PROFESSIONAL SERVICES AGREEMENT
SEGUIN, TEXAS

The City of Seguin, a Texas home rule municipality (hereinafter the "City") with administrative offices at 205 N. River Street, Seguin, Texas 78155, and **Freese and Nichols, Inc. (**hereinafter "Contractor"), whose primary place of business is located at 9601 McAllister Fwy, Suite 1008, San Antonio, Texas 78216, hereby enter into this Professional Services Agreement (hereinafter "Agreement") effective the ___ day of _____, 2024 (hereinafter "Effective Date"). The City and Contractor (collectively "the parties to this Agreement" or "the parties") agree as follows:

1. OVERVIEW

The City of Seguin (City) was awarded funding from the Alamo Area Metropolitan Planning Organization (AAMPO) for the STP-MM Widening Project (Off System) for Rudeloff Road from SH 46 to Huber Road (Project). The funding requires oversight by the Texas Department of Transportation (TxDOT). The Project consists of widening the roadway section from two to four lanes with a continuous left turn lane and shared use paths on both sides. The Project length is approximately 1.54 miles including grading, base, hot mix asphalt paving, storm sewer system, concrete curb, concrete driveways, shared use paths, pavement markings, signs, topsoil, seeding, and all other appurtenances necessary for the complete project. The Project also includes joint bid relocation and extension of approximately 7,075 LF of 8" water main, 1,400 LF of 16" water main, and related appurtenances. The joint bid relocation items are fully funded by the City of Seguin therefore not included in the funding provided by AAMPO or items that require oversight by TxDOT. The current bid total construction cost for the Project is $15.3 million.

Freese and Nichols, Inc. (Engineer) will provide construction management, inspection, record keeping, and general administration of construction and inspection activities for the Project including coordinating materials testing and quality assurance activities.

2. SERVICES

Contractor agrees to perform services for the City in accordance with the City's instructions and, in particular, the instructions of Billy Hornung, PE and/or the City Manager; and in conformance with the descriptions, definitions, terms, and conditions of this Agreement. The Scope of Services shall be limited to those services and terms attached hereto as Exhibit "A", and any subsections of Exhibit "A", if as and when they are attached hereto and signed by the parties (collectively "the Work"). If the parties to this Agreement amend the Work required under this Agreement (by adding or removing specific services and/or terms enumerated in Exhibits "A" and/or "C"), the Compensation cited in Section 5 of this Agreement may also be amended to conform with the change in Scope of Services, as agreed by the parties.

3. ADDITIONAL TERMS

Additional Terms and Obligations of the parties to this Agreement, if any, are stated in Exhibit "C", attached hereto.

4. DURATION

The parties agree that the Work for each as-needed project shall be completed on a timeline that is agreed upon in advance of project commencement by the Parties (hereinafter the "Completion

Date"). In the event Contractor is unable to complete the Work by the Completion Date, Contractor shall request an extension of the Completion Date in writing no later than fifteen (15) business days prior to the Completion Date. The City may grant extensions of the Completion Date for all reasonable extension requests and shall do so in writing.

5. COMPENSATION

Contractor will be compensated for the Work on an hourly-charge basis, the terms of which are cited in Contractor's rate schedule, which is attached hereto as Exhibit "B." Despite any reference to Contractor's rate schedule, which shall be used to calculate monthly invoice amounts under this Agreement or a change in the Scope of Services (i.e. Amendment), the parties agree that the City shall pay Contractor a total fee not to exceed two million, two hundred thirty-one thousand, twenty-nine dollars ($2,231,029 USD) for the Work under this Agreement.

6. PAYMENT

Contractor shall invoice the City for the Work performed under this Agreement on a monthly basis, beginning at the end of the first full month following the Effective Date. The City agrees to promptly pay all invoices in accordance with Texas Government Code Chapter 2251 and by sending payment to Contractor's address stated in Section 8, below.

7. NOTICE OF COMPLETION

Upon completion of the Work, Contractor shall send a Notice of Completion to the City in writing, and the City shall have the option to inspect the Work (or the product thereof) before it is considered complete under this Agreement. If the City is satisfied that the Work under this Agreement is complete, the City shall send Contractor an Acceptance of Completion in writing. If, after inspection, the City does not agree that the Work is complete or believes that the Work is of deficient quality, the City shall send Contractor a Deficiency Letter, stating the specific aspects of the Work that are incomplete and/or deficient. If, after ten (10) business days from the City's receipt of Contractor's Notice of Completion, the City does not send Contractor either an Acceptance of Completion or a Deficiency Letter, the Work under this Agreement shall be considered complete.

8. NOTICE (GENERAL)

All notices issued by Contractor under or regarding this Agreement shall be provided in writing to the City at: Attn: Billy Hornung, PE; 108 E. Mountain Street, Seguin, Texas 78155; <bhornung@seguintexas.gov>.

All notices issued by the City under or regarding this Agreement shall be provided in writing to Contractor at its primary place of business.

Notices from one party to another under this Section may be made by U.S. Mail, parcel post, Facsimile, or Electronic Mail, sent to the designated contact at any of the designated addresses cited above.

9. INSURANCE

Contractor agrees that, during the performance of all terms and conditions of this Agreement, from the Effective Date until the City's acceptance of Contractor's Notice of Completion or until this Agreement is otherwise considered completed as a matter of law, Contractor shall maintain Commercial General Liability insurance that meets or exceeds the industry standard for

professional services providers in Contractor's field of employment and for the type of services that are being performed by Contractor under this Agreement.

10. MUTUAL INDEMNITY

Contractor agrees, to the fullest extent permitted by law, to indemnify and hold harmless the City, its officers, directors and employees against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by Contractor's negligent performance of the Work under this Agreement and that of its subcontractors or anyone for whom the Consultant is responsible or legally liable.

The City agrees, to the fullest extent permitted by law, to indemnify and hold harmless Contractor, its officers, directors, employees and subcontractors against all damages, liabilities or costs, including reasonable attorneys' fees and defense costs, to the extent caused by the City's negligent acts in connection with this Agreement.

Neither the City nor Contractor shall be obligated to indemnify the other party in any manner whatsoever for the other party's negligence.

11. COMPLIANCE WITH LAWS

Each party agrees to comply with all laws, regulations, rules, and ordinances applicable to this Agreement and/or applicable to the parties performing the terms and conditions of this Agreement.

12. SURVIVAL

Notwithstanding any termination of this Agreement, the following Sections, and the terms and conditions contained therein, shall remain in effect: 3, 5, 8, 10, 12, 14, 15, 16, 17, 18, 20, 21 and 22.

13. FORCE MAJEURE

Either of the parties to this Agreement shall be excused from any delays and/or failures in the performance of the terms and conditions of this agreement, to the extent that such delays and/or failures result from causes beyond the delaying/failing party's reasonable control, including but not limited to Acts of God, Forces of Nature, Civil Riot or Unrest, and Governmental Action that was unforeseeable by all parties at the time of the execution of this Agreement. Any delaying/failing party shall, with all reasonable diligence, attempt to remedy the cause of delay and/or failure and shall recommence all remaining duties under this Agreement within a reasonable time of such remedy.

14. SEVERABILITY

If any Section or provision of this Agreement is held to be invalid or void, the other Sections and provisions of this Agreement shall remain in full force and effect to the greatest extent as is possible, and all remaining Sections or provisions of this Agreement shall be construed so that they are as consistent with the parties' intents as possible.

15. MULTIPLE COUNTERPARTS

This Agreement may be executed in several counterparts, all of which taken together shall constitute one single Agreement between the parties.

16. SECTION HEADINGS, EXHIBITS
The Section and Subsection headings of this Agreement, as well as Section 1, Entitled "Overview," shall not enter in the interpretation of the terms and conditions contained herein, as those portions of the Agreement are included merely for organization and ease of review. The Exhibit(s) that may be referred to herein and may be attached hereto, are incorporated herein to the same extent as if fully set forth herein.

17. WAIVER BY PARTY
Unless otherwise provided in writing by the waiving party, a waiver by either of the parties to this Agreement of any covenant, term, condition, agreement, right, or duty that arises under this Agreement shall be considered a one-time waiver and shall not be construed to be a waiver of any succeeding breach thereof or any other covenant, term, condition, agreement, right, or duty that arises under this Agreement.

18. GOVERNING LAW AND VENUE
THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS. Any lawsuit, claim, or action, whether in law or in equity, arising from this Agreement will be brought in Guadalupe County, Texas.

19. ASSIGNMENT
Neither party to this Agreement may assign it duties, interests, rights, benefits and/or obligations under this Agreement, in whole or in part, without the other party's prior written consent thereto.

20. BINDING EFFECT
Subject to any provisions hereof restricting assignment, this Agreement shall be binding upon and shall inure to the benefit of the parties hereto, and their respective successors, permitted assigns, heirs, executors, and/or administrators.

21. ENTIRE AGREEMENT; AMENDMENT
This Agreement (including any and all Exhibits attached hereto) constitutes the entire agreement between the parties hereto with respect to the subject matter hereof. Any amendments to this Agreement must be made in writing and signed by the parties to this Agreement prior to the performance of any terms or conditions contained in said amendments.

22. WORK PRODUCT
Any and all product, whether in the form of calculations, letters, findings, opinions, or the like, shall be the property of the City of Seguin, Texas during and after performance of the Work. Contractor shall have a right to retain a copy of all Work product for record-keeping purposes.

23. TERMINATION BY CITY
This Agreement may be terminated by City, for any reason whatsoever, by providing thirty (30) days written notice to Contractor. Any approved services provided under this Agreement up to the date of termination may be invoiced by Contractor after the termination date, and payment of said invoice shall not be unreasonably withheld by the City.

24. BOYCOTT

In accordance with Chapter 2271, Texas Government Code, a governmental entity may not enter into a contract with a company for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the contract. The signatory executing this contract on behalf of company verifies that the company does not boycott Israel and will not boycott Israel during the term of this contract.

IN WITNESS WHEREOF, the undersigned have duly executed and delivered this Professional Services Agreement, and hereby declare that THEY HAVE READ AND DO UNDERSTAND AND AGREE TO EACH AND EVERY TERM, CONDITION, AND COVENANT CONTAINED IN THIS AGREEMENT AND IN ANY DOCUMENT INCORPORATED BY REFERENCE.

_____	
City of Seguin, Texas	
By: _____	By: Chris Trevino, PE
_____	Vice-President/Principal
Title	Title

ATTEST: _____

Kristin Mueller
City Secretary

EXHIBIT A-1

Scope of Work

SCOPE OF SERVICES AND RESPONSIBILITIES OF CLIENT

PROJECT UNDERSTANDING

The City of Seguin (City) was awarded funding from the Alamo Area Metropolitan Planning Organization (AAMPO) for the STP-MM Widening Project (Off System) for Rudeloff Road from SH 46 to Huber Road (Project). The funding requires oversight by the Texas Department of Transportation (TxDOT) for compliance with Local Government Project Procedures. The Project consists of widening the roadway section from two to four lanes with a continuous left turn lane and shared use paths on both sides. The Project length is approximately 1.54 miles including grading, base, hot mix asphalt paving, storm sewer system, concrete curb, concrete driveways, shared use paths, pavement markings, signs, topsoil, seeding, and all other appurtenances necessary for the complete project. The Project also includes joint bid relocation and extension of approximately 7,075 LF of 8” water main, 1,400 LF of 16” water main, and related appurtenances. The joint bid relocation items are fully funded by the City of Seguin therefore not included in the funding provided by AAMPO or items that require oversight by TxDOT. The current bid total construction cost for the Project is $15.3 million.

Freese and Nichols, Inc. (Engineer) will provide construction management, inspection, record keeping, and general administration of construction and inspection activities for the Project including coordinating materials testing and quality assurance activities. The anticipated construction duration is 30 months total (20 months base bid, 5 months alternate bid, 1 month of float, 4 months of project close out activities).

ARTICLE I

BASIC SERVICES: FNI shall render the following professional services in connection with the development of the Project:

A. CONSTRUCTION PHASE PROJECT REPRESENTATION:

The City will have a Resident Project Representative on the Site. In performing these services, it is understood that FNI does not guarantee the Contractor's performance, nor is FNI responsible for the supervision of the Contractor's operation and employees. FNI shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor, or any safety precautions and programs relating in any way to the condition of the premises, the work of the Contractor or any Subcontractor. FNI shall not be responsible for the acts or omissions of any person (except its own employees or agents) at the Project site or otherwise performing any of the work of the Project.

I. The duties, responsibilities, and the limitations of authority of the Resident Project Representative, and designated assistants, are as follows:

1. Resident Project Representative is City’s agent at the site, will act as directed by and under the supervision of City, and will confer with City regarding Resident Project Representative’s actions. Resident Project Representative’s dealings in matters pertaining to the on-site Work shall in general be with Design Consultant and Contractor, keeping City advised as necessary. Resident Project Representative’s dealings with Subcontractors shall only be through or with full knowledge and approval of Contractor.

2. If General Conditions other than FNI's standard are used, the City agrees to include provisions in the General Conditions that require Contractor to include FNI: (1) as an additional insured and in any waiver of subrogation rights with respect to such liability insurance purchased and maintained by Contractor for the Project (except workers' compensation and professional liability policies); and (2) as an indemnified party in the Contractor's indemnification provisions where the City is named as an indemnified party.

II. Duties and Responsibilities of Resident Project Representative (Engineer):

1. FUNCTION CODE 145 – MANAGING CONTRACTED/DONATED PE

a. 145.1 PROJECT MANAGEMENT AND ADMINISTRATION

i. The Engineer shall be responsible to direct and coordinate all activities associated with the project to comply with City policies and procedures, and to deliver that work on time.

ii. The Engineer shall coordinate all subconsultant activity including quality of and consistency of work and administration of the invoices and monthly progress reports. The Engineer shall coordinate with necessary local entities.

iii. The Engineer shall:
   1. Prepare monthly written progress reports for each project.
   2. Develop and maintain a detailed project schedule to track project conformance. Schedule submittals to be provided in electronic format.
   3. Meet on a scheduled basis with the City to review project progress.
   4. Prepare, distribute and file both written and electronic correspondence.
   5. Prepare and distribute meeting minutes.
   6. Document phone calls and conference calls as required during the project to coordinate the work for various team members.

b. 145.2. DELIVERABLES FOR TASK 145.1

i. The Engineer shall provide the following:
   1. Monthly written Progress Reports
   2. Detailed Work Schedule
   3. Project Meeting Minutes
   4. Written and electronic correspondence and other work-related communication documentation
   5. Phone and Conference call log and other related documentation

2. FUNCTION CODE 300 (310) – GENERAL FUNCTION

a. 310.1 PROJECT SUPERVISION

i. For Traffic Control Inspection, the Engineer shall:
   1. Review plan sheets for Traffic Control Plan (TCP) changes or modifications.
   2. Verify that all lane and ramp closures follow City guidelines and lane restrictions as found in the project plans.
   3. Ensure that all lane closure information is sent to the assigned District Public Information Office (PIO), Corridor Mobility Coordinator, and others as directed one week prior to the closure.
   4. Ensure that if scheduled lane closures are cancelled, a District's PIO, the Corridor Mobility Coordinator, and others, as directed, are notified immediately with updated information.
   5. Coordinate lane closures with the AO staff.

6. Oversee project barricades and signs on a daily basis and coordinate corrections with the contractor as required.
7. Perform inspections of barricades and report to contractor on Form 599. A minimum of two barricade inspections (one daytime and one nighttime at approximately two-week intervals) must be performed per month. The first monthly night inspection must be performed as soon as possible after the initial set-up of the barricades.
8. Coordinate with the AO so that a barricade inspection report is performed by the District Construction office and coordinate corrections with contractor.
9. Complete Form 599, documenting deficiencies or actions needed and submit to contractor for corrective actions. The Engineer shall document when the deficiencies or actions are addressed and escalate as required. Once completed, the Engineer shall send to AO for review. The Engineer shall not retain or distribute copies of Form 599 to any individual by email.
10. Ensure that contractor makes repairs to critical items immediately, that other deficiencies or actions are addressed as soon as possible per item 502 Barricades, Signs, and Traffic Handling, and, if needed enforce non-payment of item.
11. Ensure all items meet requirements of TMUTCD, TCP, standards and specifications and State compliant list, which include at a minimum:
    a. Proper devices are used.
    b. Devices are clean and free of damage.
    c. Devices are properly aligned and spaced.
    d. Devices have proper reflectivity.
    e. Pavement markings are performing properly.
    f. Proper flagging procedures are followed.
    g. Signs are properly mounted and not leaning.
    h. The overall set up is in compliance.

ii. For Project Coordination, the Engineer, as directed by the City, shall provide the following in writing (e.g. meeting minutes and e-mails):

1. Conduct weekly coordination meetings on the project with the City Representative, contractor, subcontractors and other interested parties.
2. Prepare logs to track status of items such as change orders, issues, request for information (RFIs), and shop drawings.
3. Participate in safety meetings with the City on the job site or as required by the City.
4. Conduct pre-activity meetings for major operations or traffic control changes.
5. Review the work schedule, plan changes, construction issues, submittal progress, traffic changes, public information topics, and all other relevant matters including reviewing and approving the contractor's baseline schedule to verify the contractor has followed the approved Traffic Control Plan and all work has been incorporated into the schedule.
6. Monitor the progress of the contractor's approved schedule and progress of the work with the goal of meeting the contract completion date, review and monitor the contractor's work schedule monthly and recommend to the City any changes or needed changes to the schedule, and notify the City if the schedule does not adequately reflect appropriate completion dates, reasonable resources, or errors in logic. If additional time is requested by the contractor, the Engineer shall review the Contractor's request and verify the time impact analysis.
7. Analyze the contractor's monthly CPM schedule, provide recommendations for modifications or acceptance, and verify the CPM schedules follow all guidelines

described in the specifications. Any revisions to the schedule must be approved by the City.

iii. For Project Correspondence, the Engineer shall:
   1. Upon receipt of written correspondence from the contractor, draft a response within five working days for the City to review, comment, approve, and sign. The Engineer shall track all correspondence, approved or outstanding. The Engineer shall send all informal correspondence to the City via e-mail. The Engineer shall send all formal correspondence to the City on the Engineer's letterhead.
   2. Manage project issues and work directly with the contractor as directed in writing by the City.
   3. Escalate any major project issues to the City.
   4. Copy the City's Project Manager (PM) on all internal and external correspondence.

b. DELIVERABLES FOR TASK 310.1

i. The Engineer shall provide the following:
   1. Monthly Barricade Inspection Reports
   2. Baseline Schedule review
   3. Monthly Update Reviews and preview of upcoming month
   4. Weekly meeting minutes
   5. Project logs with status, responsible party, and impact
   6. Time Impact Analysis Reviews

3. FUNCTION CODE 300 (320) – GENERAL FUNCTION

a. 320.1 INSPECTION OF WORK IN PROGRESS AND PROJECT RECORDS

i. The Engineer shall inspect work incorporated into the project as assigned by the City. The Engineer shall:
   1. Verify that the project is built according to the plans and specifications, and all contract documents.
   2. Verify the accuracy of the work and determine pay quantities by making measurements as assigned by the City.
   3. Verify all the specifications and special provision requirements are met for inspected items of work, such as, materials, construction, measurement and payment.
   4. Verify daily quantities for each item of wok performed and tabulate into a monthly pay estimate to the contractor. The Engineer shall furnish estimate to the City for execution of payment.
   5. Enter measurement and payment information daily into PMIS for the items inspected by the Engineer personnel.
   6. Verify all material sourcing information is documented and entered into PMIS and address all material or testing deficiencies on a monthly basis.

ii. The Engineer shall maintain all records on the project in compliance with State and District procedures including Daily Work Reports (DWR), diaries, shop drawings and submittals, RFI drawings and sketches of measured items, sets of plans, record set plans, material on hand forms, and general correspondence.

iii. The Engineer shall verify whether drilled shaft or pile installations have been properly performed. Inspector must have knowledge in geological materials to ensure proper founding is achieved proper underwater and slurry placement, concrete placement procedures are used, and proper use of steel casing for dewatering and stability applications are implemented.

iv. The Engineer shall verify appropriate mill tests, materials approved and Buy America certifications are available as required.

v. The Engineer shall perform Disadvantaged Business Enterprise (DBE) and Historically Underutilized Business (HUB) interviews; Conduct Commercially Useful Function interviews and prepare required documentation; verify monthly incident and injury reporting, and verify Prompt Pay and Wage rate surveys are complete and correct. The Engineer shall verify any required corrections are made by the contractor.

vi. The Engineer shall verify and document all contractors' Form CST-C_1 (Additional Classification and Wage Rate Request) and complete Form 2182 (Commercially Useful Function Site Review) as directed by the City in writing (e.g. meeting minutes, emails).

vii. For Monthly Progress Estimates, the Engineer shall:

1. Prepare all monthly progress estimates for approval by the City and submit them on the date that is determined by the City for each estimate cycle.
2. Prepare a preliminary estimate each month for the contractor and City to review.
3. Verify all quantities and coordinate with the contractor when discrepancies arise.
4. Submit a copy of the installed work report or equivalent at the end of each week to the contractor for concurrence.
5. Make recommendation for payment for work inspected during the month.
6. Prepare monthly progress estimates to submit to the State for reimbursement.

viii. The Engineer shall maintain a log of all contractor submittals including RFI's, shop drawings, concrete, police officer hours, material testing requirements, material on hand, reviews, approvals, and any other logs deemed necessary by the City. The Engineer shall deliver the log to the City at the City's request.

ix. The Engineer shall administer the material on hand, process necessary paperwork, and shall:

1. Verify eligibility for payment of any material requested for payment of material on hand.
2. Monitor and verify material on hand before processing the payment per the requirements of the specification.
3. Perform on-site and off-site checks, as directed by the City, to verify material is part of the contractor's inventory.
4. Collect paid invoices, certifications, and testing information from the contractor to justify the use of material on hand within sixty (60) days of the progress payment.
5. Remove the material from the estimate, if no invoices are provided within sixty (60) days.
6. Spot check on-site and off-site the material on hand and document for accuracy.
7. Maintain a log per State District procedures.

x. For the Environmental Process, the Engineer shall:

1. Follow all current Storm Water Management guidelines and verify SW3P and Environmental Permits Issues and Commitments (EPIC) sheet requirements are followed.
2. Verify appropriate permits are in place for all contractor Project Specific Locations (PSL's).
3. Maintain the SW3P working drawings, which must be located in the field office at all times. If no field office is located on the project site, the SW3P working drawings must be located in the specific location designated for storage of the working drawings at all times.
4. Maintain documentation in accordance with the Texas Pollutant Discharge Elimination System's (TPDES), and Construction General Permit (GCP).

5. Perform SW3P inspections in accordance with the frequency required on the TxDOT Form 2118. Ensure use of the most current form.
6. Verify that the contractor follows the guidelines of the CGP.
7. Notify the City immediately in the event the contractor fails to make the corrections required by the CGP in accordance with Item 506 and the material manufacturer's installation and maintenance requirements.
8. Provide all environmental documents and correspondence to the City.
9. If there are any change orders or added construction that will impact the Environmental document, coordinate with the City and TxDOT to provide the necessary documentation.
10. Maintain a separate SW3P working copy of plan set and verify it is updated as required to remain in compliance.

xi. For Documenting and Reporting, the Engineer shall:

1. Prepare a DWR for each day of work from the beginning date until final acceptance. All inspectors must prepare their own DWR each day they are on the project. Each DWR must have the weather recorded for that day, including temperature high and low, weather conditions, all visitors to the project, traffic conditions, lane closure hours, police officer names and hours worked, portable message sign hours, instruction given to the contractor, the contractor work hours, the contractor's equipment and utilization, equal employment opportunity (EEO) issues, safety concerns, SW3P information, and accidents. When recording information pertaining to accidents, record only factual information as observed; not personal opinion. Include the subcontractors on the project, the number of hours on the project, the work they are performing, and items for payment.
2. Maintain all relevant subcontractor forms, contract assurance logs, agreements, and statements of compliance.
3. Submit subcontractor approval requests to the TxDOT San Antonio District Construction Office (including hauling trucks). Once subcontractor approval requests have been approved, the City will pay the contractor for the work performed by the subcontractor.
4. Include in the DWR items of work inspected for payment. Input the station number, supporting calculations, quantity being paid, any comments or remarks necessary, and any other information to properly distinguish the item being paid. Refer to specific plan sheets in comments provided in the DWR.
5. Maintain hard copies of measurements and attachments that support the calculations and quantities listed in the DWR's.
6. Maintain an electronic daily diary on the project. This diary will allow the Engineer to recommend payment for the items listed in the DWR and to charge time on the project and maintain milestone charges, if applicable. <u>No paper diary will be maintained</u>.
7. Identify items that will overrun and underrun during the course of the project.
8. Follow State's Concrete Procedures for field concrete specimens and all required sampling and testing per applicable requirements including but not limited to the specifications and TxDOT Local Government Project Procedures construction checklist.
9. Maintain a set of project records and setup according to State procedures.
10. Coordinate with the City for the State District Audits to be performed. Track resolution of audit deficiencies.

xii. Construction Scheduling Support Services (Primavera Scheduling Software)

1. Preliminary and Baseline Schedules
    a. The Engineer shall review, analyze, and provide recommendations and submit a review report on Contractor's preliminary schedule.
    b. The Engineer shall review, analyze, and provide recommendations and submit a review report on the contractor's baseline schedule.
    c. The Engineer shall facilitate and conduct a Preconstruction Meeting and any other required meetings.
2. Schedule Updates (Progress and Revised)
    The Engineer Shall:
    a. Review and analyze the contractor's monthly progress schedule updates, and submit an updated Schedule Review Report including a detailed review of critical activities and a comparison of the current update to previous updates.
    b. Coordinate with field personnel to compare actual construction status with the contractor's monthly update. Verify the accuracy of the schedule, actual start dates, actual finish dates, and percent complete or remaining duration. Review the monthly Daily Work Reports.
    c. Schedule monthly site visits with the State's District Construction Office or field personnel.
    d. From interim schedule updates provided by the Contractor, identify changes in critical path or changes in controlling delays.
    e. Identify possible future scheduling conflicts and report.
    f. Develop a Project Schedule Status Report (PSSR) to monitor project completion dates, identify actual and potential critical path slippage, and recommend strategies for mitigating critical path delays.
    g. Monitor the effects of weather (calendar-day projects) and other non-excusable impacts on the schedule and provide means to separate these from excusable impacts.
    h. Verify that schedule updates are separate: Progress Schedule vs. Schedule Revisions (Revisions require the City's approval) in accordance with the specifications.
    i. Attend meetings on an as needed basis.
3. Time Impact Analysis (TIA)
    The Engineer shall:
    a. Review and analyze TIAs from the contractor in accordance with the Special Provision or the latest version or applicable Standard Specifications for Construction and Maintenance of Highways, Streets, and Bridges Spec. Book.
    b. Coordinate with the City's personnel to determine the validity of the TIAs.
    c. Assist in analyzing Delay Claims.
    d. Provide report for the justification of granting or rejecting time requested to the City.
    e. Review overhead documentation for compensable delays.
    f. Recommend scheduling alternatives to mitigate impact resulting from conflict to the City.
    g. Perform independent TIA as an alternative to Contractor submittal.
    h. Monitor PSSR to verify the TIA process.
4. General
    The Engineer shall:
    a. Investigate, analyze and recommend resolution to mitigate schedule impacts between adjacent construction contracts as directed by the City.

b. Inform the City's of upcoming lane closures and high demand inspection needs.
c. Inform the City of milestone status; major traffic changes, and project completion for posting the project web page.
d. Review contract time determination schedules and provide written summary of findings.

b. DELIVERABLES FOR TASK 320.1, ITEMS i – xi

The Engineer shall provide the following:

i. Monthly Project Estimates (with hard copies of measurements and attachments that support the calculations and quantities listed in the estimate).
ii. Monthly estimate checklists.
iii. Monthly Material on Hand forms.
iv. Paid invoices for material on hand.
v. Documentation for extra work.
vi. SW3P Working Plan Set.
vii. Weekly SW3P inspections (TxDOT Form 2118)
viii. Yearly Stage gate checklist (TxDOT Form 2448)
ix. One DWR per day by each person, inspection items of work on the project and supporting hard copy documentation.
x. All drilled shaft or pile logs.
xi. Monthly Project Estimate reimbursement applications.
xii. Baseline Schedule Review Reports, which include the following:
    1. Transmittal letters to City providing summary of findings and recommendations to accept or reject the preliminary or detailed (baseline) schedule.
    2. Draft letters for City's signature notifying Contractor of schedule acceptance or rejection.
    3. Completed checklists for schedule review.
    4. Detailed listings of schedule deficiencies.
    5. Any other documentation to support findings.
xiii. Schedule Updates (Progress and Revised) Review Reports, which include the following:
    1. Progress Schedule Review Report
        a. Transmittal letter to City providing the following:
            i. Summary of findings.
            ii. Lists identifying potential critical path impacts.
            iii. Recommendations to accept or reject the update.
        b. Draft letter for City's signature notifying contractor of schedule update acceptance or rejection.
        c. Completed checklist for Progress Schedule review.
        d. Detailed listing of schedule deficiencies.
        e. Claim Digger output with written explanation of the results summary form.
        f. Updated Project Schedule Status Report (PSSR).
        g. Plots of look-ahead schedules showing work planned for next two months.
        h. Any other documentation to support findings.
    2. Revised Schedule Review Report
        a. Transmittal letter to City providing summary of findings and detailed discussions of revisions including the following:
            i. Changes to critical path due to the revision.
            ii. Changes to the project calendars.
            iii. Changes to resources or sequencing.

iv. Discussions of the positive and negative effects of the revisions.
v. Recommendations to accept or reject the revision.

b. Draft letters for City's signature notifying Contractor of schedule update acceptance or rejection.
c. Updated Project Schedule Status Reports (PSSR)
d. Claim Digger output with written explanation of the results summary form.
e. Any other documentation to support findings.

xiv. Time Impact Analysis Review Report, which includes the following:

1. Transmittal letter to City providing summary of findings and recommendations to accept or reject the time impact analysis.
2. Draft letter for City's signature notifying contractor of TIA acceptance or rejection.
3. Copies of recommended scheduling alternatives to mitigate impacts resulting from conflicts.
4. Independent TIA(s) as an alternative to Contractor's TIA submittals.
5. Potential Impact Tracking Sheet.

xv. Progress Report, which includes the following:

1. A progress report that compares planned construction performance, expressed as a percentage complete, with actual performance.
2. Summary statements regarding accomplishments during the reporting period and listings of major concerns and issues pertaining to construction progress.
3. A summary progress report will be developed and maintained that shows the overall status of the entire construction project for presentation.
4. A 90 day look ahead of critical and near critical activities.

4. FUNCTION CODE 300 (330) – GENERAL FUNCTION

a. 330.1 JOB CONTROL

i. The Engineer shall perform all quality assurance (QA) sampling and testing of components and materials in accordance with the standard specifications, and all other standard and special specifications and special provisions applicable in this agreement. The Engineer shall meet the minimum sampling frequencies set out in the TxDOT Guide Schedule applicable to the project for Sampling and Testing for materials. The testing must- include the following materials and all the components of the materials listed: Asphalt, Concrete, Soils, and Aggregates. The estimated number of samples and tests are based on quantities in the executed construction contract.

1. The Engineer shall ensure the testing is completed and documented in the PMIS.
2. The Engineer shall provide certified personnel, outlined in their Quality Assurance and Quality Control (QA/QC) plan, that are knowledgeable of all materials testing procedures. All personnel performing acceptance tests must provide certifications and must maintain the certifications throughout the project.
3. The Engineer shall provide technicians certified in accordance with TxDOT Quality Assurance Programs for Construction (QAP) or other State approved programs, such as the Texas Asphalt Pavement Associations (TXAPA) for Hot Mix Asphalt, ACI for concrete, and the Soils and Base Certification Program, as listed below.
4. The Engineer shall provide certified technicians to perform the following tests:
   a. Hot Mix Asphalt Testing, HMAC
      i. Level 1A
      ii. Level 1B
      iii. Level 2

iv. All other tests in the Manual of Testing Procedures 200-F Series or ASTM Procedures not covered in Level 1A, Level 1B or Level 2 will be administered by the State central lab per the QAP.

b. Concrete Testing, ACI-American Concrete Association
   i. Concrete Field Testing Technician – Grade I
   ii. Concrete Strength Testing Technician
   iii. Other tests outlined in the Manual of Testing Procedures 400-A Series or ASTM Procedures that are not covered by ACI Field and Strength Testing will be administered by the State central lab per the QAP.

c. Soils and Base, HMAC
   i. SB 101 Properties Specialist
   ii. SB 102 Field Specialist
   iii. SB 103 Materials Analyst Specialist
   iv. SB 201 Strength Specialist
   v. SB 202 Compressive Strength Specialist
   vi. AGG101 Aggregate Specialist
   vii. Other tests outlined in the Manual of Testing Procedures 100-E Series or ASTM Procedures that are not covered in AGG101, SB101, SB102, SB103, SB201, SB 202 testing will be administered by the State district lab per the QAP.

5. The Engineer shall perform testing on the project. These tests include all tests listed in State's Guide Schedule to Sampling and Testing. The Engineer shall follow the State's Guide Schedule of Sampling and Testing to establish testing frequencies. Testing frequencies may be increased if directed by the City.
6. When appropriate, the Engineer may request that one or more tests be waived by City. The Engineer shall perform all required tests unless otherwise instructed by the City in writing.
7. The Engineer shall attend preconstruction QA and QC testing meetings prior to beginning work.
8. The Engineer shall:
   a. Review and recommend approval or rejection for all sampling and testing documentation submitted by the contractor for compliance with applicable State and federal regulations, standards, and contract requirements.
   b. Verify all materials used meet specifications or identify materials that do not meet specifications and recommend action which should be taken.
   c. Certify that all materials used during construction meet the specifications.
   d. Work closely with the City to resolve all material discrepancies before the next monthly estimate is processed.
   e. Enter all test data into the PMIS.
   f. Enter all mix designs, for both concrete and asphalt, into the PMIS.
   g. Report failing tests to the City within 24 hours.

b. 330.2. DELIVERABLES FOR TASK 330.1

i. The Engineer shall provide the following:
   1. Monthly Deficiency Reports to track material issues (one per month)
   2. Certification Verifications
   3. Testing documentation as applicable
   4. Letters of Certification
   5. Test Exception Letter

5. FUNCTION CODE 300 (351) – DESIGN VERIF/CHANGES/ALTER

a. 351.1. DESIGN VERIFICATION, CHANGES AND ALTERATIONS

i. Change Orders

1. The Engineer shall review the Construction Contract Administration Manual (CCAM) on change orders to understand the State's policy.
2. The Engineer shall provide an estimated cost of change orders to the City and aid the City in price negotiations of new pay items added by change order. The Engineer shall review the information submitted by the contractor to verify the prices are within the current Statewide or district bid averages. If the price exceeds the bid averages, the Engineer shall review the breakdown to ensure the contractor is using the allowed mark-ups as specified in the Spec. Book. The Engineer shall verify that prices are fair and reasonable based on the time, material, equipment and labor necessary to perform the work.
3. The Engineer shall provide appropriate documentation including justification for the change order, revised drawings and plan sheets with appropriate design backup documentation prepared by the Design Consultant, cost breakdowns, time impacts, and change order descriptions.
4. The Engineer shall work with the City on submitting change orders. The City must sign change orders.
5. The Engineer shall coordinate with the State by sending all change orders to the assigned district for concurrence before a change order is sent to the contractor.
6. The Engineer shall provide all documentation supporting the need for any change orders.
7. The Engineer shall coordinate all plan sheets associated with change orders. The plan sheets prepared by the Design Consultant must be signed, sealed and dated by a Texas Licensed Professional Engineer.
8. The Engineer shall provide completed district's Change Order Checklist, signed by the Engineer.
9. The Engineer shall follow any current and new processes that are mandated by the State.
10. If third party funds are associated with the change order, the Engineer shall assist the City as needed.

ii. Submittal, Tracking and Approval of the Shop Drawings

1. The Engineer shall log, monitor, and coordinate the contractor's submittals of fabrication plans, erection plans, shop drawings, change orders, Material on Hand, time extensions, product and material submittals, and Requests for Information (RFI).
2. The Engineer shall <u>forward submittals and shop drawings to the appropriate party for review and approval</u> and verify return of documents.
3. The Engineer shall address RFI's as directed by the City.
4. The Engineer shall make recommendations to the City for resolution of any RFI's and draft any correspondence necessary for the resolution of the RFI.
5. The Engineer shall coordinate RFI resolutions with appropriate party as directed by the City.
6. The Engineer shall submit all shop drawings electronically as outlined in the "Guide to Electronic Shop Drawing Submittal."
7. The Engineer shall track all shop drawing submittals, reviews, and approvals.

b. 351.2. DELIVERABLES FOR TASK 351.1

The Engineer shall provide the following:

i. All change orders funded by the City, State and by the contractor.
ii. All documentation supporting the need for any change orders.
iii. Compile all plan sheets associated with change orders which shall be sealed by an engineer.
iv. Complete district's Change Order Checklist, signed by an engineer.
v. Log of change orders.
vi. Logs of Shop Plan submittals.
vii. Shop Plan submittals and shop drawings.
viii. RFI(s).
ix. Recommendations on RFI(s) and draft correspondence on resolution.

6. FUNCTION CODE 300 (352) – GENERAL FUNCTION

a. 352.1 FINAL CONSTRUCTION DOCUMENTS

The Engineer shall:

i. Provide a comprehensive punch list to the contractor and to the City.
ii. Verify that all punch list work is complete before recommending acceptance to the City.
iii. Provide final complete construction records in the format required by the State. The final complete construction records must include as-built plans, final quantities, complete test reports, final DBE, HUB, and Prompt Pay reports, and project documentation (including all general correspondence that occurred during the project) within 30 days of final acceptance of the project by the State.
iv. Final project documentation shall include the following:
    1. Folder labeled by item number for items requiring additional back-up.
    2. Copies of all the change orders with back-up.
    3. Material invoices back-up.
    4. Manifest tickets for all material paid by weight (Asphalt, Concrete, Lime, etc.).
    5. Material on Hand forms 1914 and 1915.
    6. Texas Department of Licensing and Regulation (TDLR) Inspections.
    7. Any other applicable records as required by TxDOT Local Government Project Procedure requirements necessary to complete the review.
    8. The Engineer shall submit the correspondence folder with the final records including the as-builts when submitting the final documents.
v. Provide a letter to the Area Office recommending certification that the project was constructed in substantial compliance with the plans and specifications and that materials incorporated in the construction work and operations were in conformity with the approved plans and specifications.
vi. Coordinate with the design consultant and TDLR for inspection of work performed.

b. 352.2. DELIVERABLES FOR TASK 352.1

i. Final Records labeled by item number, follow District guidelines.
ii. Manifest Tickets (Asphalt, Concrete, Hot Mix, Lime).
iii. Copies of all change orders created on the project.
iv. Material on Hand forms for the duration of the project.
v. Barricade Inspection forms.
vi. TDLR Inspection Report.
vii. Correspondence File.
viii. As-built Plans.
ix. Test Certification Report.

x. Failing Samples Report.

7. FUNCTION CODE 300 (390) – GENERAL FUNCTION

a. 390.1. CONSTRUCTION ENGINEERING NOT OTHERWISE CLASSIFIED

The Engineer shall provide the following:

i. Post Letting Activities Prior to Construction, which include:
   1. Schedule and assist in conducting a preconstruction conference for the project, document the conference in accordance with State procedures as outlined in CCAM, District Procedures, and the QAP.
   2. Attend and lead a Risk Workshop with the project stakeholders to develop and document risks associated with the project.
   3. Monitor known existing utility facilities on the project, which includes:
      a. Coordinate any and all relocations or conflicts with the appropriate utility companies and the contractor.
      b. Document any project delay or potential delay caused by utility conflicts.
      c. Verify that new utility structures and component materials as identified in the Utility Agreement Estimate are compliant with BUY AMERICA and coordinate the submittal of Form 1818 by the utility to the State.

ii. Activities during Construction, which include preparing or performing the following:
   1. Disputes and Claims
      a. Upon notice from the contractor of pending claims for extra work or changes in scope of the work or delay to the work, maintain records indicating the cost of such work and delay.
      b. Analyze the schedule and make recommendations to the City regarding such claims, time extensions, contract changes, extra work, or delay costs.
      c. Assist the City in dispute negotiations and claim resolution through all levels of escalation.
   2. Utilities & ROW
      a. Coordinate with the City and their representative on utility and ROW issues as needed and attend meetings as required.
   3. Internal and External Agency Audits
      a. Assist the City in any internal and external agency audits that may be performed during the life of the construction project.
      b. Provide documentation as required.

iii. For the Quality Assurance and Quality Control Plan (QA and QC):
   1. Develop and maintain a QA and QC plan for inspections, record keeping, and testing and submit to the City for review.
   2. Complete Form 2682 and submit to the district lab for review.
   3. Submit documentation to the City and State for verification of quality control checks.
   4. Include steps to ensure the City is receiving trained personnel on the project.
   5. Submit this plan to the City. If changes to the plan are made by the Engineer or as directed by the City, provide updated version to the City. Adress all City comments on the plan.
   6. Provide a quarterly comparison of estimated manpower showing the estimated, actual, and budgeted manpower.
   7. Provide a monthly schedule of predicted manpower showing the estimated, actual, and budgeted manpower.

iv. For Public Information and Coordination:

1. Assist the City in the public relations activities including the preparation of public information, attending public meetings for the purposes of providing information to the public, notifying City personnel of lane closures including press releases. All news conferences and media interviews will be handled by the City.
2. Assist the City with public information and coordination meetings, which include the following parties: contractor representatives, neighboring construction projects, public works agencies, utilities, federal officials, the State, the City, and other interested parties. The goal of these meetings will be to maintain adequate cooperation and communication among all partners to this project.
3. Coordinate with the City to resolve any issues from the public.

b. 390.2. DELIVERABLES FOR TASK 390.1

The Engineer shall provide the following:

i. Pre-Construction Conference Agenda and Roster
ii. Risk Register
iii. QA and QC Plan
iv. Quarterly QA and QC checks
v. Monthly schedule of predicted manpower
vi. Graph showing the estimated, actual, and budgeted manpower.

ARTICLE II

SPECIAL SERVICES: FNI shall render the following professional services, which are not included in the Basic Services described above, in connection with the development of the Project:

1. No special services included.

ARTICLE III

ADDITIONAL SERVICES: Any services performed by FNI that are not included in the Basic Services or Special Services described above are Additional Services. Additional Services to be performed by FNI, if authorized by Client, are described as follows:

1. FUNCTION CODE 160 (150) – ROADWAY DESIGN

a. 150.1 FIELD SURVEYING AND PHOTGRAMMETRY (CONSTRUCTION SURVEYS)

Construction surveys include performance of surveys associated with the gathering of survey data for topography, cross-sections, and other related work necessary to layout and stake projects for construction.

i. Purpose
The purpose of a construction survey is to provide field data in support of highway construction.

ii. Definitions
A construction survey is defined as the combined performance of reconnaissance, field work, analysis, computation, and documentation necessary to provide the horizontal and vertical position of specific ground points to be used by the construction contractor for determining lines and grades.

iii. Tasks to be Completed
1. Construction Surveys
The City will request construction surveys on an as needed basis. The Engineer's

Surveyor shall perform tasks including, but not limited to the following:

a. Stake existing or proposed rights-of-way.
b. Stake existing or proposed baseline/centerline.
c. Stake proposed bridge structures.
d. Stake proposed drainage structures (e.g. manholes, culverts, etc.)
e. Set grade stakes.
f. Recover and check existing control points.
g. Establish additional control points.
h. Check elevations and locations of structures.
i. Determine and resolve conflicts associated with survey data.

iv. Technical Requirements

1. Construction surveys must be performed under the supervision of a RPLS currently registered with the Texas Board of Professional Land Surveyors (TBPLS).
2. Horizontal and vertical ground control used for construction surveys, furnished to the Engineer's surveyor by the City or based on acceptable methods conducted by the Engineer's Surveyor, must meet the standards of accuracy required by the City.
3. Side shots or short traverse procedures used to determine horizontal and vertical locations must meet the following criteria:
   a. Side shots or short traverses must begin and end on horizontal and vertical ground control as described above.
   b. Standards, procedures, and equipment (may be GPS Equipment, LiDAR, Total Stations, etc.) must be such that horizontal locations relative to the control may be reported within the following limits:
      i. Bridges and other roadway structures: less than 0.1 of one foot.
      ii. Utilities and improvements: less than 0.2 of one foot.
      iii. Cross-sections and profiles: less than 1 foot
      iv. Bore holes: less than 3 feet.
   c. Standards, procedures, and equipment (may be GPS Equipment, LiDAR, Total Stations, etc.) used must be such that vertical locations relative to the control may be reported within the following limits:
      i. Bridges and other roadway structures: less than 0.1 of one foot.
      ii. Utilities and improvements: less than 0.2 of one foot.
      iii. Cross-sections and profiles: less than 0.2 of one foot.
      iv. Bore holes: less than 0.5 of one foot.
      v. Automation Requirements
         1. Planimetric design files (DGN) must be fully compatible with the MicroStation V8i graphics program used by TxDOT without further modification or conversion.
         2. Electronically collected and processed field survey data files must be fully compatible with the State's computer systems without further modification or conversion. All files must incorporate only those feature codes currently being used by TxDOT.
         3. DTM must by fully compatible with GEOPAK system used by TxDOT without further modification or conversion. All DTM must be fully edited and rectified to provide a complete digital terrain model with all necessary break lines.
      vi. Deliverables for Survey Taks

      The deliverables for construction surveys shall be any combination of the following:

1. Digital Terrain Models (DTM) and the Triangular Irregular Network (TIN) files in a format acceptable by the City.
2. Maps, plans, or sketches showing the results of field surveys.
3. Computer printouts or other tabulations summarizing the results of field surveys.
4. Digital files or media acceptable by the City containing field survey data (ASCII Data files).
5. Maps, plats, plans, sketches, or other documents acquired from utility companies, private corporations, or other public agencies, the contents of which are relevant to the survey.
6. Field survey notes, as electronic and hard copies.
7. An 8 ½ inch by 11 inch survey control data sheet for each control point that must include a location sketch, a physical description of the point including a minimum of two reference ties, surface coordinates, a surface adjustment factor, elevation, and the horizontal and vertical datum used.
8. A digital and hard copy of all computer printouts of horizontal and vertical conventional traverses, GPS analysis and results, and survey control data sheets.
9. All GEOPAK GPK files.
10. Survey reports in a format requested by the City.

2. FUNCTION CODE 160 (163) – ROADWAY DESIGN

a. 163.1. UTILITY ENGINEERING INVESTIGATION

i. Engineer Designees.

The Engineer is responsible for designating and providing the services of the following individuals or entities:

1. Utility Coordinator is the individual or entity performing Utility-related Services that are not required to be performed by a licensed engineer under Texas law.
2. Utility Engineer is the individual or entity performing Utility-related Services that are required to be performed by a licensed engineer under Texas law.

ii. Utility Engineering Investigation

Utility Engineering Investigation shall include utility investigations subsurface and above ground prepared in accordance with American Association of State Highway and Transportation Officials (AASHTO) standards and Utility Quality Levels, defined in cumulative order (least to greatest) as follows:

1. Quality Level D – Existing Records: Utilities are plotted from review of available existing records.
2. Quality Level C – Surface Visible Feature Survey: Quality level "D" information from existing records is correlated with surveyed surface-visible features. Includes Quality Level D information. If there are variances in the designated work area of Level D, a new schematic or plan layout will be necessary to identify the limits of the proposed project and the limits of the work area required for the work authorization; including highway stations, limits within existing right-of-way, and distances or areas to be included along existing intersecting roadways.
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, a new schematic or plan layout will be necessary to identify the limits of the proposed project and the limits of the work area required for the work authorization; including highway stations, limits within existing right-of-way, and distances or areas to be included along existing intersecting roadways.

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.

iii. Designate (Quality Level B):

The Engineer shall:

1. As requested by the LG compile "As Built" information from plans, plats and other location data as provided by the utility owners.
2. Coordinate with utility owners when utility owner's policy is to designate their own facilities at no cost for preliminary survey purposes. The Engineer shall examine utility owner's work to ensure accuracy and completeness.
3. Designate, record, and mark the horizontal location of the existing utility facilities and their service laterals to existing buildings using non-destructive surface geophysical techniques. No storm sewer facilities are to be designated unless authorized by the City. A non-water base paint, utilizing the American Public Works Association (APWA) color code scheme, must be used on all surface markings of underground utilities.
4. Correlate utility owner records with designating data and resolve discrepancies using professional judgement. A color-coded composite utility facility plan with utility owner names, quality levels, line sizes and subsurface utility locate (test hole) locations, shall be prepared and delivered to the City. It is understood by both the Engineer and City 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 hold vacuum excavation. A note must be placed on the designate deliverable only that states "line sizes are from best available records." All above ground appurtenance locations must be included in the deliverable to the City. This information shall be provided in the latest version of MicroStation or Geopak used by the City. The electronic files will be delivered on CD or DVD, as required by the City. The electronic file will be delivered on CD or DVD, as required by the City. A hard copy is required and must be signed, sealed, and dated by the Engineer. When requested by the City, the designated utility information must be over laid on the City's design plans.
5. Determine and inform the City of the approximate utility depths at critical locations as determined by the City. This depth indication is understood by both the Engineer and the City to be approximate only and is not intended to be used preparing the right-of-way and construction plans.
6. Provide a monthly summary of work completed and in process with adequate detail to verify compliance with agreed work schedule.
7. Close-out permits as required.
8. 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.

9. Comply with all applicable City policy and procedural manuals.

iv. Subsurface Utility Locate (Test Hole) Service (Quality Level A).

The Engineer shall:

1. Review requested test hole locations and advise the City in the development of an appropriate locate (test hole) work plan relative to the existing utility infrastructure and proposed highway design elements.
2. Coordinate with utility owner inspectors as may be required by law or utility owner policy.
3. Neatly cut and remove existing pavement material, such that the cut not to exceed 0.10 square meters (1.076 square feet) unless unusual circumstances exist.
4. Measure and record the following data on an appropriately formatted test hole data sheet that has been sealed and dated by the Engineer:
   a. Elevation of top and bottom of utility tied to the datum of the furnished plan.
   b. Identify a minimum of two benchmarks utilized. Elevations shall be within an accuracy of 15mm (.591 inches) of utilized benchmarks.
   c. Elevation of existing grade over utility at test hole location.
   d. Horizontal location referenced to project coordinate datum.
   e. Outside diameter of pipe or width of duct banks and configuration of non-encased multi-conduit systems.
   f. Utility facility material(s).
   g. Utility facility condition.
   h. Pavement thickness and type.
   i. Coating/Wrapping information and condition.
   j. Unusual circumstances or field conditions.
5. Excavate test holes in such a manner as to prevent any damage to wrappings, coatings, cathodic protection or other protective coverings and features. Water excavation can only be utilized with written approval from the City.
6. Be responsible for any damage to the utility during the locating process. In the event of damage, the Engineer shall stop work, notify the appropriate utility facility owner, the City and appropriate regulatory agencies. The Engineer shall not resume work until the utility facility owner has determined the corrective action to be taken. The Engineer shall be liable for all costs involved in the repair or replacement of the utility facility.
7. Backfill all excavations with appropriate material, compact backfill by mechanical means, and restore the pavement and surface material. The 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.
8. Furnish and install a permanent above ground marker as specified by the City directly above center line of the utility facility.
9. Provide complete restoration of work site and landscape to equal or better condition then before excavation. If a work site and landscape is not appropriately restored, the Engineer shall return to correct the condition at no extra charge to the City.
10. Plot utility location position information to scale and provide a comprehensive utility plan sign and sealed by the responsible Engineer. This information shall be provided in the latest version of MicroStation or Geopak format used by the City.
11. Return plans, profiles, and test hole data sheets to the City. If requested, conduct a review of the findings with the City.
12. Close-out permits as required.

ARTICLE IV

TIME OF COMPLETION: FNI is authorized to commence work on the Project upon execution of this Agreement and agrees to complete the services in accordance with the schedule for construction of the project. It is anticipated that the construction phase will last for a total duration of 30 months (25 months for construction, 1 month of float, 4 months for project closeout).

If FNI's services are delayed through no fault of FNI, FNI shall be entitled to adjust contract schedule consistent with the number of days of delay. These delays may include but are not limited to delays in Client or regulatory reviews, delays on the flow of information to be provided to FNI, governmental approvals, etc. These delays may result in an adjustment to compensation as outlined on the face of this Agreement and in Attachment CO.

ARTICLE V

RESPONSIBILITIES OF CLIENT: Client shall perform the following in a timely manner so as not to delay the services of FNI:

A. Client recognizes and expects that change orders may be required to be issued during construction. The responsibility for the costs of change orders will be determined on the basis of applicable contractual obligations and professional liability standards. FNI will not be responsible for any change order costs due to unforeseen site conditions, changes made by or due to the Client or Contractor, or any change order costs not caused by the negligent errors or omissions of FNI. Nothing in this provision creates a presumption that, or changes the professional liability standard for determining if, FNI is liable for change order costs. It is recommended that the Client budget a minimum of 5% for new construction and a minimum of 10% for construction that includes refurbishing existing structures.

B. Designate in writing a person to act as Client's representative with respect to the services to be rendered under this Agreement. Such person shall have contract authority to transmit instructions, receive information, interpret and define Client's policies and decisions with respect to FNI's services for the Project.

C. Provide all criteria and full information as to Client's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which Client will require to be included in the drawings and specifications.

D. Assist FNI by placing at FNI's disposal all available information pertinent to the Project including previous reports and any other data relative to design or construction of the Project.

E. Arrange for access to and make all provisions for FNI to enter upon public and private property as required for FNI to perform services under this Agreement.

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

G. Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project.

H. Client shall make or arrange to have made all subsurface investigations, including but not limited to borings, test pits, soil resistivity surveys, and other subsurface explorations. Client shall also make or arrange to have made the interpretations of data and reports resulting from such investigations. All costs associated with such investigations shall be paid by Client.

I. Provide such accounting, independent cost estimating and insurance counseling services as may be required for the Project, such legal services as Client may require or FNI may reasonably request with regard to legal issues pertaining to the Project including any that may be raised by Contractor(s), such auditing service as Client may require to ascertain how or for what purpose any Contractor has used the moneys paid under the construction contract, and such inspection services as Client may require to ascertain that Contractor(s) are complying with any law, rule, regulation, ordinance, code or order applicable to their furnishing and performing the work.

J. Attend the preconstruction conferences, construction progress and other job-related meetings and substantial completion inspections and final payment inspections.

K. Give prompt written notice to FNI whenever Client observes or otherwise becomes aware of any development that affects the scope or timing of FNI's services, or any defect or nonconformance of the work of any Contractor.

L. Furnish, or direct FNI to provide, Additional Services as stipulated in Attachment SC, Article III of this Agreement or other services as required.

M. Bear all costs incident to compliance with the requirements of this Article V.

ARTICLE VI

DESIGNATED REPRESENTATIVES: FNI and Client designate the following representatives:

Client's Designated Representative – Billy Hornung, PE (bhornung@seguintexas.gov)

Client's Accounting Representative – Pam Herrerra (pherrera@seguintexas.gov)

FNI's Designated Representative – Bregger Garrison, PE (bregger.garrison@freese.com)

FNI's Accounting Representative – Marissa Mendoza (Marissa.mendoza@freese.com)

EXHIBIT B

Fee Schedule

Rudeloff Road CMCI
5/13/2024
Detailed Cost Breakdown

Project Fee Summary		
Basic Services	$	2,145,264
Special Services	$	85,765
Total Project	$	2,231,029

Tasks					Labor														Expenses			Subconsultants			Total
Phase	Task	Activity	Basic or Special	Task Description	Principal-In-Charge	PM	CM	Inspector	Inspector	Record Keeper	Project Engineer	Safety	Utility Engineer	QA Manager	LGPP Support	Operations Analyst	Cost Est Support	Total Hours	Total Labor Effort	Tech Charge	Miles	Total Expense Effort	Rock	SAM	Total Sub Effort	Total Effort
					$285	$285	$156	$156	$156	$132	$211	$285	$285	$285	$285	$175	$185									
				Resident Project Representation															$ -			$ -			$ -	$ -
				1. Function Code 145 - Managing Contracted/Donated PE															$ -			$ -			$ -	$ -
				145 Project Management and Administration															$ -			$ -			$ -	$ -
			Basic	1. Monthly Progress Reports (30 mos)			30			30						30		90	$ 14,566	90		$ 765			$ -	$ 15,331
			Basic	2. Detailed Work Schedule			30			30								60	$ 9,060	60		$ 510			$ -	$ 9,570
			Basic	3. Project Meeting Minutes	2	66	160	66	5	64	2			2				367	$ 68,011	296		$ 2,516			$ -	$ 70,527
			Basic	4. Communication and Correspondence			30			60								90	$ 13,213	90		$ 765			$ -	$ 13,978
			Basic	5. Phone and Conference Call Log			30			60								90	$ 13,213	90		$ 765			$ -	$ 13,978
				2. Fct. Code 300 (310) - General Function															$ -			$ -			$ -	$ -
				310 Project Supervision															$ -			$ -			$ -	$ -
			Basic	1. Monthly Barricade Inspection Reports			100	200		25								325	$ 52,537	125		$ 1,063			$ -	$ 53,599
			Basic	2. Baseline Schedule Review			100			50								150	$ 23,280	150		$ 1,275			$ -	$ 24,555
			Basic	3. Monthly Update Reviews			50	50		200								300	$ 44,043	250		$ 2,125			$ -	$ 46,168
			Basic	4. Weekly Meeting Minutes			200	200		200								600	$ 93,119	400		$ 3,400			$ -	$ 96,519
			Basic	5. Project Logs			50			200								250	$ 35,863	250		$ 2,125			$ -	$ 37,988
			Basic	6. Time Impact Analysis Reviews (4 TIAs over 30 mos)		16	32	32	16		32		16					144	$ 29,731	96		$ 816			$ -	$ 30,547
				3. Fct. Code 300 (320) - General Function															$ -			$ -			$ -	$ -
				320 Inspection of Work in Progress and Project Records															$ -			$ -			$ -	$ -
			Basic	1. Monthly Project Estimates (25 mos)			100	200		100								400	$ 62,918	200		$ 1,700			$ -	$ 64,618
			Basic	2. Monthly Estimate Checklists (25 mos)			50			50								100	$ 15,100	100		$ 850			$ -	$ 15,950
			Basic	3. Monthly Material on Hand Forms (25 mos)			25	50		25								100	$ 15,730	50		$ 425			$ -	$ 16,155
			Basic	4. Paid Invoices for Material on Hand (25 mos)			25	50		50								125	$ 19,190	75		$ 638			$ -	$ 19,828
			Basic	5. Documentation for Extra Work (25 mos)			25	50		25								100	$ 15,730	50		$ 425			$ -	$ 16,155
			Basic	6. SW3P Working Plan Set (25 mos)			50	100		50								200	$ 31,459	100		$ 850			$ -	$ 32,309
			Basic	7. Weekly SW3P Inspections (100 wks)				200		100								300	$ 46,560	100		$ 850			$ -	$ 47,410
			Basic	8. Yearly Stage Gate Checklist		4	8			4								16	$ 3,058	16		$ 136			$ -	$ 3,194
			Basic	9. Daily Work Reports (25 mos, 24 wrk days/mo)			600	3,600	960				40					5,200	$ 856,068	640	133,580	$ 94,939			$ -	$ 951,006
			Basic	10. Drilled shaft logs				12										12	$ 1,963			$ -			$ -	$ 1,963
			Basic	11. Monthly Project Estimate reimbursement applications (25 plus Final)			52			104								156	$ 22,902	156		$ 1,326			$ -	$ 24,228
			Basic	12. Baseline Schedule Review Reports			16	16										32	$ 5,235	16		$ 136			$ -	$ 5,371
			Basic	13. Schedule Updates Review Reports (25 mos)			100	100										200	$ 32,718	100		$ 850			$ -	$ 33,568
			Basic	14.Time Impact Analysis Review Reports (4 TIAs)		4	32	32		32								100	$ 16,095	68		$ 578			$ -	$ 16,673
			Basic	15. Progress Reports (25 mos)			50	50		50								150	$ 23,280	100		$ 850			$ -	$ 24,130
				4. Fct. Code 300 (330) - General Function															$ -			$ -			$ -	$ -
				330 Job Control															$ -			$ -			$ -	$ -
			Basic	1. Monthly Deficiency Reports (25 mos)			50	50		100								200	$ 30,201	150		$ 1,275			$ -	$ 31,476
			Basic	2. Certification Verifications						4								4	$ 554	4		$ 34			$ -	$ 588
			Basic	3. Testing Documentation (25 mos)			25	100		100								225	$ 34,291	125		$ 1,063	85,800		$ 94,380	$ 129,733
			Basic	4. Letters of Certification (25 mos)			25			25								50	$ 7,550	50		$ 425			$ -	$ 7,975
			Basic	5. Test Exception Letter (10 exceptions)			10											10	$ 1,636	10		$ 85			$ -	$ 1,721
				5. Fct. Code 300 (351) - Design Verif/Changes/Alter															$ -			$ -			$ -	$ -
				351 Design Verification, Changes, and Alterations															$ -			$ -			$ -	$ -
			Basic	1. Change Orders (6 Change Orders, 2 util)			24	12	4				8				24	72	$ 13,590	56		$ 476			$ -	$ 14,066
			Basic	2. Supporting Documentation			6			12								18	$ 2,643	18		$ 153			$ -	$ 2,796
			Basic	3. Revised Plan Sheet Coordination (6 change orders)			6			6								12	$ 1,812	12		$ 102			$ -	$ 1,914
			Basic	4. Change Order Checklists			12			6								18	$ 2,794	18		$ 153			$ -	$ 2,947
			Basic	5. Change Order Log			12			6								18	$ 2,794	18		$ 153			$ -	$ 2,947
			Basic	6. Submittal Log			50			25								75	$ 11,640	75		$ 638			$ -	$ 12,277
			Basic	7. Submittal Coordination			80			40	40							160	$ 27,474	160		$ 1,360			$ -	$ 28,834
			Basic	8. RFIs (30 RFIs)			60			30								90	$ 13,968	90		$ 765			$ -	$ 14,733
			Basic	9. RFI Recommendations (30 RFIs)			60				60							120	$ 23,091	120		$ 1,020			$ -	$ 24,111
				6. Fct. Code 300 (352) - General Function															$ -			$ -			$ -	$ -
				352 Final Construction Documents															$ -			$ -			$ -	$ -
			Basic	1. Final Records			24			40								64	$ 9,463	64		$ 544			$ -	$ 10,007
			Basic	2. Manifest Tickets				16		8								24	$ 3,725	8		$ 68			$ -	$ 3,793
			Basic	3. Copies of all Change Orders			4			8								12	$ 1,762	12		$ 102			$ -	$ 1,864
			Basic	4. Material On Hand Forms			2	2		8								12	$ 1,762	10		$ 85			$ -	$ 1,847
			Basic	5. Barricade Inspection Forms			2	2		8								12	$ 1,762	10		$ 85			$ -	$ 1,847
			Basic	6. TDLR Inspection Report			4	4		8								16	$ 2,416	12		$ 102			$ -	$ 2,518
			Basic	7. Correspondence Records			2	2		8								12	$ 1,762	10		$ 85			$ -	$ 1,847
			Basic	8. As-built Plans			4	8		16								28	$ 4,178	20		$ 170			$ -	$ 4,348
			Basic	9. Test Certification Report				8		8								16	$ 2,416	8		$ 68			$ -	$ 2,484
			Basic	10 Failing Samples Report				8		8								16	$ 2,416	8		$ 68			$ -	$ 2,484
				7. Fct. Code 300 (390) - General Function															$ -			$ -			$ -	$ -
				390 Construction Engineering Not Otherwise Classified															$ -			$ -			$ -	$ -
			Basic	1. Pre-Construction Conference		4	4	4			4			4				20	$ 4,585	16		$ 136			$ -	$ 4,721
			Basic	2. Risk Register	8	8	8	8						8				40	$ 9,790	32		$ 272			$ -	$ 10,062
			Basic	3. QA and QC Plan		8	40			40				4				92	$ 15,667	92		$ 782			$ -	$ 16,449
			Basic	4. Quarterly QA and QC Checks (10 checks)		40	40	40				40		40				200	$ 48,951	160		$ 1,360			$ -	$ 50,311
			Basic	5. Monthly Schedule of Predicted Manpower			60											60	$ 9,815	60		$ 510			$ -	$ 10,325
			Basic	6. Manpower Graphs						60								60	$ 8,305	60		$ 510			$ -	$ 8,815
			Basic	7. TxDOT Audit Support		40	80			80					40			240	$ 48,070	240		$ 2,040			$ -	$ 50,110
				8. Fct. Code 160 (150) - Roadway Design															$ -			$ -			$ -	$ -
			Special	**150 Field Surveying and Photogrammetry (Construction Surveys)**		8	20	40		20								88	$ 14,975	48		$ 408		30,000	$ 33,000	$ 48,383
				9. Fct. Code 160 (163) - Roadway Design															$ -			$ -			$ -	$ -
			Special	**163 Utility Engineering Investigation**		8	20	40		20								88	$ 14,975	48		$ 408		20,000	$ 22,000	$ 37,383
				Total Hours / Quantity	**10**	**206**	**2,679**	**5,352**	**985**	**2,203**	**138**	**40**	**64**	**58**	**40**	**30**	**24**	**11,829**		**5,492**	**133,580**			**$ 85,800**	**$ 50,000**	
				Total Effort	**$ 2,989**	**$ 61,566**	**$ 438,252**	**$ 875,522**	**$ 161,134**	**$ 304,940**	**$ 30,534**	**$ 11,954**	**$ 19,127**	**$ 17,334**	**$ 11,954**	**$ 5,505**	**$ 4,656**		**$ 1,945,468**	**$ 46,682**	**$ 89,499**	**$ 136,181**	**$ 94,380**	**$ 55,000**	**$ 149,380**	**$ 2,231,029**

COMPENSATION

Compensation to FNI for Basic Services in Attachment SC shall be computed on the basis of the following Schedule of Charges, but shall not exceed Two Million One Hundred Forty Five Thousand Two Hundred Sixty Four Dollars ($2,145,264).

Compensation to FNI for Special Services in Attachment SC shall be computed on the basis of the following Schedule of Charges, but shall not exceed Eighty Five Thousand Seven Hundred Sixty Five Dollars ($85,765).

If FNI sees the Scope of Services changing so that Additional Services are needed, including but not limited to those services described as Additional Services in Attachment SC, FNI will notify OWNER for OWNER's approval before proceeding. Additional Services shall be computed based on the following Schedule of Charges.

Position	**Hourly Rate**
Professional 1	134
Professional 2	163
Professional 3	185
Professional 4	211
Professional 5	247
Professional 6	285
Construction Manager 1	116
Construction Manager 2	145
Construction Manager 3	156
Construction Manager 4	195
Construction Manager 5	236
Construction Manager 6	271
Construction Representative 1	104
Construction Representative 2	116
Construction Representative 3	145
Construction Representative 4	156
CAD Technician/Designer 1	114
CAD Technician/Designer 2	149
CAD Technician/Designer 3	182
Corporate Project Support 1	110
Corporate Project Support 2	132
Corporate Project Support 3	175
Intern / Coop	68
Senior Advisor	175

Rates for In-House Services and Equipment

Mileage

Standard IRS Rates

Technology Charge

$8.50 per hour

Bulk Printing and Reproduction

	B&W	Color
Small Format (per copy)	$0.10	$0.25
Large Format (per sq. ft.)		
Bond	$0.25	$0.75
Glossy / Mylar	$0.75	$1.25
Vinyl / Adhesive	$1.50	$2.00
Mounting (per sq. ft.)	$2.00	
Binding (per binding)	$0.25	

Equipment

Valve Crew Vehicle (hour)		$75
Pressure Data Logger (each)		$200
Water Quality Meter (per day)		$100
Microscope (each)		$150
Pressure Recorder (per day)		$100
Ultrasonic Thickness Guage (per day)		$275
Coating Inspection Kit (per day)		$275
Flushing / Cfactor (each)		$500
Backpack Electrofisher (each)		$1,000
	Survey Grade	Standard
Drone (per day)	$200	$100
GPS (per day)	$150	$50

OTHER DIRECT EXPENSES:

Other direct expenses are reimbursed at actual cost times a multiplier of 1.10. They include outside printing and reproduction expense, communication expense, travel, transportation and subsistence away from the FNI office. For other miscellaneous expenses directly related to the work, including costs of laboratory analysis, test, and other work required to be done by independent persons other than staff members, these services will be billed at a cost times a multipler of 1.10. For Resident Representative services performed by non-FNI employees and CAD services performed In-house by non-FNI employees where FNI provides workspace and equipment to perform such services, these services will be billed at cost times a multiplier of 2.0. This markup approximates the cost to FNI if an FNI employee was performing the same or similar services.

These ranges and/or rates will be adjusted annually in February. Last updated 2023.

May 10, 2024

Freese and Nichols, Inc.
9601 McAllister Fwy Ste 1008
San Antonio, Texas 78216

Attention: Chris Trevino, P.E., CCM

SUBJECT: PROPOSAL TO PERFORM CONSTRUCTION MATERIALS TESTING
RUDELOFF ROAD IMPROVEMENTS
RUDELOFF ROAD
SEGUIN, TEXAS
UES Proposal Number: SCP050724A

Dear Mr. Trevino,

Introduction

UES Professional Solutions 45, LLC, (UES) (TBPELS #2101), is pleased to provide this proposal to perform the Construction Materials Testing for the proposed Rudeloff Road Improvements to be constructed in Seguin, Texas. This proposal contains our unit rates and an estimated testing budget.

Unit Rates

The type of construction materials field and laboratory tests and inspections that UES may perform, and the associated unit fees are as follows:

- Atterberg Limits/Plasticity Index - $75.00 each
- Standard/Tex-114-E Proctor - $225.00 each
- Modified/Tex-113-E Proctor - $250.00 each
- Sieve Analysis/Gradation - $75.00 each
- Minus #200 Sieve - $45.00 each
- Asphalt Full Series - $550.00 each
- Asphalt Cores - $75.00 each (Set of 2 typical)
- In-Place Density - $45.00 each (Min. of 3 Per Trip)
- 3x6” Grout Prisms, Compressive Strength - $60.00 each (Set of 4 typical)
- 4”x8” Concrete Cylinders, Compressive Strength - $60.00 each (Set of 5 typical)
- Engineering Technician - $60.00 per hour (observations and standby time)
- Professional Engineer - $175.00 per hour (project management, report review & letters)
- Trip Charge - $100.00 per trip
- Project Setup Fee - $100.00 lump sum

The proposed services will be performed in accordance with the attached General Conditions. A minimum of 3 compaction tests will be billed each time this service is requested, and the compaction test fee includes the technician time, equipment, and reporting. The fee for concrete test cylinders includes the technician time up to 1-hour onsite, sampling equipment, casting, curing, and testing the specimens, and reporting the test results.

Overtime work before 8 a.m. and after 5 p.m. and weekend time will be billed at a rate of $90.00 an hour in addition to the testing fee. Professional Engineer, for requested inspections, meetings, and letters, will be billed at a minimum rate of 2-hours. The transportation charge includes the technician travel time and all vehicle charges.

Estimated Budget

Based on the project information provided to UES, the project will include the reconstruction of approximately 8,000 LF of Rudeloff Road. The roadway pavement section will consist of 8-inches of moisture conditioned subgrade, 6-inches of flexible base, 2.5-inches of Type B HMAC, and 2-inches of Type C HMAC. In addition, domestic water lines, storm drains, and new curbs and sidewalks will be constructed. UES estimates the following quantities of testing for the project:

- Atterberg Limits = 12 each (embankment/subgrade, utility backfill & base)
- Standard Proctor = 11 each (embankment/subgrade & utility backfill)
- Modified Proctor = 1 each (base)
- Sieve Analysis = 8 each (embankment/subgrade, utility backfill & base)
- Minus #200 Sieve = 4 each (embankment & utility backfill)
- Asphalt Full Series = 2 each (Type B & C HMAC)
- Asphalt Cores = 12 each (6 sets of 2) (asphalt density determination)
- Soil Compaction Test = 616 each (1 test/200 LF for subgrade/embankment/base/HMAC) (roadways)
- Soil Compaction Test = 462 each (1 test/100 LF for the first & last lifts) (water line & storm drain mains & services backfill)
- Concrete Test Cylinders = 275 each (55 sets) (flowable fill, curbs & sidewalks)
- Engineering Technician = 415 hours (soil/concrete testing & proof-roll, rebar, HMAC & site observations)
- Professional Engineer = 40 hours (project management & report review)
- Transportation Charge = 160 each
- Project Setup Fee = 1 each

Using the applicable unit rates, the estimated testing budget is on the order of $78,000.00. The estimated fee does not include any retests or any overtime work. The total final fee will be dependent on the actual number of tests and inspections performed, and number of trips made to the site.

Closing

UES looks forward to providing the construction materials testing during the construction phase of this project. Copies of the construction materials testing reports will be delivered to the client via the email address provided by the client to UES on the distribution list below. A hard copy of the construction materials testing reports will be available through the mail only if explicitly requested by the client. If there are any questions, or if we can be of assistance, please contact our office.

Sincerely,

Nathan Ruckstuhl, P.E.
Project Engineer / CMT Project Manager

Nolan Cox
CMT Estimator

Attachment: General Conditions – Texas

ACCEPTED AND APPROVED

Print: _____

Signature: _____

Date: _____

Project Information Sheet

1. Project Manager_____

2. Telephone No._____ Email address _____

3. Your Project No. _____ Purchase Order No. _____

4. Report Distribution (electronically):

   ( ) Company:_____
   Attn:_____
   Email:_____

   ( ) Company:_____
   Attn:_____
   Email:_____

   ( ) Company:_____
   Attn:_____
   Email:_____

5. Invoicing Address:_____
   _____
   _____
   Attn:_____

6. Site Contact: _____ Telephone No.: _____
   Email: _____

Please note our new direct dispatch number, 210-457-3504, for all calls pertaining to scheduling for testing and inspection services.

STANDARD RATE SCHEDULE
AUSTIN 2024

Effective January 2024

SURVEY OFFICE PERSONNEL RATES:

Office / Department Manager	$300.00	per hour
Senior Project Manager	$250.00	per hour
Project Manager	$205.00	per hour
Staff Surveyor	$190.00	per hour
Phase Manager	$170.00	per hour
Project Coordinator	$150.00	per hour
Senior Office Technician	$135.00	per hour
Office Technician III	$125.00	per hour
Office Technician II	$120.00	per hour
Office Technician I	$115.00	per hour
Project Specialist	$125.00	per hour
Administration / Clerical Support	$105.00	per hour

SURVEY FIELD CREW RATES:

Field Ops Manager	$195.00	per hour
Field Coordinator / Supervisor	$140.00	per hour
One (1) Person Survey Field Crew	$135.00	per hour
Two (2) Person Survey Field Crew	$185.00	per hour
Three (3) Person Survey Field Crew	$260.00	per hour
Additional Rodperson or Flagperson	$80.00	per hour

UTILITY ENGINEERING OFFICE PERSONNEL RATES:

Office / Department Manager	$300.00	per hour
Senior Project Manager	$250.00	per hour
Project Manager / Senior Engineer	$230.00	per hour
Staff Engineer	$220.00	per hour
Phase Manager	$160.00	per hour
Senior Office Technician	$135.00	per hour
Office Technician III	$125.00	per hour
Office Technician II	$120.00	per hour
Office Technician I	$115.00	per hour
Project Specialist	$125.00	per hour
Administration/Clerical Support	$105.00	per hour

UTILITY ENGINEERING FIELD CREW RATES:

Field Ops Manager	$210.00	per hour
Field Coordinator / Supervisor	$150.00	per hour
Field Technician III	$140.00	per hour
Field Technician II	$130.00	per hour
Field Technician I	$120.00	per hour

Effective January 2024

UTILITY COORDINATION OFFICE PERSONNEL RATES:

Office / Department Manager	$325.00	per hour
Project Manager / UC Manager	$275.00	per hour
Senior Utility Coordinator	$245.00	per hour
Utility Coordinator III	$230.00	per hour
Utility Coordinator II	$120.00	per hour
Utility Coordinator I	$110.00	per hour
Project Specialist	$125.00	per hour
Administration / Clerical Support	$105.00	per hour

UTILITY COORDINATION FIELD CREW RATES:

Senior Utility Construction Engineering Inspector	$170.00	per hour
Utility Construction Engineering Inspector III	$150.00	per hour
Utility Construction Engineering Inspector II	$130.00	per hour
Utility Construction Engineering Inspector I	$120.00	per hour

FIBER ENGINEERING PERSONNEL RATES:

Office / Department Manager	$300.00	per hour
Senior Project Manager	$250.00	per hour
Project Manager	$215.00	per hour
Phase Manager	$170.00	per hour
OSP Engineer III	$135.00	per hour
OSP Engineer II	$125.00	per hour
OSP Engineer I	$125.00	per hour
Drafter	$100.00	per hour
Project Specialist	$125.00	per hour
Administration / Clerical Support	$105.00	per hour

FIBER ENGINEERING FIELD CREW RATES:

Fielder	$105.00	per hour
OSP Inspector	$105.00	per hour
Senior OSP Inspector	$140.00	per hour

GEOSPATIAL OFFICE PERSONNEL RATES:

Director / Operations Manager	$360.00	per hour
Senior Project Manager	$275.00	per hour
Acquisition Manager	$240.00	per hour
Project Manager	$210.00	per hour
Aircraft Pilot	$205.00	per hour
UAS Pilot	$130.00	per hour
Project Lead / Sr. Office Technician / Sensor Op Lead (SR Tech 3)	$140.00	per hour
Two (2) Person UAS Geo Crew – Unmanned Pilot & Observer	$235.00	per hour
Two (2) Person UAS Survey Crew – Unmanned Pilot & Observer	$200.00	per hour
Three (3) Person UAS Crew – Unmanned Pilot & 2 Observers	$365.00	per hour
Photogrammetrist / Project Lead /sensor operator (Tech3)	$135.00	per hour
Acquisition / Calibration / Aerial Triangulation Technician (Tech2)	$120.00	per hour

Effective January 2024

LiDAR / Photogrammetry/GIS Technician (Tech1)	$105.00	per hour
Project Specialist	$125.00	per hour
Administration / Clerical Support	$125.00	per hour

GIS OFFICE PERSONNEL RATES:

GIS Office Manager	$225.00	per hour
Director / Operations Manager	$215.00	per hour
Senior Project Manager	$185.00	per hour
Project Manager	$142.00	per hour
Phase Manager	$125.00	per hour
GIS Office Technician 1	$90.00	per hour
GIS Office Technician 2	$105.00	per hour
GIS Office Technician 3	$115.00	per hour
Field Coordinator	$105.00	per hour
GIS Field Technician	$90.00	per hour
IT / Web Administrator	$185.00	per hour
Programmer / Solutions Architect	$130.00	per hour
Administration / Clerical Support	$120.00	per hour

SURVEY EQUIPMENT RATES:

GPS Receiver	$10.00	per hour
Robotic Total Station S-7	$20.00	per hour
Robotic Total Station S-9	$20.00	per hour
SX-10	$35.00	per hour
Tier 1 HDS Scanner (BLK360 & Faro)	$33.00	per hour
Tier 2 HDS Scanner RTC 360	$60.00	per hour
Tier 3 HDS Scanner Leica P20, P40, P50	$312.00	per hour
Digital Level	$5.00	per hour
UTV	$25.00	per hour
Aluminum Boat	$15.00	per hour
Echo Sounder –Remote Controlled Boat	$25.00	per hour
Echo Sounder-Sonarmite	$9.25	per hour
VM810 Survey	$5.75	per hour
RD8000 Survey	$11.50	per hour
IKE-IKE4	$30.00	per hour
Tool Tracking Equipment (Hans Box & Traxall)	$5.00	per hour
SPAR 300 Kit	$5.00	per hour
Weather Station	$6.00	per hour

UTILITY ENGINEERING EQUIPMENT RATES:

GPS Receiver	$10.00	per hour
Robotic Total Station S-7	$20.00	per hour
Robotic Total Station S-9	$20.00	per hour
SX-10	$35.00	per hour

Effective January 2024

Digital Level	$5.00	per hour
UTV	$25.00	per hour
SPAR 300 Kit	$5.00	per hour
Vacuum Excavator Truck (Standard)	$100.00	per hour
Vacuum Excavator Truck (Hybrid)	$150.00	per hour
Vacuum Excavator Towed Trailer	$60.00	per hour
Vacuum Excavator (Canister)	$5.00	per hour
Single Axle Trailer (Compressor/Generator-Towed) IR185	$17.00	per hour
Magnetometer (EM-61)	$90.00	per hour
SUE Equipment Package	$8.00	per hour
Ground Penetrating Radar (GPR-Push Cart)	$12.50	per hour
GPR Towed (Raptor Towed Array)	$350.00	per hour
Confined Space Entry Package (CSE)	$13.00	per hour
All Material Locator (AML PRO)	$20.00	per hour

FIBER ENGINEERING EQUIPMENT RATES:

Fiber Engineering Equipment Package	$13.50	per hour

GEOSPATIAL EQUIPMENT RATES:

Riegl VQ 1560II	$1,300.00	per hour
Riegl 480II or 780I	$1,000.00	per hour
Mobile Mapping System, includes 360° Camera System (Equipment Only)	$1,000.00	per hour
Mobile Mapping Equipment Stand-by Fee (Equipment Only)	$200.00	per hour
HDS Laser Scanner	$100.00	per hour
High Rail Equipped Vehicle	$10.00	per hour
Weather Station	$10.00	per hour
FLIR Corona 350 with a Quad Camera Gimbal System	$300.00	per hour
Oblique HD Camera System – Manned Aircraft	$30.00	per hour
Video Camera System – Manned Aircraft	$5.00	per hour
360° Camera System – Terrestrial or Marine Stand Alone	$100.00	per hour
Helicopter (Turbine Engine Powered)	$1,450.00	per hour
Helicopter (Reciprocal Engine Powered)	$850.00	per hour
Fixed Wing Twin Engine (Piston)	$1,300.00	per hour
Fixed Wing Single Engine (Piston)	$750.00	per hour
Fixed Wing Single Engine (Turbine)	$1,400.00	per hour
UAS Autel Devon2 / Mavic / Phantom/ Small Lift TIER 1	$50.00	per hour
UAS Alta-X / Galaxy / SkyFront Heavy Lift w/ LiDAR TIER 3	$300.00	per hour
UAS M600 type Inspection Platform TIER 2	$75.00	per hour
Handheld DSLR Camera	$50.00	per hour
GPS Receiver (Unmanned)	$10.00 per hour/$100.00 per day	
Geospatial Work Station	$15.00	per hour
VRS Network	$4.20	per hour
UTV	$10.00	per hour
Additional Vehicle	$10.00	per hour
Total Station	$2.85	per hour
SL RAT	$20.00	per hour
IKE	$28.00	per hour

Effective January 2024

Geospatial Equipment Fees:
Manned Aircraft fees are incurred at the per hour rate for mobilization and acquisition with pointof origin from one of our Airport Bases: Austin, TX; Atlanta, GA; Moore Co, NC and Easton, MD.

OTHER DIRECT RATES:

Lodging/Per Diem*	GSA
Mileage	$0.93 per mile
Additional Vehicle (plus mileage)	$20.00 per hour
Environmental Supplies	$25.00 per day
Recording Fees	At Cost plus 10%
Permitting Fees	At Cost plus 10%
Third-Party Traffic Control	At Cost plus 10%
Metered Water	At Cost plus 10%
Backfill Material	At Cost plus 10%
Spoils Disposal	At Cost plus 10%
Coring	At Cost plus 10%
Document Reproduction	At Cost plus 10%
Records Collection Fees	At Cost plus 10%
All other services not described	At Cost plus 10%

NOTES:

*Per Diem based on GSA rates and may change depending on location and availability of accommodations. This is a general practice and used for estimating purposes.

All holiday, travel, per diem, etc., and all additional items not listed herein shall only be permitted where approved by Company in writing and in advance for any particular project.

Overtime Rates:

The Overtime Rate for Field Survey Personnel shall be computed at 1.5 times the hourly rate in excess of 8 hours per day. The Overtime Rate for Office Survey Personnel shall be computed at 1.5 times the hourly rate in excess of 8 hours per day.

Travel & Subsistence:

All travel and subsistence expenses for personnel are invoiced at GSA Rates or as allowed by the Client contract. Cost of mileage on company-owned vehicles is computed at $0.93 cents per mile.

Purchased Services:

All purchase services are invoiced at actual cost plus ten percent (10%) administrative fee. These include but are not limited to reproduction, computer time, long distance telephone, consultants, subcontract services, rented or leased equipment, expendable supplies, and project required special supplies.

Effective January 2024

Taxes:

Any state/local sales tax or gross receipts tax, if applicable to the services provided, are in addition to the hourly rates and will be applied on the invoice for services.

Labor Rate Adjustment:

The Schedule of Rates will remain in force for a six (6) month period from the effective date of utilization and subject to an escalation on each "six (6) month anniversary date" unless otherwise agreed to by Client contract. The escalation rate shall be the most recent 6-month Employment Cost Index (ECI) as published by the United States Department of Labor (DOL), Bureau of Labor Statistics. In no event shall the next six (6) month Schedule of Rates be less than the prior period.

-- EXHIBIT "C" --

Additional Terms to the Services provided by Contractor, if any, are as follows:

A. The City Council of Seguin, Texas, by authorizing execution of this Professional Services Agreement, grants an exemption from the requirements of Chapter 252 of the Texas Local Government Code (TLGC), as provided by TLGC §252.022(a)(4).

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