coordinate and/or review PS&E for all utilities included in the construction contract	2	2	4		4					**12**	$ 1,700.00
Submit a Utility Cert. or Special Provisions Report	2	4			2					**8**	$ 1,230.00
Total Hours	**15**	**30**	**34**	**44**	**18**	**20**	**0**	**0**	**2**	**163**	
Cost	$2,850	$4,500	$4,420	$4,620	$2,250	$2,100	$0	$0	$130		**$ 20,870.00**

Subsurface Utility Engineering

	Unit Price	Unit	Quantity	Total
Utility Engineering Investigation (SUE)				
Designate Task				
Designation Truck Mobilization	$ 500.00	EACH	1	$500.00
Quality Level C & D - Records Research/Visible Surface Feature Survey	$0.45	LF	6000	$2,700.00
Quality Level B - Designate - Incorporates Levels C and D information	$1.43	LF	3000	$4,290.00
			Subtotal	**$7,490.00**
Locate Task				
Vac Truck Mobilization	$ 900.00	EACH	1	$900.00
Quality Level A - Locate - Test Holes				
0 feet to 5.00 feet	$1,125.00	EACH	2	$2,250.00
Over 5.00 feet to 10.00 feet	$1,580.00	EACH	2	$3,160.00
Over 10.00 feet to 15.00 feet	$1,825.00	EACH		$0.00
Over 15.00 feet to 20.00 feet	$2,510.00	EACH		$0.00
Over 20.00 feet	$3,600.00	EACH		
			Subtotal	**$6,310.00**
			COST	**$13,800.00**

Hays County
Utility Coordination Services
Exhibit D
Fee Schedule

Other Direct Costs

			CobbFendley UC	
Description	Unit Cost	Units	Quantity	Total
Copies (up to 11"x17")	$ 0.15	each	500	$75.00
Color Prints (up to 11"x17")	$ 1.50	each	80	$120.00
Color Prints (Larger than 11"x17")	$ 3.00	sq. ft.	65	$195.00
Bond Prints (all sizes)	$ 2.00	each		$0.00
Standard Postage	$ 0.44	each	12	$5.28
Express Mail (billed at cost - estimated cost shown)	$ 20.00	each	4	$80.00
Local Deliveries (billed at cost - estimated cost shown)	$ 12.00	each	4	$48.00
Mileage (billed at IRS approved rate - estimated cost shown)	$ 0.505	miles	500	$252.50
				$775.78

Hays County
Utility Coordination Services
Exhibit D
Fee Schedule

Summary of Services

	CobbFendley UC Total
Project Management and Coordination	$ 7,840.00
Utility Adjustment Coordination	$ 29,275.00
Utility Engineering	$ 23,765.00
SUE Services	$ 16,050.00
Other Direct Costs	$ 874.60
Total Fee	$ 77,804.60

Total Fee
FM 110: From FM 621 to SH 80 - Segment 2 **$ 77,804.60**

Utility Coordination & Engineering Services

Description of Work Task	Project Manager	Project Engineer III	Project Engineer II	Project Engineer I	Utility Specialist	Technician III	Technician II	Technician I	Adm/Clerical	Total Hours	Total Cost
	$190.00	$150.00	$130.00	$105.00	$125.00	$105.00	$90.00	$75.00	$65.00		
Project Management and Coordination											
Project Quality Assurance / Quality Control (QA/QC)	10									**10**	$ 1,900.00
Prepare and Maintain Utility Status Report (bi-weekly) - 15 months	4				4				4	**12**	$ 1,520.00
Monthly Project Status Meetings (15 total)	4				8					**12**	$ 1,760.00
External communications/maintain project documentation	4				10				10	**24**	$ 2,660.00
Total Hours	**22**	**0**	**0**	**0**	**22**	**0**	**0**	**0**	**14**	**58**	
Cost	$4,180	$0	$0	$0	$2,750	$0	$0	$0	$910		**$ 7,840.00**
Utility Adjustment Coordination											
Coordinate Activities/Meetings											
Initial Project Meeting	2	2		2	2					**8**	$ 1,140.00
Project Notifications - design milestones (4 anticipated)	2				8				8	**18**	$ 1,900.00
Group Utility Meetings - design milestone - (4 anticipated)	4	4		8	12		4		4	**36**	$ 4,320.00
Individual Utility Coordination Meetings (up to 2 meetings)	2	2		4	8		2		2	**20**	$ 2,410.00
Utility Agreement Assemblies Preparation		0									
Secure Utility Agreement and plans for reimbursable utilities (3 anticipated)	4	6		8	60		6		6	**90**	$ 10,930.00
Secure Utility Acknowledgement and plans for nonreimbursable (2 anticipated)	2	4		6	18		6		4	**40**	$ 4,660.00
Utility Billings (3 anticipated)	3	6			18				3	**30**	$ 3,915.00
Total Hours	**19**	**24**	**0**	**28**	**126**	**0**	**18**	**0**	**27**	**242**	
Cost	$3,610	$3,600	$0	$2,940	$15,750	$0	$1,620	$0	$1,755		**$ 29,275.00**
Utility Engineering											
Coordination of Engineering Activities											
Create and Maintain Existing Utility Layout		2	4	16		8				**30**	$ 3,340.00
Identify Conflicts and Resolutions	2	4	8	24	4					**42**	$ 5,040.00
Conflict resolution meetings with Utility Companies (up to 2 meetings)	2	8		6		4			2	**22**	$ 2,760.00
Create and Maintain a Proposed Utility Layout	2	2	4	10		8				**26**	$ 3,090.00
Review of Utility's Proposed Adjustments											
Review plans for compliance with County Design Guidelines and/or UAR (5 anticipated)	3	6	15		6					**30**	$ 4,170.00
Review relocation estimates and schedules (3 anticipated)	1	3	6		3					**13**	$ 1,795.00
Review Traffic Control Plans (3 anticipated)	1	3								**4**	$ 640.00
Utility Certification/Special Provisions											
Coordinate and/or review PS&E for all utilities included in the construction contract	2	2	4		4					**12**	$ 1,700.00
Submit a Utility Cert. or Special Provisions Report	2	4			2					**8**	$ 1,230.00
Total Hours	**15**	**34**	**41**	**56**	**19**	**20**	**0**	**0**	**2**	**187**	
Cost	$2,850	$5,100	$5,330	$5,880	$2,375	$2,100	$0	$0	$130		**$ 23,765.00**

Subsurface Utility Engineering

	Unit Price	Unit	Quantity	Total
Utility Engineering Investigation (SUE)				
Designate Task				
Designation Truck Mobilization	$ 500.00	EACH	1	$500.00
Quality Level C & D - Records Research/Visible Surface Feature Survey	$ 0.45	LF	6000	$2,700.00
Quality Level B - Designate - Incorporates Levels C and D information	$ 1.43	LF	3000	$4,290.00
			Subtotal	**$7,490.00**
Locate Task				
Vac Truck Mobilization	$ 900.00	EACH	1	$900.00
Quality Level A - Locate - Test Holes				
0 feet to 5.00 feet	$ 1,125.00	EACH	4	$4,500.00
Over 5.00 feet to 10.00 feet	$ 1,580.00	EACH	2	$3,160.00
Over 10.00 feet to 15.00 feet	$ 1,825.00	EACH		$0.00
Over 15.00 feet to 20.00 feet	$ 2,510.00	EACH		$0.00
Over 20.00 feet	$ 3,600.00	EACH		
			Subtotal	**$8,560.00**
			COST	**$16,050.00**

Hays County
Utility Coordination Services
Exhibit D
Fee Schedule

Other Direct Costs

			CobbFendley UC	
Description	Unit Cost	Units	Quantity	Total
Copies (up to 11"x17")	$ 0.15	each	600	$90.00
Color Prints (up to 11"x17")	$ 1.50	each	80	$120.00
Color Prints (Larger than 11"x17")	$ 3.00	sq. ft.	65	$195.00
Bond Prints (all sizes)	$ 2.00	each		$0.00
Standard Postage	$ 0.44	each	15	$6.60
Express Mail (billed at cost - estimated cost shown)	$ 20.00	each	5	$100.00
Local Deliveries (billed at cost - estimated cost shown)	$ 12.00	each	5	$60.00
Mileage (billed at IRS approved rate - estimated cost shown)	$ 0.505	miles	600	$303.00
				$874.60

Hays County
Utility Coordination Services
Exhibit D
Fee Schedule

Summary of Services

	CobbFendley UC Total
Project Management and Coordination	$ 12,380.00
Utility Adjustment Coordination	$ 44,510.00
Utility Engineering	$ 35,720.00
SUE Services	$ 55,320.00
Other Direct Costs	$ 1,390.56
Total Fee	$ 149,320.56

Total Fee
FM 110: From SH 80 to IH 35 (Yarrington Rd) - Segment 3 $ 149,320.56

Utility Coordination & Engineering Services

Description of Work Task	Project Manager	Project Engineer III	Project Engineer II	Project Engineer I	Utility Specialist	Technician III	Technician II	Technician I	Adm/Clerical	Total Hours	Total Cost
	$190.00	$150.00	$130.00	$105.00	$125.00	$105.00	$90.00	$75.00	$65.00		
Project Management and Coordination											
Project Quality Assurance / Quality Control (QA/QC)	12									**12**	$ 2,280.00
Prepare and Maintain Utility Status Report (bi-weekly) - 18 months	6				12				6	**24**	$ 3,030.00
Monthly Project Status Meetings (18 total)	6				12					**18**	$ 2,640.00
External communications/maintain project documentation	6				18				16	**40**	$ 4,430.00
Total Hours	**30**	**0**	**0**	**0**	**42**	**0**	**0**	**0**	**22**	**94**	
Cost	$5,700	$0	$0	$0	$5,250	$0	$0	$0	$1,430		**$ 12,380.00**
Utility Adjustment Coordination											
Coordinate Activities/Meetings											
Initial Project Meeting	2	2		2	2					**8**	$ 1,140.00
Project Notifications - design milestones (4 anticipated)	2				8				8	**18**	$ 1,900.00
Group Utility Meetings - design milestone - (4 anticipated)	4	4		8	12		4		4	**36**	$ 4,320.00
Individual Utility Coordination Meetings (up to 4 meetings)	4	4		8	12		4		4	**36**	$ 4,320.00
Utility Agreement Assemblies Preparation											
Secure Utility Agreement and plans for reimbursable utilities (6 anticipated)	6	12		24	100		12		12	**166**	$ 19,820.00
Secure Utility Acknowledgement and plans for nonreimbursable (2 anticipated)	4	4		8	20		8		4	**48**	$ 5,680.00
Utility Billings (6 anticipated)	6	12			32				6	**56**	$ 7,330.00
Total Hours	**28**	**38**	**0**	**50**	**186**	**0**	**28**	**0**	**38**	**368**	
Cost	$5,320	$5,700	$0	$5,250	$23,250	$0	$2,520	$0	$2,470		**$ 44,510.00**
Utility Engineering											
Coordination of Engineering Activities											
Create and Maintain Existing Utility Layout		2	6	24		12				**44**	$ 4,860.00
Identify Conflicts and Resolutions	2	6	10	32	4					**54**	$ 6,440.00
Conflict resolution meetings with Utility Companies (up to 4 meetings)	4	16		8		8			4	**40**	$ 5,100.00
Create and Maintain a Proposed Utility Layout	2	4	6	10		16				**38**	$ 4,490.00
Review of Utility's Proposed Adjustments											
Review plans for compliance with County Design Guidelines and/or UAR (8 anticipated)	4	8	24		4					**40**	$ 5,580.00
Review relocation estimates and schedules (6 anticipated)	3	6	12		6					**27**	$ 3,780.00
Review Traffic Control Plans (6 anticipated)	3	6								**9**	$ 1,470.00
Utility Certification/Special Provisions											
Coordinate and/or review PS&E for all utilities included in the construction contract	2	4	8		6					**20**	$ 2,770.00
Submit a Utility Cert. or Special Provisions Report	2	4			2					**8**	$ 1,230.00
Total Hours	**22**	**56**	**66**	**74**	**22**	**36**	**0**	**0**	**4**	**280**	
Cost	$4,180	$8,400	$8,580	$7,770	$2,750	$3,780	$0	$0	$260		**$ 35,720.00**

Subsurface Utility Engineering

	Unit Price	Unit	Quantity	Total
Utility Engineering Investigation (SUE)				
Designate Task				
Designation Truck Mobilization	$ 500.00	EACH	2	$1,000.00
Quality Level C & D - Records Research/Visible Surface Feature Survey	$0.45	LF	30000	$13,500.00
Quality Level B - Designate - Incorporates Levels C and D information	$1.43	LF	15000	$21,450.00
			Subtotal	**$35,950.00**
Locate Task				
Vac Truck Mobilization	$ 900.00	EACH	2	$1,800.00
Quality Level A - Locate - Test Holes				
0 feet to 5.00 feet	$1,125.00	EACH	10	$11,250.00
Over 5.00 feet to 10.00 feet	$1,580.00	EACH	4	$6,320.00
Over 10.00 feet to 15.00 feet	$1,825.00	EACH		$0.00
Over 15.00 feet to 20.00 feet	$2,510.00	EACH		$0.00
Over 20.00 feet	$3,600.00	EACH		
			Subtotal	**$19,370.00**
			COST	**$55,320.00**

Hays County
Utility Coordination Services
Exhibit D
Fee Schedule

Other Direct Costs

			CobbFendley UC	
Description	Unit Cost	Units	Quantity	Total
Copies (up to 11"x17")	$ 0.15	each	800	$120.00
Color Prints (up to 11"x17")	$ 1.50	each	200	$300.00
Color Prints (Larger than 11"x17")	$ 3.00	sq. ft.	100	$300.00
Bond Prints (all sizes)	$ 2.00	each		$0.00
Standard Postage	$ 0.44	each	24	$10.56
Express Mail (billed at cost - estimated cost shown)	$ 20.00	each	8	$160.00
Local Deliveries (billed at cost - estimated cost shown)	$ 12.00	each	8	$96.00
Mileage (billed at IRS approved rate - estimated cost shown)	$ 0.505	miles	800	$404.00
				$1,390.56