SUPPLEMENTAL WORK AUTHORIZATION NO. 2
TO
WORK AUTHORIZATION NO. 3

WILLIAMSON COUNTY ROAD BOND PROJECT:
"Utility Coordination/Relocation Services"

This Supplemental Work Authorization No. 2 to Work Authorization No. 3 is made pursuant to the terms and conditions of the Williamson County Contract for Engineering Services, being dated September 23, 2014 ("Contract") and entered into by and between Williamson County, Texas, a political subdivision of the State of Texas, (the "County") and Cobb Fendley Associates (the "Engineer").

WHEREAS, the County and the Engineer executed Work Authorization No. 3 dated effective October 1, 2016 (the "Work Authorization");

WHEREAS, pursuant to Article 14 of the Contract, amendments, changes and modifications to a fully executed Work Authorization shall be made in the form of a Supplemental Work Authorization; and

WHEREAS, it has become necessary to amend, change and modify the Work Authorization.

AGREEMENT

NOW, THEREFORE, premises considered, the County and the Engineer agree that the Work Authorization shall be amended, changed and modified as follows:

I. The maximum amount payable for services under the Work Authorization is hereby increased from $495,208.00 to $ 653,288.00. The revised Work Schedule is attached hereto as Attachment "D" (must be attached).

Except as otherwise amended by prior or future Supplemental Work Authorizations, all other terms of the Work Authorization are unchanged and will remain in full force and effect.

This Supplemental Work Authorization does not waive the parties' responsibilities and obligations provided under the Contract.

IN WITNESS WHEREOF, the County and the Engineer have executed this Supplemental Work Authorization, in duplicate, to be effective as of the date of the last party's execution below.

ENGINEER:

By: Melissa Horn
Signature

Melissa Horn
Printed Name

Principal
Title

January 20, 2017
Date

COUNTY:

By:
Signature

DAN A GATTIS
Printed Name

County Judge
Title

02-07-2017
Date

LIST OF ATTACHMENTS

Attachment B - Services to be Provided by Engineer

Attachment C - Work Schedule

Attachment D - Fee Schedule

OK
MM 1/23/2017

ATTACHMENT B

ENGINEERING SERVICES

SCOPE OF SERVICES

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

This scope includes the following major tasks:

1. UTILITY PROGRAM MANAGEMENT
2. PROJECT MANAGEMENT AND COORDINATION
3. UTILITY ADJUSTMENT COORDINATION
4. SUBSURFACE UTILITY ENGINEERING (SUE)
5. UTILITY ENGINEERING AND DESIGN
6. UTILITY CONSTRUCTION MANAGEMENT AND OBSERVATION
7. RESEARCH – UTILITY DATA COLLECTION (PLANNING)
8. FIELD SURVEYING
9. RIGHT-OF-WAY (ROW) COORDINATION
10. MISCELLANEOUS

1. UTILITY PROGRAM MANAGEMENT

1.1. The ***Utility Coordinator***, in association with the County and its Designated Representatives, will be responsible for the Utility Program Management for all assigned County Projects.

1.2. The ***Utility Coordinator*** will provide Utility Program Management services during any one, or combination, of the following phases of a project: Planning, Design, and/or Construction.

1.3. Annual or Bi-Annual Utility Meetings. The ***Utility Coordinator***, in association with the County and its Designated Representative, will conduct an annual or bi-annual Utility Meeting with all Utility Representatives within the County to outline the projects anticipated for design and/or construction during that Fiscal Year.

1.4. Utility Design Criteria Manual. The ***Utility Coordinator***, in association with the County and its Designated Representatives, will review and update the Utilities Section of the County Road Bond Program Design Criteria Manual and associated appendices on an annual basis or as needed, with first update to be completed by end of 2016

1.5 Utility Agreements. The ***Utility Coordinator***, in association with the County and its Designated Representatives, will review and update all Utility Agreements of the County Road Bond Program and associated attachments on an annuals basis, or as needed.

1.6. The ***Utility Coordinator*** will meet with the County and its Designated Representatives on a bi-weekly basis, or as needed, to discuss the overall County Utility Program.

2. PROJECT MANAGEMENT AND COORDINATION

2.1. The ***Utility Coordinator***, 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's*** Project Manager is:
Ms. Melissa Horn
Cobb, Fendley & Associates, Inc.
505 East Huntland Drive, Suite 485
Austin, Texas 78752
Telephone: 512-834-9798

2.2. Project Quality Assurance / Quality Control (QA/QC). The ***Utility Coordinator*** 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.

2.3. Utility Status Report. The ***Utility Coordinator*** will create and maintain a utility status report on all assigned projects and submit on a bi-weekly basis. The status report will include, at a minimum:
- 2.3.1. Project with Limits
- 2.3.2. Roadway Design Engineer
- 2.3.3. Roadway Design Status
- 2.3.4. Estimated Start or Letting Date for Roadway Construction
- 2.3.5. Utility Owners within Project
- 2.3.6. Utility Design Status
- 2.3.7. Utility Agreement or Permit Status
- 2.3.8. Utility Relocation Status

2.4. Bi-weekly Utility Update Meetings. The ***Utility Coordinator*** will participate in bi-weekly utility update meetings to review all assigned projects with the County or its Designated Representative. The Utility Coordinator will review the Utility Status Report for all assigned projects during this meeting and will prepare meeting minutes with action items for the week.

2.5. Weekly Project Status Meetings. The ***Utility Coordinator*** will participate in weekly project status meetings with the County and its Designated Representatives.

2.6. Project Documentation. The ***Utility Coordinator*** will upload all project related documents including, but not limited to, utility as-builts, utility conflict tracker spreadsheets, utility conflict strip maps at design milestone (i.e., 30%, 60%, 90%, etc.), utility agreement packages, meeting minutes, Utility Certifications, etc. in designated project folders in Project Wise, or other approved County documentation system.

3. 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's*** responsibilities, as listed in the following scope.

3.1. ***Utility Coordinator*** 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.

3.2. ***Utility Coordinator*** 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*** will be responsible for the following:

3.2.1. 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.

3.2.2. Project Notifications. Prepare written notification letters at each design milestone, (i.e., 30%, 60%, 90%, etc.) with associated project information and files, and send to utility owners. (Initial Notification to be sent via Certified Mail to the utility owners.)

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

3.2.3.1. 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.

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

3.2.4. External Communications: The ***Utility Coordinator*** 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*** will also provide copies of reports, correspondence and other documentation of work-related communications between the ***Utility Coordinator***, utility owners and other outside entities when requested by the County.

3.3. The ***Utility Coordinator*** shall determine which utilities will conflict with proposed Construction and make the utility company aware of these conflicts. The ***Utility Coordinator*** 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.

3.4. Utility Agreement Assemblies: A packaged agreement consisting of (if Applicable) a Master Utility Adjustment Agreement along with the following attachments, Attachment "A" Plans, Specifications, and Estimated Cost, Attachment "B" Utility's Schedule of Work and Estimated Date of Completion, Attachment "C" Eligibility Ratio, Attachment "D" Betterment Calculation and Estimates, Attachment "E" Proof of Property Interest, Attachment "F" Wilco-U-80A-Utility Joint Use Agreement, Quitclaim, and Field Notes for quitclaim portion of easement.

3.4.1. The ***Utility Coordinator***, in coordination with the County and its

Designated Representative, shall determine the appropriate forms to be used on each assigned project and which utilities will be installed by "Agreement", by "Permit", or by "ILA". The ***Utility Coordinator*** shall review and process all agreement and permit requests and forward to the County or its Designated Representative or TxDOT if the project is on-system project for final approval.

3.4.2. Utility Agreements: If a utility is located within an easement, the ***Utility Coordinator*** shall determine whether or not a compensable interest exists and the owner's degree of eligibility. The ***Utility Coordinator*** shall assist the utility company with adjustment plans and cost estimate for these adjustments. The ***Utility Coordinator*** shall review plans to ensure compliance with the County Utility Design Criteria Guidelines and the TxDOT UAR, if applicable, and to ensure that the proposed adjustments will not conflict with roadway construction. The ***Utility Coordinator*** will submit 4 original Master Utility Agreement packages along with attachments to the County or its Designated Representative by letter recommending approval.

3.4.3. Non-Reimbursable Utility Adjustments. The ***Utility Coordinator*** will furnish the appropriate Utility Installation Permit form to the utility company and assist them with adjustment plan preparation. The ***Utility Coordinator*** 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*** will submit the permit to the County or its Designated Representative by letter recommending approval.

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

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

3.5.1. Utility Owner and Contact Information
3.5.2. Meetings and Written Notifications
3.5.3. Agreement Information
3.5.4. Utility Billings

3.6. Utility Billings. The ***Utility Coordinator*** will receive and review all invoices sent by reimbursable utilities for accuracy and compliance with the executed utility agreements and as per Williamson County Reimbursement Policy. If needed, the ***Utility Coordinator*** 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.

4. 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*** will recommend required test holes. The ***Utility Coordinator*** 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*** 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.

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

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

4.1.1.2. 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.

4.1.1.3. 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.

4.1.1.4. 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.

4.1.2. 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.

4.2. 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*** shall:

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

4.2.2. 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*** will examine utility owner's work to ensure accuracy and completeness.

4.2.3. 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 County. A non-water base paint, utilizing the APWA color code scheme, must be used on all surface markings of underground utilities.

4.2.4. 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*** 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 uploaded to Project Wise. A hard copy is required and must be sealed and dated by the ***Utility Coordinator***. When requested by the County or its Designated Representative, the designated utility information must be over laid on the County design plans.

4.2.5. 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*** and the County and its Designated Representative to be approximate only.

4.2.6. 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.

4.3. 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 nondestructive 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*** shall:

4.3.1. 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.

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

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

4.3.4. 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***:

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

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

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

4.3.4.4. Horizontal location referenced to project coordinate datum.

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

4.3.4.6. Utility facility material(s).

4.3.4.7. Utility facility condition.

4.3.4.8. Pavement thickness and type.

4.3.4.9. Coating/Wrapping information and condition.

4.3.4.10. Unusual circumstances or field conditions.

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

4.3.5. Be responsible for any damage to the utility during the locating process. In the event of damage, the ***Utility Coordinator*** 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*** will not resume work until the utility facility owner has determined the corrective action to be taken. The ***Utility Coordinator*** shall be liable for all costs involved in the repair or replacement of the utility facility.

4.3.5.1. Backfill all excavations with appropriate material, compact backfill by mechanical means and restore pavement and surface material. The ***Utility Coordinator*** 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.

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

4.3.5.3. 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*** shall return to correct the condition at no extra charge to the County.

4.3.5.4. 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.

4.4. Closed-Circuit Television (CCTV) Investigation. Subsurface utility investigation using CCTV equipment on existing storm drains or sanitary sewer lines to assist with the determining the condition of existing lines or to identify points of potential blockage. Utility Coordinator shall coordinate with the County or its Designated Representative on required deliverable for each task assigned.

4.4.1 Optional deliverables of CCTV data. CCTV data can be delivered in one the following methods, as deemed necessary by the County:

4.4.1.1. Deliver Video of data to the client for their use after data download and reduction;

4.4.1.2. Prepare and deliver a Certified Report after data download, reduction and report preparation; and/or

4.4.1.3. Physical designation of horizontal location of the subject utility line in the field, that is surveyed in to project controls.

5. 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*** 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:

5.1. Utility Layout: The ***Utility Coordinator*** 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's*** Project Manager or registered Professional Engineer (P.E.) will utilize the layout of existing utilities and make a determination of the following:

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

5.1.2. Facilities to be abandoned in place.

5.1.3. Facilities to remain in service and in place.

5.1.4. The ***Utility Coordinator's*** Project Manager or P.E. 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*** shall coordinate this information with the County and/or its Designated Representative immediately upon discovery.

5.2. Conflict Assessment. The ***Utility Coordinator*** 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 with in a two (2) week turn around.

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

5.3.1. 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.

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

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

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

5.4. Proposed Utility Layout. The ***Utility Coordinator*** 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:

5.4.1. Stakeholders have concurred with the various alignments.

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

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

5.4.4. Determine which facilities will be relocated prior to construction

5.4.5. Facilities conflicts have been resolved.

5.5. Review of Utility's Proposed Adjustments

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

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

5.5.3. 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.

5.5.4. Review Traffic Control Plans. The ***Utility Coordinator*** 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*** must coordinate approval from the County or its Designated Representative concerning the proposed method of handling traffic prior to allowing commencement of work.

5.6. The ***Utility Coordinator*** will coordinate, develop (on request) and/or review PS&E for all utilities included in the construction contract.

5.6.1. The ENGINEER shall develop PS&E and special details to accommodate or adjust utilities, including but not limited to fiber optic, communications, gas, water or wastewater. Prior to developing any special utility detail or PS&E set, the ENGINEER shall notify the COUNTY in writing regarding each utility conflict that may require an accommodation. As directed by the COUNTY, the ENGINEER shall coordinate with each utility to develop each PS&E package and special details. The ENGINEER shall develop each utility detail or PS&E package in compliance with the COUNTY guidelines.

5.6.2. The ENGINEER shall prepare General Notes and shall provide a list of governing specifications and special provisions. The ENGINEER shall prepare each plan sheet, detail sheet, special specification, special provision, and special note required to incorporate the utility designs into the COUNTY's plans. If necessary, the ENGINEER

shall provide any required Utility Certifications. The ENGINEER shall prepare a Construction Time Determination schedule for each utility relocation design required to incorporate into the COUNTY's construction schedule.

5.7. Utility Certification/Special Provisions: The ***Utility Coordinator's*** Project Manager or P.E. 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.

6. UTILITY CONSTRUCTION MANAGEMENT AND OBSERVATION including the coordination of utility construction activities, monitoring progress of utility installations, reporting, and acquiring utility as-builts.

6.1. The ***Utility Coordinator*** shall schedule a Pre-Construction meeting for each utility adjustment for which they are required to perform construction management and observation duties. The ***Utility Coordinator*** will ensure the appropriate County representatives are present.

6.2. The ***Utility Coordinator*** will conduct a weekly site visit to observe utility relocation progress. If the ***Utility Coordinator*** observes construction not in compliance with the relocation plans, the ***Utility Coordinator*** will notify the County or its Designated Representative that an inspector should be assigned to the project.

6.3. The ***Utility Coordinator*** will perform additional verification services at the request and authorization of the County or its Designated Representative.

6.4. Status Reports: The ***Utility Coordinator*** will provide the County and/or its Designated Representative with a status report for all utility adjustments on a bi-weekly basis.

6.5. Review Payment Request: The ***Utility Coordinator*** will review all payment requests for conformance with the utility estimate and verify the work has been performed.

6.6. As-Builts. The ***Utility Coordinator*** will request as-builts and relocation plans from each utility company, review as-builts to ensure compliance with the project, and upload as-builts to Project Wise.

6.7. The Utility Company retains all responsibility for all inspections related to compliance with Utility Codes, Industry standards, and design of the Utility Facility.

7. RESEARCH – UTILITY DATA COLLECTION (PLANNING). Planning services consist of performing research, identifying potential conflicts and preparing estimates of the costs of utility avoidance, protection, and/or relocation to assist with the development of the County's Road Bond Program Budget. Utility data collection will be based on information provided on proposed projects, from schematic or conceptual-level design drawings to project location with scope of proposed improvements. Research – Utility Data Collection (Planning) services include:

7.1. Initial Project Meeting. The ***Utility Coordinator*** will meet with the County or its Designated Representative to obtain project information and establish communication and documentation requirements

7.2. Utility Data Collection. The ***Utility Coordinator*** will research records of properties and utilities within the estimated limits of the project area and:

7.2.1. Identify all utility service providers within the project area

7.2.2. Determine the existence and approximate location of utilities and easement.

7.2.3. Perform a visual inspection of the project area on-site and/or using available GIS map, aerial photography, and utility records to identify conflicts

7.3. Evaluation of Utility Data. The ***Utility Coordinator*** will summarize utility conflicts and relocation responsibilities, cost estimates, and alternatives for the proposed project

7.3.1. Utilities within easement (compensable interest):

7.3.1.1. Present and discuss alternatives with the County and its Designated Representative for redesign options to avoid utility relocations or to minimize utility relocation costs.

7.3.1.2. Provide utility relocation cost estimates for those utilities that will have to be relocated or require additional protection measures to remain in place.

7.3.2. Utilities within existing right-of-way:

7.3.2.1. Present and discuss alternatives with the County and its Designated Representative for utility relocation options, including redesign.

7.3.2.2. Obtain utility service providers' relocation policies and procedures and estimated duration for completing relocation design and construction.

7.4. Summary Report. The ***Utility Coordinator*** will prepare a summary report of all utility documentation and findings obtained and developed and provide copies to the County and its Designated Representative upon completion of the research.

8. FIELD SURVEYING. The ***Utility Coordinator*** 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*** will only provide such services to the County when requested and authorized. Field surveying services include, but are not limited to:

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

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

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

9. RIGHT-OF-WAY (ROW) COORDINATION. The ***Utility Coordinator*** 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:

9.1. Utility easement acquisitions

9.2. Utility structure clearance as a result of ROW acquisition

9.3. ROW acquisition schedule and priorities for utility relocations

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

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

10. MISCELLANEOUS

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

Services from
January 2017 -February 2017

Williamson County
Utility Coordination Services
Attachment C
Work Schedule

Suplemental No. 2 to Work Authorization No. 3
2013 Road Bond Program

Description	January-14	February-17												
Notice to Proceed	◆													
Project Management & Coordination														
Monthly Coordination Meetings w/Utility Owners, HNTB, and Williamson County	▬	▬												
Monthly Progress Reports	▬	▬												
Utility Adjustment Coordination														
Coordinate Activities/Meetings	▬	▬												
Utility Agreement Assemblies	▬	▬												
Utility Engineering														
Coordination of Engineering Activities	▬	▬												
Review of Utility's Proposed Adjustments	▬	▬												
Utility Certification/Special Provisions	▬	▬												

Services from
January 2017 thru February 2017

Williamson County - Utility Coordinaton Services

Attachment D

Fee Schedule

Work Authorization No. 3
Supplemental No. 2
2013 Road Bond Program

Utility Coordination & Engineering Services

Description of Work Task	Project Manager	Sr. Engineer	Project Engineer III	Project Engineer II	Project Engineer I	Sr. Utility Specialist	Utility Specialist	Sr. Technician	Technician III	Technician II	Technician I	Admin/Clerical	Total Hours	Total Cost
	$165.00	$225.00	$150.00	$125.00	$105.00	$135.00	$120.00	$120.00	$105.00	$95.00	$75.00	$65.00		
UTILITY PROGRAM MANAGEMENT	40	2	8	0	0	0	40	0	0	0	0	0	90	$ 13,050.00
PROJECT MANAGEMENT AND COORDINATION	40	4	8	0	0	0	0	0	0	0	0	8	60	$ 9,220.00
UTILITY ADJUSTMENT COORDINATION	40	8	8	0	16	0	320	0	0	0	0	8	400	$ 50,200.00
UTILITY ENGINEERING AND DESIGN	8	8	16	0	240	0	16	0	0	0	0	8	296	$ 33,160.00
UTILITY DESIGN	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -
City of Georgetown Water	8	0	0	0	0	0	0	160	0	0	0	8	176	$ 21,040.00
City of Round Rock	0	0	0	0	0	0	0	24	0	0	0	0	24	$ 2,680.00
Austin Water Utilities	2	0	0	0	0	0	0	160	0	0	0	8	170	$ 20,050.00
UTILITY CONSTRUCTION MANAGEMENT AND OBSERVATION	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -
RESEARCH - UTILITY DATA COLLECTION (PLANNING)	8	0	0	0	16	0	16	0	0	0	0	0	40	$ 4,920.00
RIGHT-OF-WAY (ROW) COORDINATION	4	0	0	0	8	0	8	0	0	0	0	0	20	$ 2,460.00
SUBSURFACE UTILITY ENGINEERING (SUE)														$0.00
OTHER DIRECT EXPENSES														$ 1,100.00
Total Hours	150	22	40	0	280	0	400	344	0	0	0	40	1,276	
Cost	$24,750	$4,950	$6,000	$0	$29,400	$0	$48,000	$41,280	$0	$0	$0	$2,600		$ 158,080.00

Subsurface Utility Engineering

	Unit Price	Unit	Quantity	Total
Utility Engineering Investigation (SUE)				
Designate Task				
Quality Level C & D - Records Research/Visible Surface Feature Survey	$0.45	LF		$0.00
Quality Level B - Designate - Incorporates Levels C and D information	$1.47	LF		$0.00
			Subtotal	**$0.00**
Locate Task				
Quality Level A - Locate - Test Holes				
0 feet to 5.00 feet	$1,125.00	EACH		$0.00
Over 5.00 feet to 10.00 feet	$1,580.00	EACH		$0.00
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	**$0.00**
			COST	**$0.00**

Other Direct Costs

			CobbFendley UC	
Description	Unit Cost	Units	Quantity	Total
Copies (up to 11"x17")	$ 0.15	each		$0.00
Color Prints (up to 11"x17")	$ 1.50	each		$0.00
Color Prints (Larger than 11"x17")	$ 3.00	sq. ft.		$0.00
Bond Prints (all sizes)	$ 2.00	each		$0.00
Standard Postage	$ 0.44	each		$0.00
Express Mail (billed at cost - estimated cost shown)	$ 20.00	each		$0.00
Local Deliveries (billed at cost - estimated cost shown)	$ 12.00	each		$0.00
Mileage (billed at IRS approved rate - estimated cost shown)	$ 0.550	miles	2000	$1,100.00
				$1,100.00