

STATE OF TEXAS §
 §
COUNTY OF FORT BEND §

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

THIS AGREEMENT is made and entered into by and between Fort Bend County, (hereinafter "County"), a body corporate and politic under the laws of the State of Texas, and Isani Consultants, LP, (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

WITNESSETH

WHEREAS, County desires that Contractor provide professional engineering services for improvements to Benton Road under 2020 Mobility Bond Project No. 20104 (hereinafter "Services") pursuant to SOQ 14-025; and

WHEREAS, County has determined Contractor is the most highly qualified provider of the desired Services on the basis of demonstrated competence and qualifications, and County and Contractor have negotiated to reach a fair and reasonable amount of compensation for the provision of such Services, as required under Chapter 2254 of the Texas Government Code; and

WHEREAS, Contractor represents that it is qualified and desires to perform such services.

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

AGREEMENT

Section 1. Scope of Services

Contractor shall render the professional engineering services as described in Contractor's proposal dated April 14, 2021, attached hereto as Exhibit A, and incorporated herein for all purposes.

Section 2. Personnel

2.1 Contractor represents that it presently has, or is able to obtain, adequate qualified personnel in its employment for the timely performance of the Scope of Services required under this Agreement and that Contractor shall furnish and maintain, at its own expense, adequate and sufficient personnel, in the opinion of County, to perform the Scope of Services when and as required and without delays.

2.2 All employees of Contractor shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Contractor who, in the opinion of County, is incompetent or by his conduct becomes detrimental to the project shall, upon request of County, immediately be removed from association with the project.

Section 3. Compensation and Payment

3.1 Contractor's fees shall be calculated at the rates set forth in the attached Exhibit A. The Maximum Compensation for the performance of Services within the Scope of Services described in Exhibit A is eight hundred sixty-nine thousand seven hundred forty-six dollars and no/100 (\$869,746.00) as set forth in Exhibit A. In no case shall the amount paid by County under this Agreement exceed the Maximum Compensation without a written agreement executed by the parties.

3.2 All performance of the Scope of Services by Contractor including any changes in the Scope of Services and revision of work satisfactorily performed will be performed only when approved in advance and authorized by County.

3.3 County will pay Contractor based on the following procedures: Upon completion of the tasks identified in the Scope of Services, Contractor shall submit to County staff person designated by the County Engineer, one (1) electronic (pdf) copy of the invoice showing the amounts due for services performed in a form acceptable to County. County shall review such invoices and approve them within 30 calendar days with such modifications as are consistent with this Agreement and forward same to the Auditor for processing. County shall pay each such approved invoice within thirty (30) calendar days. County reserves the right to withhold payment pending verification of satisfactory work performed.

Section 4. Limit of Appropriation

4.1 Contractor clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that County shall have available the total maximum sum of eight hundred sixty-nine thousand seven hundred forty-six dollars and no/100 (\$869,746.00) specifically allocated to fully discharge any and all liabilities County may incur.

4.2 Contractor does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that Contractor may become entitled to and the total maximum sum that County may become liable to pay to Contractor shall not under any conditions, circumstances, or interpretations thereof exceed eight hundred sixty-nine thousand seven hundred forty-six dollars and no/100 (\$869,746.00).

Section 5. Time of Performance

Time for performance of the Scope of Services under this Agreement shall begin with receipt of the Notice to Proceed and end no later than December 31, 2025. Contractor shall complete the tasks described in the Scope of Services, within this time or within such additional time as may be extended by the County.

Section 6. Modifications and Waivers

6.1 The parties may not amend or waive this Agreement, except by a written agreement executed by both parties.

6.2 No failure or delay in exercising any right or remedy or requiring the satisfaction of any condition under this Agreement, and no course of dealing between the parties, operates as a waiver or estoppel of any right, remedy, or condition.

6.3 The rights and remedies of the parties set forth in this Agreement are not exclusive of, but are cumulative to, any rights or remedies now or subsequently existing at law, in equity, or by statute.

Section 7. Termination

7.1 Termination for Convenience – County may terminate this Agreement at any time upon forty-eight (48) hours written notice.

7.2 Termination for Default

7.2.1 County may terminate the whole or any part of this Agreement for cause in the following circumstances:

7.2.1.1 If Contractor fails to perform services within the time specified in the Scope of Services or any extension thereof granted by the County in writing;

7.2.1.2 If Contractor materially breaches any of the covenants or terms and conditions set forth in this Agreement or fails to perform any of the other provisions of this Agreement or so fails to make progress as to endanger performance of this Agreement in accordance with its terms, and in any of these circumstances does not cure such breach or failure to County's reasonable satisfaction within a period of ten (10) calendar days after receipt of notice from County specifying such breach or failure.

7.2.2 If, after termination, it is determined for any reason whatsoever that Contractor was not in default, or that the default was excusable, the rights and obligations of the parties shall be the same as if the termination had been issued for the convenience of the County in accordance with Section 7.1 above.

7.3 Upon termination of this Agreement, County shall compensate Contractor in accordance with Section 3, above, for those services which were provided under this Agreement prior to its termination and which have not been previously invoiced to County. Contractor's final invoice for said services will be presented to and paid by County in the same manner set forth in Section 3 above.

7.4 If County terminates this Agreement as provided in this Section, no fees of any type, other than fees due and payable at the Termination Date, shall thereafter be paid to Contractor.

Section 8. Ownership and Reuse of Documents

All documents, data, reports, research, graphic presentation materials, etc., developed by Contractor as a part of its work under this Agreement, shall become the property of County upon completion of this Agreement, or in the event of termination or cancellation thereof, at the time

of payment under Section 3 for work performed. Contractor shall promptly furnish all such data and material to County on request.

Section 9. Inspection of Books and Records

Contractor will permit County, or any duly authorized agent of County, to inspect and examine the books and records of Contractor for the purpose of verifying the amount of work performed under the Scope of Services. County's right to inspect survives the termination of this Agreement for a period of four years.

Section 10. Insurance

10.1 Prior to commencement of the Services, Contractor shall furnish County with properly executed certificates of insurance which shall evidence all insurance required and provide that such insurance shall not be canceled, except on 30 days' prior written notice to County. Contractor shall provide certified copies of insurance endorsements and/or policies if requested by County. Contractor shall maintain such insurance coverage from the time Services commence until Services are completed and provide replacement certificates, policies and/or endorsements for any such insurance expiring prior to completion of Services. Contractor shall obtain such insurance written on an Occurrence form (or a Claims Made form for Professional Liability insurance) from such companies having Best's rating of A/VII or better, licensed or approved to transact business in the State of Texas, and shall obtain such insurance of the following types and minimum limits:

10.1.1 Workers' Compensation insurance. Substitutes to genuine Workers' Compensation Insurance will not be allowed.

10.1.2 Employers' Liability insurance with limits of not less than \$1,000,000 per injury by accident, \$1,000,000 per injury by disease, and \$1,000,000 per bodily injury by disease.

10.1.3 Commercial general liability insurance with a limit of not less than \$1,000,000 each occurrence and \$2,000,000 in the annual aggregate. Policy shall cover liability for bodily injury, personal injury, and property damage and products/completed operations arising out of the business operations of the policyholder.

10.1.4 Business Automobile Liability insurance with a combined Bodily Injury/Property Damage limit of not less than \$1,000,000 each accident. The policy shall cover liability arising from the operation of licensed vehicles by policyholder.

10.1.5 Professional Liability insurance may be made on a Claims Made form with limits not less than \$1,000,000.

10.2 County and the members of Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability. All Liability policies including Workers' Compensation written on behalf of Contractor shall contain a waiver of subrogation in favor of County and members of Commissioners Court.

10.3 If required coverage is written on a claims-made basis, Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of the contract; and that continuous coverage will be maintained or an extended discovery period will be exercised for a period of 2 years beginning from the time that work under the Agreement is completed.

Section 11. Indemnity

CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS COUNTY AGAINST LOSSES, LIABILITIES, CLAIMS, AND CAUSES OF ACTION, INCLUDING THE REIMBURSEMENT OF COUNTY'S REASONABLE ATTORNEYS FEES IN PROPORTION TO CONTRACTOR'S LIABILITY, ARISING FROM ACTIVITIES OF CONTRACTOR, ITS AGENTS, SERVANTS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENCE, INTENTIONAL TORT, ERROR, OR OMISSION OF CONTRACTOR OR ANY OF CONTRACTOR'S AGENTS, SERVANTS OR EMPLOYEES.

Section 12. Confidential and Proprietary Information

12.1 Contractor acknowledges that it and its employees or agents may, in the course of performing their responsibilities under this Agreement, be exposed to or acquire information that is confidential to County. Any and all information of any form obtained by Contractor or its employees or agents from County in the performance of this Agreement shall be deemed to be confidential information of County ("Confidential Information"). Any reports or other documents or items (including software) that result from the use of the Confidential Information by Contractor shall be treated with respect to confidentiality in the same manner as the Confidential Information. Confidential Information shall be deemed not to include information that (a) is or becomes (other than by disclosure by Contractor) publicly known or is contained in a publicly available document; (b) is rightfully in Contractor's possession without the obligation of nondisclosure prior to the time of its disclosure under this Agreement; or (c) is independently developed by employees or agents of Contractor who can be shown to have had no access to the Confidential Information.

12.2 Contractor agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Contractor uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purposes whatsoever other than the provision of Services to County hereunder, and to advise each of its employees and agents of their obligations to keep Confidential Information confidential. Contractor shall use its best efforts to assist County in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limitation of the foregoing, Contractor shall advise County immediately in the event Contractor learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Agreement and Contractor will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Contractor against any such person. Contractor agrees that, except as directed by County, Contractor will not at any time during

or after the term of this Agreement disclose, directly or indirectly, any Confidential Information to any person, and that upon termination of this Agreement or at County's request, Contractor will promptly turn over to County all documents, papers, and other matter in Contractor's possession which embody Confidential Information.

12.3 Contractor acknowledges that a breach of this Section, including disclosure of any Confidential Information, or disclosure of other information that, at law or in equity, ought to remain confidential, will give rise to irreparable injury to County that is inadequately compensable in damages. Accordingly, County may seek and obtain injunctive relief against the breach or threatened breach of the foregoing undertakings, in addition to any other legal remedies that may be available. Contractor acknowledges and agrees that the covenants contained herein are necessary for the protection of the legitimate business interest of County and are reasonable in scope and content.

12.4 Contractor in providing all services hereunder agrees to abide by the provisions of any applicable Federal or State Data Privacy Act.

12.5 Contractor expressly acknowledges that County is subject to the Texas Public Information Act, TEX. GOV'T CODE ANN. §§ 552.001 *et seq.*, as amended, and notwithstanding any provision in the Agreement to the contrary, County will make any information related to the Agreement, or otherwise, available to third parties in accordance with the Texas Public Information Act. Any proprietary or confidential information marked as such provided to County by Consultant shall not be disclosed to any third party, except as directed by the Texas Attorney General in response to a request for such under the Texas Public Information Act, which provides for notice to the owner of such marked information and the opportunity for the owner of such information to notify the Attorney General of the reasons why such information should not be disclosed.

Section 13. Independent Contractor

13.1 In the performance of work or services hereunder, Contractor shall be deemed an independent contractor, and any of its agents, employees, officers, or volunteers performing work required hereunder shall be deemed solely as employees of contractor or, where permitted, of its subcontractors.

13.2 Contractor and its agents, employees, officers, or volunteers shall not, by performing work pursuant to this Agreement, be deemed to be employees, agents, or servants of County and shall not be entitled to any of the privileges or benefits of County employment.

Section 14. Notices

14.1 Each party giving any notice or making any request, demand, or other communication (each, a "Notice") pursuant to this Agreement shall do so in writing and shall use one of the following methods of delivery, each of which, for purposes of this Agreement, is a writing: personal delivery, registered or certified mail (in each case, return receipt requested and postage prepaid), or nationally recognized overnight courier (with all fees prepaid).

14.2 Each party giving a Notice shall address the Notice to the receiving party at the address listed below or to another address designated by a party in a Notice pursuant to this Section:

County: Fort Bend County Engineering Department
Attn: County Engineer
301 Jackson Street
Richmond, Texas 77469

With a copy to: Fort Bend County
Attn: County Judge
401 Jackson Street, 1st Floor
Richmond, Texas 77469

Contractor: Isani Consultants, LP
10448 Westoffice Drive
Houston, Texas 77042

14.3 A Notice is effective only if the party giving or making the Notice has complied with subsections 14.1 and 14.2 and if the addressee has received the Notice. A Notice is deemed received as follows:

14.3.1 If the Notice is delivered in person, or sent by registered or certified mail or a nationally recognized overnight courier, upon receipt as indicated by the date on the signed receipt.

14.3.2 If the addressee rejects or otherwise refuses to accept the Notice, or if the Notice cannot be delivered because of a change in address for which no Notice was given, then upon the rejection, refusal, or inability to deliver.

Section 15. Compliance with Laws

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

Section 16. Standard of Care

Contractor represents shall perform the Services to be provided under this Agreement with the professional skill and care ordinarily provided by competent engineers practicing under the same or similar circumstances and professional license. Further, Contractor shall perform the Services as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer.

Section 17. Assignment

17.1 Neither party may assign any of its rights under this Agreement, except with the prior written consent of the other party. That party shall not unreasonably withhold its consent. All assignments of rights are prohibited under this subsection, whether they are voluntarily or involuntarily, by merger, consolidation, dissolution, operation of law, or any other manner.

17.2 Neither party may delegate any performance under this Agreement.

17.3 Any purported assignment of rights or delegation of performance in violation of this Section is void.

Section 18. Applicable Law

The laws of the State of Texas govern all disputes arising out of or relating to this Agreement. The parties hereto acknowledge that venue is proper in Fort Bend County, Texas, for all legal actions or proceedings arising out of or relating to this Agreement and waive the right to sue or be sued elsewhere. Nothing in the Agreement shall be construed to waive the County's sovereign immunity.

Section 19. Successors and Assigns

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

Section 20. Third Party Beneficiaries

This Agreement does not confer any enforceable rights or remedies upon any person other than the parties.

Section 21. Severability

If any provision of this Agreement is determined to be invalid, illegal, or unenforceable, the remaining provisions remain in full force, if the essential terms and conditions of this Agreement for each party remain valid, binding, and enforceable.

Section 22. Publicity

Contact with citizens of Fort Bend County, media outlets, or governmental agencies shall be the sole responsibility of County. Under no circumstances whatsoever, shall Contractor release any material or information developed or received in the performance of the Services hereunder without the express written permission of County, except where required to do so by law.

Section 23. Captions

The section captions used in this Agreement are for convenience of reference only and do not affect the interpretation or construction of this Agreement.

Section 24. Conflict

In the event there is a conflict between this Agreement and the attached exhibits, this Agreement controls.

Section 25. Certain State Law Requirements for Contracts

25.1 Agreement to Not Boycott Israel Chapter 2271 Texas Government Code: By signature below, Contractor verifies that if Contractor employs ten (10) or more full-time employees and this Agreement has a value of \$100,000 or more, Contractor does not boycott Israel and will not boycott Israel during the term of this Agreement.

25.2 Texas Government Code Section 2251.152 Acknowledgment: By signature below, Contractor represents pursuant to Section 2252.152 of the Texas Government Code, that Contractor is not listed on the website of the Comptroller of the State of Texas concerning the listing of companies that are identified under Section 806.051, Section 807.051 or Section 2253.153.

Section 26. Human Trafficking

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

[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK.]

IN WITNESS WHEREOF, the parties hereto have signed or have caused their respective names to be signed to multiple counterparts to be effective on the date signed by the last party hereto.

FORT BEND COUNTY

ISANI CONSULTANTS, LP

KP George, County Judge

Bobby V. P. Singh

Authorized Agent – Signature

Date

Bobby V. P. Singh

Authorized Agent – Printed Name

ATTEST:

Principal
Title

Laura Richard, County Clerk

4/30/21

Date

APPROVED:

J. Stazy Slawinski

J. Stazy Slawinski, P.E., County Engineer

APPROVED AS TO LEGAL FORM:

Marcus D. Spencer, First Assistant County Attorney

AUDITOR'S CERTIFICATE

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

Robert Ed Sturdivant, County Auditor

EXHIBIT A



civil \ design \ engineers

April 14, 2021

Mr. Kevin Mineo, P.E.
Sr. Project Manager
Binkley & Barfield, Inc.
1710 Seamist Drive
Houston, TX 77008

Subject: Fort Bend County Mobility Bond Program
FBC Project Number: 20104
Proposal for Professional Engineering Services: Benton Road – From South of Reading Rd to Irby Cobb Blvd, Precinct 1

Dear Mr. Mineo:

Isani Consultants, LP is pleased to submit the proposal for **Preliminary Design and Final Design Phase services** for the above referenced project. The following documents are attached herewith:

- **Exhibit A:** Scope of Services (Preliminary and Final Design)
- **Exhibit B:** Compensation for Professional Engineering Services
- **Exhibit C:** Project Schedule (Preliminary and Final Design)
- **Exhibit D:** Project Team Sub-Consultants
- **Exhibit E:** 2021 Billing Rate Schedule
- **Exhibit F:** Project Limits

The total proposed fee for professional engineering and additional services including topographic Survey, Geotechnical Investigations, and detention pond design will be **\$869,746.00**. Fee for any other services including Construction Phase Services will be provided, if required.

Please review and let us know if you have any comments or clarifications regarding the scope of services submitted.

We appreciate the opportunity to propose on this project. Please contact me if you have any questions or need additional supporting information regarding this request.

Sincerely,

A handwritten signature in blue ink, appearing to read "Murthy Made".

Murthy Made, P.E.
Project Manager
Isani Consultants, LP

April 14, 2021

“EXHIBIT A” – Scope of Services

Benton Road – From South of Reading Rd to Irby Cobb Blvd

FBC Project #20104, Precinct 1

Fort Bend County has requested a proposal for **Preliminary Engineering and Final Design Phase Services** to improve the existing 2-lane asphalt undivided roadway (with roadside ditches) to a 4-lane concrete curb & gutter boulevard section with a raised median, storm sewers, detention, drainage outfalls, culvert replacement, a new roundabout, and all necessary appurtenances.

PROJECT LIMITS AND DETAILS:

1. The Benton Road project will begin south of the intersection of Benton Road and Reading Road and ends north of the intersection of Benton Road and Irby Cobb Boulevard. The Existing ROW for the project limits varies from 60-feet to 100-feet. Proposed ROW is to be acquired 100-feet within the project limits and evaluated based on the drainage needs.
2. The road will be widened to accommodate a 4-lane concrete curb & gutter boulevard section, with left-turn lanes as needed and a 33-feet raised median. The existing ditches east and west of the existing roadway will be replaced with a storm sewer system.
3. The project has an existing stop sign traffic control at A Meyers Rd (Bryan Rd on the west side) intersection with Benton Rd. A roundabout design will be proposed at this intersection.

PROJECT SCOPE

GENERAL:

1. Coordination with Geotechnical and Survey consultants for the project will be performed during the Preliminary Engineering and Design Phase.
2. Coordination with Rohan Road design engineer for the Benton Road and Rohan Road intersection/pavement tie-in and drainage/detention requirements.
3. Coordinate with Sunset Crossing for Bryan Road tie-in.
4. Coordinate with Reading Road design engineer if needed.
5. Coordination with MUD engineer when needed.

PRELIMINARY ENGINEERING PHASE

A Preliminary Engineering Report (PER) shall serve as a summary document that incorporates the recommendations from the supporting investigative reports, results from working meetings with Fort Bend County, necessary approvals, and final recommendations from the Consultant's efforts. The document will serve as the framework for the design phase, having addressed the major issues that affect the roadway design and supporting infrastructure.

The Preliminary Engineering Phase shall include the preparation and approval of reports necessary to support the recommendations and design of the roadway and all appurtenances included, but not limited to, Geotechnical Investigations, Hydrology and Hydraulic Analysis, including a drainage report. Environmental Site Assessments, Wetlands Assessment, Delineation, Concurrence/Permitting, and associated tasks will be performed by others. A schematic layout showing the proposed improvements for the Roadway will be prepared for the preliminary meeting followed by the Preliminary Construction Plans. The Preliminary Engineering Report will be following the requirements stated in the Mobility Design Manual.

Proposed Roadway geometry will be evaluated and the preliminary alternatives for the alignment and Proposed Right-of-Way (ROW) Acquisition will be presented to Fort Bend County during the preliminary stages of the PER.

The Preliminary Engineering Phase shall include working meetings with Fort Bend County and other consultants/sub-consultants and a drainage meeting with Fort Bend County Drainage District prior to submitting the draft Drainage Report for the project. During this phase, the topographic survey will be performed and the existing conditions will be evaluated including roadway geometrics, soils, and traffic. In addition, during this phase parcels should be defined.

Utility companies within the project limits will be contacted and coordinated for obtaining the facility maps and record drawings available and a contact list for the utility companies and a Utility Conflict Table will be prepared. Roadway Schematics and Aerial Exhibits will be prepared for review.

Proposed improvements will include Roadway Geometry, Pavement Structure, Storm Sewer System and Detention. A Preliminary Construction Cost Estimate will be prepared and included in the Preliminary Engineering Report.

A Draft Preliminary Engineering Report will be submitted, after initial review of the existing conditions, which include, but not limited to, Exhibits, Preliminary Construction Drawings, Survey/Right-of-Way Acquisition Maps, Roadway Alignment, Geotechnical, Environmental Site Assessment, Drainage Report, and Utility Conflicts. Consultant shall provide preliminary schematics and exhibits to support discussions to solicit input from Fort Bend County on decision items. The draft PER is expected to be submitted 3 months from Notice to Proceed.

Exhibits/Attachments shall include:

- **Schematic Layout of Roadway**
 - Provide a Plan View Layout with proposed roadway improvements. Include the location of the proposed trunk storm sewer and detention facilities as necessary. The schematic layout shall be at a scale of 1" = 40' on 11"x17" sheets. Include a Cover Sheet with a Vicinity Map with the project limits. The schematic will show the pavement marking concept so that traffic movements can be considered and reviewed during the study phase. Provide the proposed typical sections on the schematic. Typical Sections shall be drawn at 1"=20' horizontal and 1"=2' vertical scale on 11"x17" sheets. The location of soil borings will be identified.
- **Cost Estimates**
 - Provide a preliminary construction cost estimate for the final recommendation provided in the Abbreviated Preliminary Engineering Report.
- **Utility Tables**
 - The consultant shall coordinate with utility companies that have existing facilities in or adjacent to project limits. The coordination shall include:
 - Perform records research and field visits to determine the presence of underground or overhead private or public utilities during the Preliminary Design phase. A reasonable amount of research should be conducted, including but not limited to contact with companies identified on above-ground markers, Railroad Commission website research, and map requests from prominent companies (i.e., CenterPoint Energy, AT&T, etc.).
 - **Level B SUE:**
Identify all existing utilities within the existing and proposed rights-of-way. Provide a list of existing utilities with owner and contact information. Coordinate with the utility companies and provide information and schematics, as necessary.
 - Send records requests to utility companies and obtain I.D. numbers (CenterPoint and AT&T).
 - Identify any utilities that are within dedicated easements that will be within the proposed right-of-way.

- Prepare a conflict table during the Preliminary Design phase to highlight conflicts. The table shall include the given ID number for the potential conflicts, stations along the centerline for the utilities and crossings, the owner of the utility, contact name, address, phone number, and email address, any notes such as it may be in a possible conflict.
- **Sight Distance**
 - The consultant shall investigate sight distance restrictions and general operating conditions of all existing and proposed intersections along Benton Road within the project limits including the roundabout.
 - Sight distance restrictions will be investigated, and Approach and Departure Site Triangles will be developed for the intersections for determining the safe passing distance and stopping sight distance for the traffic.

SCOPE OF ADDITIONAL SERVICES FOR THE PROJECT:

SURVEYING (by Rekha Engineering):

1. Topographic Survey:

Topographic Survey of Benton Road from South of Reading Rd to Irby Cobb Blvd. Cross-section at 100 feet interval extending 20 feet past the proposed right of way. Provide Level B SUE and notify 811. Survey intersecting side streets 100 feet past the existing or proposed right of way. Survey Dry creek to be able to outfall the drainage. Survey the channel crossing 800 ft south of Reading Rd intersection to include the topo 100 ft upstream and downstream from Benton Rd. Locate soil boring by others. Provide data in Microstation, DTM, TIN file, and point file. Prepare survey control sheet with recovery sheet for control points. Location of pipeline and local utilities uncovered by others. Tie to NGS monument for horizontal and vertical control. Surveyors have the responsibility of obtaining the right-of entry (ROE) for the properties.

2. Right of Way Survey

Prepare the Right of Way map to determine the existing ownership and existing right of way. Prepare a KMZ file with ownership information, proposed takings, and a preliminary roadway layout.

3. Detention Pond:

Provide a topographic survey of the proposed detention pond, location to be determined.

4. Optional Services

- a. Prepare parcel plats and metes and bounds for acquisitions. Stake line with iron pins
- b. Prepare parcel plats and metes and bounds for Unrestricted Visibility Easement (UVE)
- c. Stake the right of way with laths at 100-foot intervals.

GEOTECHNICAL SCOPE OF SERVICES (by Earth Engineering, Inc.):

The geotechnical scope of services based on the Fort Bend County Engineering Design Manual and HCFCD specifications for the detention pond are as follows:

1. Field Exploration

- Drilling and sampling **13 borings** along the road alignment to a depth of 20-feet each.
- Drilling and sampling **two (2) borings** to a depth of 25-feet in the **detention pond area**.
- Obtaining continuous soil samples to a depth of 15 feet, and then at five (5) foot intervals thereafter to the borings' termination depths.
- Earth Engineering will perform granular soil sampling utilizing the Standard Penetration Test (split spoon sampler) by driving. Blow counts will be recorded as produced by a 140-pound weight falling 30 inches (ASTM D-1558). Cohesive soils will be sampled using a thin-walled sampler (Shelby Tube) hydraulically pushed into the soil (ASTM D-1587).

2. Laboratory Testing

- Performing laboratory tests on selected representative soil samples to develop the engineering properties of the soil. These tests may include pocket penetrometers, unconfined compression, present moisture content, percent passing 200 sieves, dry densities, Atterberg Limits, and swell tests, as deemed appropriate.

3. Engineering Analyses and Reporting

Utilizing the results of observations both in the field and in limited laboratory tests, Earth Engineering will author a report that will include the following subjects:

- Soil stratigraphy: soil encountered up to 25 feet.
- Groundwater conditions and groundwater control during construction
- The boring log information will include all laboratory test results and field observations.
- Develop design recommendations for the underground utilities. The recommendations will include buried structures such as manholes etc.
- Classify the soil types in accordance with OSHA requirements based on the characteristics of the soils along the alignment.
- Recommend the utility bedding in accordance with Fort Bend County, City of Houston specifications and Harris County.
- Perform laboratory Proctor Compaction tests on the subgrade soil from the pavement areas in accordance with ASTM D-698 to obtain 95% soil density.
- Perform California Bearing Ration test "CBR".
- Present Resilient Modulus "Mr" to be used for flexible pavement.
- Present Modulus of Subgrade Reaction "Ks" to be for Rigid pavement design.
- Provide rigid pavement recommendations.
- Present subgrade stabilization options such as lime/fly-ash for cohesion-less soils and lime for cohesive soils.
- Detention pond and the drainage channel recommendations including:
 - Stability of the basin side slopes for short- and long-term conditions
 - Evaluation of bottom instability due to excess hydrostatic pressure.
 - Groundwater table and its variability.
 - Identification of dispersive soils.
 - Potential erosion problems.
 - Constructability issues.
 - Evaluation of seepage (natural clay liner and/or sealing agents, if needed).
 - Recommend construction considerations, as deemed necessary.
 - Recommend back-fill material specifications.
 - Discuss effects of poor drainage and presence of trees on the performance of the utilities and pavement.

DRAINAGE (HYDROLOGY & HYDRAULIC ANALYSIS):

We will perform the following Hydraulic and Hydrologic support services during the preliminary design phase.

The scope of services includes the following tasks:

1. **Preparation of Drainage Impact and Mitigation Analysis Report for submission and approval of Fort Bend County Drainage District:**
 - Determine existing and proposed condition discharge rates from the proposed roadway alignment and limits. Confirm the limits of the analysis with the

preliminary layout for the proposed roadway. Discharge rates for proposed conditions will reflect the change in Tc and change of the drainage system from open ditch to storm sewers. Additionally, all new areas of Proposed Right-of-Way (ROW) will be accounted for in the drainage calculations.

- Develop hydrographs for existing and proposed conditions for design storms and determine required detention volume requirements to offset the increase in peak runoff rates for storms up to the 100-year events. Storms to be evaluated for the analysis will include the 2-year and 100-year events using Atlas 14 rainfall data.
- Perform drainage area delineations for the proposed conditions and develop onsite and offsite flow calculations for proposed conditions. Perform extreme event sheet flow analysis.
- Identify all mitigation requirements, including measures needed to eliminate impacts on flow rates and floodplain storage. Such measures may include a proposed detention pond, floodplain excavation, etc.
- Provide options for detention pond(s) size and location.

2. Preparation of Drainage Report:

- Prepare a written report detailing the assumptions made in the drainage study and hydraulic analysis, the obtained results, and proposed mitigation recommendations. The report will summarize background information, methodology, and results regarding the existing conditions and proposed improvements. Figures, tables, appendices, etc. will be provided to convey relevant information.

FINAL DESIGN PHASE

The Design Phase of the project shall consist of the preparation of completely approved construction documents that reflect the Preliminary Engineering Report recommendations accepted by Fort Bend County. The Design shall build upon the framework identified in the Preliminary Engineering Phase and include roadway design, profiles, drainage system and appurtenances, and details, necessary for a complete design review. The submittal milestones for Fort Bend County shall follow the project schedule as shown in “Exhibit C”.

A Meeting will be held to discuss the traffic control and provide the following preliminary documents for communicating the significant construction traffic control concepts and to enable review and discussion at the meeting: phasing overview

drawing (roll plots), typical cross-section(s) for each major phase and preliminary traffic control detail plans showing the temporary transitions at the ends of the project. Also, provide preliminary traffic control detail plans for intersections with existing traffic signal control and, if off-site detours are anticipated, a detour concept sketch.

The Design Submittal shall address all comments from the Preliminary Engineering phase of the project, design phase milestone submittals, and the construction review meetings. The Design Submittal shall include the submittal of the 11"x17" construction ready Plans, Specifications, and Cost Estimate (PS&E). The submittal milestones will be 70%, 95%, 100%.

The design phase shall also include preparation of Exhibits and Utility Conflict list and coordination with utility companies.

The design phase shall also include the coordination of utilities. The coordination shall include, but not limited to:

- Depict utilities to a reasonable degree of accuracy on the plan and profile drawings.
- Utility Conflict Table to be updated during the Final Design phase as required. Refer to Appendix C, Fort Bend County Utility Conflict Table template.
- Submit milestone-level drawings to applicable utility companies for their review.

Additional Considerations for the Design Phase are:

Roadway and Drainage Design:

1. The Design Phase services will be performed in accordance with the DESIGN STANDARDS AND DETAILS, Fort Bend County Engineering Department, Latest Edition.
2. The Roadway design and construction of Benton Road shall comply with the requirement of Fort Bend County regulations and follow MOBILITY DESIGN MANUAL, Latest Edition.
3. The design and construction of Benton Road drainage systems shall comply with the requirement of Fort Bend County regulations and Fort Bend County Drainage District (FBCDD) DRAINAGE CRITERIA MANUAL and TxDOT (if required).
4. The pavement elevation shall be set in accordance with the Fort Bend County Guidelines.

5. The pavement section shall be evaluated by the Geotechnical Investigations and Report, if not adequately designed in accordance with the recommendations.
6. Provide coordination with Fort Bend County for any adjacent developments within the project area limits.
7. Plan and Profile sheets will be created for a scale of 1" = 40' for horizontal and 1"=4' for vertical with all the references attached and shown as per the Fort Bend County design requirements for all submittals and the Final Submittal will be a standard 11"x17". All the CAD work will follow Fort Bend County design standards.
8. Driveway width and location should match existing when feasible. Also, driveways should meet Fort Bend County Regulations of Subdivisions, Section 7 requirements. The centerline station and percent grade shall be indicated on the drawings for all driveways.
9. All the intersections or where the sidewalks exist shall include pedestrian ramps in accordance with the current ADA requirements

Traffic Control Plans (TCP) and Signing and Pavement Marking Plans:

1. A construction traffic control meeting shall be held prior to the 70% submittal and will be scheduled by the Fort Bend County Project Manager with Traffic Engineer and the Construction Programs Division. Provide the following preliminary documents for communicating the significant construction traffic control concepts and to enable review and discussion at the meeting: phasing overview drawing (roll plots), a typical cross-section(s) for each major phase, and preliminary traffic control detail plans showing the temporary transitions at the ends of the project.
2. Provide preliminary traffic control detail plans for intersections with existing traffic signal control and, if off-site detours are anticipated, a detour concept sketch.
3. Traffic Control Plans and Permanent Signing and Pavement Marking Plans will be provided as per the MUTCD and Fort Bend County Engineering Department Standards.

Utilities:

Water:

1. If it is determined in PER that the existing water lines within the project limits require to be relocated, we will include the plan and profile sheets for water line to be relocated. Any additional water line which is not existing will be an additional service.

Storm Water Pollution Prevention Plans (SWPPP):

1. Prepare the drawings based on Fort Bend County Design Criteria.

"EXHIBIT B" - Compensation for Professional Services

Project Name: Benton Road

Project Limits: From Reading Rd to Irby Cobb Boulevard

FBC Project Number: 20104 | Isani Project Number: 21PVxx

BASIC SERVICES			
1	Preliminary Engineering Report		
	Preliminary Engineering Design (Lump Sum)		
1.1	(includes coordinaton with Surveyor, Geotechnical, and adjacent project consultants)	\$ 211,699.00	
1.2	Drainage (H&H)		
1.2.1	Existing Condition Analysis	\$ 31,640.00	
1.2.2	Proposed Condition Analysis	\$ 32,730.00	
1.2.3	Drainage Report (Approx. 50 pages)	\$ 26,142.00	
			\$ 302,211.00
2	Final Design (Lump Sum)		
	(includes coordinaton with Surveyor and adjacent project consultants. Also includes waterline relocation, roundabout design and major culvert design)		\$ 385,939.00
3	Geotechnical Investigations		
3.1	Geotechnical Report for Roadway and Drainage	\$ 40,372.00	
			\$ 40,372.00
4	Survey		
4.1	Topographic Survey (Lump Sum)	\$ 50,495.00	
4.2	ROW Maps ((6 Parcels = 6 @ \$3000/Parcel)	\$ 18,000.00	
			\$ 68,495.00
SUB-TOTAL FOR BASIC SERVICES (1-4)			\$ 797,017.00
OPTIONAL ADDITIONAL SERVICES			
5	Detention Pond Design (Lump Sum)		\$ 33,280.00
6	Survey		
6.1	Detention Pond Survey	\$ 15,000.00	
6.2	ROW and Propoerty Corners Marking Prior to Letting	\$ 5,065.00	
			\$ 20,065.00
7	Geotechnical Investigations		
	Detention Pond	\$ 19,384.00	
			\$ 19,384.00
SUB-TOTAL FOR OPTIONAL SERVICES (5-7)			\$ 72,729.00
TOTAL SERVICES (BASIC & OPTIONAL)			\$ 869,746.00

BENTON ROAD
FROM READING ROAD TO IRBY COBB BOULEVARD
ISANI CONSULTANTS, L.P. PROPOSAL - MARCH 30, 2021
PRELIMINARY DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification			No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour				\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST		LEVEL OF EFFORT (ESTIMATED HOURS)									
PRELIMINARY DESIGN (TASK A)												
A1	PRELIMINARY ENGINEERING/DESIGN				91	108	338	446	232	6	1221	\$ 163,739.00
A2	DRAINAGE ANALYSIS FOR ROADWAY (H&H)		2		64	68	206	274	24	8	646	\$ 90,512.00
A3	GEOTECHNICAL INVESTIGATIONS (BY Earth Engineering, Inc.)											\$ 59,756.00
A3.1	COORDINATION WITH GEOTECHNICAL SUBCONSULTANT		2	8		16	8		8	42	\$ 5,992.00	
A4	TOPOGRAPHIC SURVEY AND ROW MAPS (BY Rekha Engineering, Inc)											\$ 83,495.00
A4.1	COORDINATION WITH SURVEYOR		2	10		24	12		8	56	\$ 8,042.00	
A5	PROJECT MANAGEMENT		3	46		92	50	6	24	221	\$ 31,676.00	
A6	OTHER EXPENSES											\$ 2,250.00
TOTAL ESTIMATE FOR PRELIMINARY DESIGN												\$ 445,462.00
PRELIMINARY DESIGN												
PRELIMINARY ENGINEERING/DESIGN (TASK A1)												
1	Key Maps, Vicinity Maps and Other Maps						4	4	12		20	\$ 2,340.00
2	Requesting Facility Maps and Record Drawings from the concerned companies/organizations			4			12	16		6	38	\$ 4,964.00
3	Evaluate Existing Conditions											
3.1	Geometrics			2	4	4	8				18	\$ 2,590.00
3.2	Topographic Conditions			1		6	6				13	\$ 1,805.00
3.3	Traffic			1		2	2				5	\$ 725.00
3.4	Structures (Culvert)			2		4	6				12	\$ 1,690.00
4	Utilities Coordination and Contact List Table			2		12	20				34	\$ 4,570.00
5	Major Utility Conflicts Table			2		12	30				44	\$ 5,770.00
6	Proposed Improvements											
6.1	Geometrics (Design Criteria and Typical Sections)			2	4	8	12				26	\$ 3,670.00
6.2	Paving			2	4	6	8				20	\$ 2,890.00
6.3	Drainage			2	4	12	16				34	\$ 4,750.00
6.4	Traffic (Roundabout)			4	6	12	16				38	\$ 5,450.00

BENTON ROAD
FROM READING ROAD TO IRBY COBB BOULEVARD
ISANI CONSULTANTS, L.P. PROPOSAL - MARCH 30, 2021
PRELIMINARY DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour			\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)									
6.5	Structures (Culvert)			4	4	8	12			28	\$ 4,040.00
6.6	Permitting Requirements			2		6	8			16	\$ 2,230.00
7	Review and Check Topographic Survey (with field visit)				6	24	16			46	\$ 6,510.00
8	Study Existing ROW and provide Recommendations for Proposed ROW			2		4	6			12	\$ 1,690.00
9	Identify Problem Areas and Potential Resolutions			4		8	16			28	\$ 3,860.00
10	Basemaps & Existing Plan and Profiles	16		10	12	30	40	56		148	\$ 19,010.00
11	Proposed Horizontal Design/Alignments (Roadway with a Roundabout)			8	6	12	24	32		82	\$ 10,510.00
12	Proposed Horizontal Design/Alignments (Storm Sewers)			4	6	12	16	20		58	\$ 7,550.00
13	Preparing Roadway Schematics			4	12	16	24	32		88	\$ 11,360.00
14	Sight Triangles (Proposed Cross Streets/Roundabout)	5		2	4	16	16	24		62	\$ 7,870.00
15	Intersection Details/Driveway Details	5		1		8	12	16		37	\$ 4,505.00
16	Roundabout Exhibits	12		8	8	24	32	40		112	\$ 14,440.00
17	Preliminary Engineering Report		1	12	16	60	50			139	\$ 20,100.00
18	Specifications and Preliminary Construction Cost Estimate			6	12	16	30			64	\$ 9,090.00
SHEETS/HOURS SUB-TOTALS			1	91	108	338	446	232	6	1222	
TOTAL LABOR COSTS			\$240.00	\$16,835.00	\$17,820.00	\$50,700.00	\$53,520.00	\$24,360.00	\$504.00		\$ 163,979.00
% DISTRIBUTION OF STAFFING			0.08%	7.45%	8.84%	27.66%	36.50%	18.99%	0.49%	100.00%	
SUBTOTAL (TASK A1)											\$ 163,979.00
DRAINAGE ANALYSIS FOR ROADWAY (H&H) (TASK A2)											
1	Review of data including survey, record drawings, site visits and other information			6	6	8				20	\$ 3,300.00
2	Delineate all sub-drainage areas contributing to project limits			4	4	12	36			56	\$ 7,520.00
3	Perform Hydrologic calculations for Existing Conditions based on Atlas 14 data			6	4	24	42			76	\$ 10,410.00
4	Develop Hydraulic model for Existing Conditions based on Atlas 14 data			6	4	24	42			76	\$ 10,410.00

BENTON ROAD
FROM READING ROAD TO IRBY COBB BOULEVARD
ISANI CONSULTANTS, L.P. PROPOSAL - MARCH 30, 2021
PRELIMINARY DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour			\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)									
5	Determine Change in 2-yr and 100-yr flows for change in Tc and New Imperviousness Outside Existing ROW, Validate Drainage Boundaries and hydrologic calculations			6	4	12	18	12		52	\$ 6,990.00
6	Determine Detention Volume based on ROW, hydrographs and physical constraints			4	4	12	18			38	\$ 5,360.00
7	Develop Preliminary Proposed Alternatives and Hydraulic models			6	6	28	32			72	\$ 10,140.00
8	Perform Mitigation Analysis and Finalize models			8	8	24	32			72	\$ 10,240.00
9	Prepare OPCC			4	4	12				20	\$ 3,200.00
10	Prepare and Present Preliminary Findings to Fort Bend County Engineering Department/Drainage District			4	4	12	12			32	\$ 4,640.00
11	Prepare Exhibits and Appendices required for the Drainage Report				4	8	12	12		36	\$ 4,560.00
12	Prepare Drainage Impact and Mitigation Analysis Report for Fort Bend County Engineering Department/Drainage District Submittal		1	6	12	24	24		8	75	\$ 10,482.00
13	Submit the Drainage Report with Roadway to Fort Bend County Engineering Department and Fort Bend County Drainage District		1	4	4	6	6			21	\$ 3,260.00
SHEETS/HOURS SUB-TOTALS			2	64	68	206	274	24	8	646	
TOTAL LABOR COSTS			\$480.00	\$11,840.00	\$11,220.00	\$30,900.00	\$32,880.00	\$2,520.00	\$672.00		\$ 90,512.00
% DISTRIBUTION OF STAFFING			0.31%	9.91%	10.53%	31.89%	42.41%	3.72%	1.24%	100.00%	
SUBTOTAL (TASK A2)											\$ 90,512.00

BENTON ROAD
FROM READING ROAD TO IRBY COBB BOULEVARD
ISANI CONSULTANTS, L.P. PROPOSAL - MARCH 30, 2021
PRELIMINARY DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour			\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)									
GEOTECHNICAL INVESTIGATIONS (TASK A3) (by Earth Engineering, Inc.)											
1	Geotechnical Investigations and Report (Roadway, Drainage, Water/Sanitary) (by Earth Engineering, Inc.)										\$ 40,372.00
2	Detention Pond										\$ 19,384.00
	TOTAL LABOR COSTS										\$ 59,756.00
	SUBTOTAL (TASK A3)										\$ 59,756.00
TOPOGRAPHIC SURVEY AND ROW MAPS (TASK A4) (by Rekha Engineering, Inc.)											
1	Topographic Survey (by Rekha Engineering, Inc.)										\$ 45,495.00
2	ROW Maps, parcel plat, metes and bounds for acquisition (6 parcels = 6@ \$3000/parcel) (by Rekha Engineering, Inc.)										\$ 18,000.00
3	Topographic Survey for Detention Pond (5 ac @ \$3000/acre) (by Rekha Engineering, Inc.)										\$ 15,000.00
4	Topographic Survey at Intersection of Reading Rd & Benton Rd (by Rekha Engineering, Inc.)										\$ 2,500.00
5	Topographic Survey at Intersection of Irby Cobb Blvd & Benton Rd (by Rekha Engineering, Inc.)										\$ 2,500.00
	TOTAL LABOR COSTS										\$ 83,495.00
	SUBTOTAL (TASK A4)										\$ 83,495.00

BENTON ROAD
FROM READING ROAD TO IRBY COBB BOULEVARD
ISANI CONSULTANTS, L.P. PROPOSAL - MARCH 30, 2021
PRELIMINARY DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour			\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)									
PROJECT MANAGEMENT FOR PRELIMINARY ENGINEERING (TASK A5)											
1	Site/Field Visit			2		6	4			12	\$ 1,750.00
2	Co-ordination with Centerpoint Energy (Electric and Gas)			2		6			4	12	\$ 1,606.00
3	Co-ordination with AT&T			2		6			4	12	\$ 1,606.00
4	Coordination with Other Utility Companies			6		16	16		4	42	\$ 5,766.00
5	Coordination with adjacent project Engineers			8		16	24			48	\$ 6,760.00
6	Project Management and Meetings		2	16		24			4	46	\$ 7,376.00
7	Approval from FBCED and FBCDD			4		6			4	14	\$ 1,976.00
8	Submittal Milestones (Draft Report and Final Report)		1	6		12	6	6	4	35	\$ 4,836.00
	SHEETS/HOURS SUB-TOTALS		3	46		92	50	6	24	221	
	TOTAL LABOR COSTS		\$720.00	\$8,510.00		\$13,800.00	\$6,000.00	\$630.00	\$2,016.00		\$ 31,676.00
	% DISTRIBUTION OF STAFFING		1.36%	20.81%		41.63%	22.62%	2.71%	10.86%	100.00%	
	SUBTOTAL (TASK A5)										\$ 31,676.00
OTHER EXPENSES (TASK A6)											
1	Printing/Plotting/Copying										\$ 1,500.00
2	Mileage/Postage/Courier										\$ 750.00
	SUBTOTAL (TASK A6)										\$ 2,250.00
TOTAL HOURS			6	201	176	636	770	262	38	2089	
TOTAL ESTIMATE FOR PRELIMINARY DESIGN			\$1,440	\$37,185	\$29,040	\$95,400	\$92,400	\$27,510	\$3,192		\$ 431,668.00

BENTON ROAD
FROM READING ROAD TO IRBY COBB BOULEVARD
ISANI CONSULTANTS, L.P. PROPOSAL - MARCH 30, 2021
FINAL DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification			No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour				\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.			LEVEL OF EFFORT: TASK LIST		LEVEL OF EFFORT (ESTIMATED HOURS)							
FINAL DESIGN (TASKS A TO I)												
A	ROADWAY DESIGN				74	122	308	408	476		1388	\$ 178,960.00
B	DRAINAGE DESIGN			2	27	36	106	172	172		515	\$ 66,015.00
C	DETENTION POND DESIGN				17	29	50	84	74		254	\$ 33,280.00
D	TRAFFIC CONTROL PLANS				26	27	99	128	172		452	\$ 57,535.00
E	SIGNING AND STRIPING PLANS				10	21	40	48	46		165	\$ 21,905.00
F	STORM WATER POLLUTION PREVENTION PLANS				10	8	28	52	42		140	\$ 18,020.00
G	PROJECT MANAGEMENT FOR FINAL DESIGN			6	52	4	94	86		46	288	\$ 40,004.00
H	OTHER EXPENSES											\$ 3,500.00
TOTAL ESTIMATE FOR FINAL DESIGN												\$ 419,219.00
FINAL DESIGN												
ROADWAY DESIGN (TASK A)												
1	Fort Bend County Design Criteria						4		6		10	\$ 1,230.00
2	Cover Sheet, General Notes, and Project Layouts		6		4	4	6	8	12		34	\$ 4,520.00
3	Horizontal and Vertical Design/Alignments (Roadway with Roundabout)				6	8	16	20	40		90	\$ 11,430.00
4	Existing and Proposed Typical Sections		5		2	4	10	24	24		64	\$ 7,930.00
5	Demolition Plans		6		2	4	12	18	24		60	\$ 7,510.00
6	Out fall Details at Dry Creek				2	8	12	16	24		62	\$ 7,930.00
7	Design for Cross Streets		2		2	2	16	16	24		60	\$ 7,540.00
8	Design for Cross Culvert over Gapps Slough Channel		6		8	8	24	32	40		112	\$ 14,440.00
9	Roundabout Design		6		16	24	32	40	60		172	\$ 22,820.00
10	Intersection Details/Layouts		2		2	4	8	12	16		42	\$ 5,350.00
11	Typical Street/Driveway Connection Details		2				12	8	10		30	\$ 3,810.00
12	Roadway Plan and Profile Sheets		16		12	24	80	104	120		340	\$ 43,260.00
13	Cross Sections at 100-foot Intervals		36		6	24	36	40	48		154	\$ 20,310.00

BENTON ROAD
FROM READING ROAD TO IRBY COBB BOULEVARD
ISANI CONSULTANTS, L.P. PROPOSAL - MARCH 30, 2021
FINAL DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour			\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)									
14	Existing Waterline Relocation (Included with Roadway Plan and Profile Sheets)			4	4	8	12	24		52	\$ 6,560.00
15	Project Calculations and Earthwork Calculations	3		4	4	12	16			36	\$ 5,120.00
16	Specifications and Construction Cost Estimate			4		18	40			62	\$ 8,240.00
17	Standard Details/Drawings	6				2	2	4		8	\$ 960.00
	SHEETS/HOURS SUB-TOTALS	96		74	122	308	408	476		1388	
	TOTAL LABOR COSTS			\$13,690.00	\$20,130.00	\$46,200.00	\$48,960.00	\$49,980.00			\$ 178,960.00
	% DISTRIBUTION OF STAFFING			5.33%	8.79%	22.19%	29.39%	34.29%		100.00%	
	SUBTOTAL (TASK A)										\$ 178,960.00
DRAINAGE DESIGN (TASK B)											
1	Drainage Area Maps	7		6	12	24	40	48		130	\$ 16,530.00
2	Hydraulic Data Sheets	8		4	6	12	16	24		62	\$ 7,970.00
3	Horizontal and Vertical Design/Alignments (Storm)		2	4	6	24	40			76	\$ 10,610.00
4	Drainage Plan and Profile Sheets (Included with Roadway Plan and Profile Sheets)			4	6	24	48	70		152	\$ 18,440.00
5	Drainage System Laterals	6		4	6	12	16	24		62	\$ 7,970.00
6	Standard Details/Drawings	4		1		4	4	6		15	\$ 1,895.00
7	Specifications and Construction Cost Estimate			4		6	8			18	\$ 2,600.00
	SHEETS SUB-TOTALS	25	2	27	36	106	172	172		515	
	TOTAL LABOR COSTS		\$480.00	\$4,995.00	\$5,940.00	\$15,900.00	\$20,640.00	\$18,060.00			\$ 66,015.00
	% DISTRIBUTION OF STAFFING		0.39%	5.24%	6.99%	20.58%	33.40%	33.40%		100.00%	
	SUBTOTAL (TASK B)										\$ 66,015.00

BENTON ROAD
FROM READING ROAD TO IRBY COBB BOULEVARD
ISANI CONSULTANTS, L.P. PROPOSAL - MARCH 30, 2021
FINAL DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour		\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO. LEVEL OF EFFORT: TASK LIST LEVEL OF EFFORT (ESTIMATED HOURS)										
DETENTION POND DESIGN (TASK C)										
1	Detention Pond Design and Layout per FBC Standards			6	12	24	40	48		\$ 16,530.00
2	Detention Pond Design Calculations	1		6	6	12	24		48	\$ 6,780.00
3	Proposed Cross Sections for Detention Pond	2		2	8	6	8	16	40	\$ 5,230.00
4	Standard Details/Drawings	3		1	1	2	4	10	18	\$ 2,180.00
5	Specifications and Construction Cost Estimate			2	2	6	8		18	\$ 2,560.00
	SHEETS SUB-TOTALS	6		17	29	50	84	74	254	
	TOTAL LABOR COSTS			\$3,145.00	\$4,785.00	\$7,500.00	\$10,080.00	\$7,770.00		\$ 33,280.00
	% DISTRIBUTION OF STAFFING			6.69%	11.42%	19.69%	33.07%	29.13%	100.00%	
	SUBTOTAL (TASK C)									\$ 33,280.00
TRAFFIC CONTROL PLANS (TASK D)										
1	General Notes and Index	1				1	2	2	5	\$ 600.00
2	Project Approach Signing	1				8	8	12	28	\$ 3,420.00
3	Phasing Overview	1		4	2	6	6	12	30	\$ 3,950.00
4	Phasing Description and Typical Sections	4		4	2	6	8	12	32	\$ 4,190.00
5	TCP for Temporary Pavement Construction	4				4	6	12	22	\$ 2,580.00
6	TCP Phase I	8		4	8	24	32	40	108	\$ 13,700.00
7	TCP Phase II	8		4	8	24	32	40	108	\$ 13,700.00
8	TCP Tie- Ins	4		4	2	12	12	16	46	\$ 5,990.00
9	Detour Plans & Temporary Diversion Channel	4		4	2	8	8	12	34	\$ 4,490.00
10	TCP Specifications and Construction Cost Estimate			2	2	4	12	8	28	\$ 3,580.00
11	Standard Details/Drawings	2			1	2	2	6	11	\$ 1,335.00
	SHEETS/HOURS SUB-TOTALS	37		26	27	99	128	172	452	
	TOTAL LABOR COSTS			\$4,810.00	\$4,455.00	\$14,850.00	\$15,360.00	\$18,060.00		\$ 57,535.00
	% DISTRIBUTION OF STAFFING			5.75%	5.97%	21.90%	28.32%	38.05%	100.00%	
	SUBTOTAL (TASK D)									\$ 57,535.00

BENTON ROAD
FROM READING ROAD TO IRBY COBB BOULEVARD
ISANI CONSULTANTS, L.P. PROPOSAL - MARCH 30, 2021
FINAL DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total
Contract Rate Per Hour			\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00		
NO.	LEVEL OF EFFORT: TASK LIST	LEVEL OF EFFORT (ESTIMATED HOURS)									
SIGNING AND STRIPING PLANS (TASK E)											
1	Signing and Striping Plans	8		8	16	32	32	40		128	\$ 16,960.00
2	SPM Specifications and Construction Cost Estimate			2	4	6	12			24	\$ 3,370.00
3	Standard Details/Drawings	2			1	2	4	6		13	\$ 1,575.00
	SHEETS/HOURS SUB-TOTALS	10		10	21	40	48	46		165	
	TOTAL LABOR COSTS			\$1,850.00	\$3,465.00	\$6,000.00	\$5,760.00	\$4,830.00			\$ 21,905.00
	% DISTRIBUTION OF STAFFING			6.06%	12.73%	24.24%	29.09%	27.88%		100.00%	
	SUBTOTAL (TASK E)										\$ 21,905.00
STORM WATER POLLUTION PREVENTION PLANS (TASK F)											
1	Storm Water Pollution Prevention Plans	7		8	8	16	32	40		104	\$ 13,240.00
2	SWPPP Specifications and Construction Cost Estimate			2		8	16			26	\$ 3,490.00
3	Standard Details/Drawings	1				4	4	2		10	\$ 1,290.00
	SHEETS/HOURS SUB-TOTALS	8		10	8	28	52	42		140	
	TOTAL LABOR COSTS			\$1,850.00	\$1,320.00	\$4,200.00	\$6,240.00	\$4,410.00			\$ 18,020.00
	% DISTRIBUTION OF STAFFING			7.14%	5.71%	20.00%	37.14%	30.00%		100.00%	
	SUBTOTAL (TASK F)										\$ 18,020.00
PROJECT MANAGEMENT FOR FINAL DESIGN (TASK G)											
1	Field Visit			6		6	6		4	22	\$ 3,066.00
2	Project Manual			4	4	8	8		4	28	\$ 3,896.00
3	Co-ordination with Centerpoint Energy (Electric and Gas)			2		6	4		4	16	\$ 2,086.00
4	Co-ordination with AT&T, and other private Utilities			2		6	4		4	16	\$ 2,086.00
5	Coordination with Surveying Consultants		1	4		8	8		4	25	\$ 3,476.00
6	Coordination with Geotechnical Consultants		1	4		8	8		4	25	\$ 3,476.00
7	Coordination with Designers of Adjacent Projects		2	12		24	24		10	72	\$ 10,020.00
8	Project Management and Meetings		2	12		16	16		6	52	\$ 7,524.00
9	Milestones (70%, 95%, and 100%)			6		12	8		6	32	\$ 4,374.00
	HOURS SUB-TOTALS		6	52	4	94	86		46	288	
	TOTAL LABOR COSTS		\$1,440.00	\$9,620.00	\$660.00	\$14,100.00	\$10,320.00		\$3,864.00		\$ 40,004.00
	% DISTRIBUTION OF STAFFING		2.08%	18.06%	1.39%	32.64%	29.86%		15.97%	100.00%	

BENTON ROAD
FROM READING ROAD TO IRBY COBB BOULEVARD
ISANI CONSULTANTS, L.P. PROPOSAL - MARCH 30, 2021
FINAL DESIGN LEVEL OF EFFORT



EXHIBIT B

Employee Classification			No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total Labor Hrs & Costs	Total	
Contract Rate Per Hour				\$240.00	\$185.00	\$165.00	\$150.00	\$120.00	\$105.00	\$84.00			
NO.	LEVEL OF EFFORT: TASK LIST		LEVEL OF EFFORT (ESTIMATED HOURS)										
	SUBTOTAL (TASK G)											\$	40,004.00
OTHER EXPENSES (TASK H)													
1	Printing/Plotting/Copying (Including Mylars)											\$ 2,500.00	
2	Mileage/Postage/Courier											\$ 1,000.00	
	SUBTOTAL (TASK H)											\$	3,500.00
TOTAL HOURS				8	216	247	725	978	982	46	3202		
TOTAL ESTIMATE FOR FINAL DESIGN (TASKS A-I)				\$1,920	\$39,960	\$40,755	\$108,750	\$117,360	\$103,110	\$3,864		\$ 419,219.00	

4/5/2021



"EXHIBIT C" - Final Design Schedule
BENTON ROAD (From Reading Rd to Irby Cobb Blvd)

EXHIBIT C

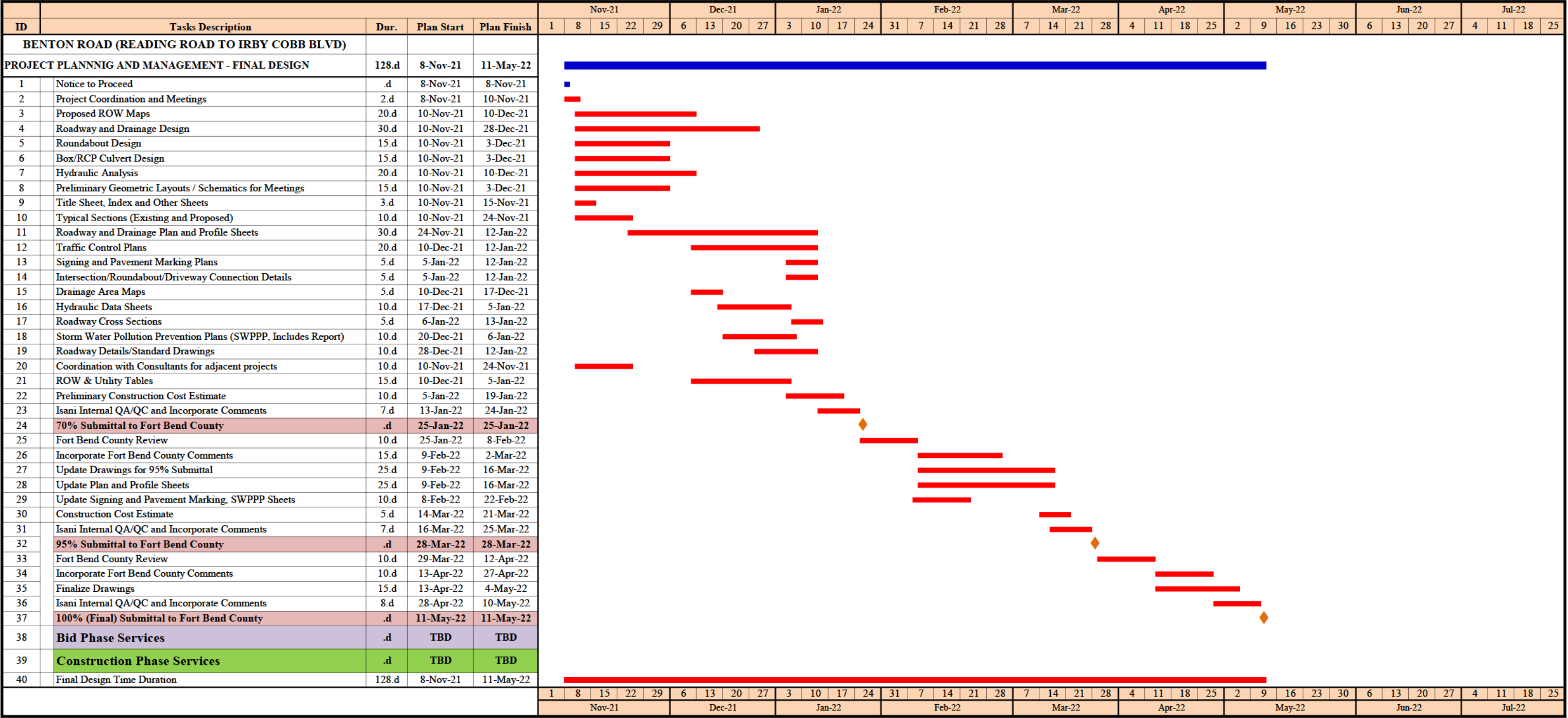


Exhibit "D" - Project Team Sub-Consultants for Additional Services

Project Name: Benton Road – From South of Reading Rd to Irby Cobb Blvd, Precinct 1

Project Limits: From South of Reading Rd to Irby Cobb Blvd, Precinct 1

FBC Precinct: 1

Surveying: Rekha Engineering, Inc.

Geotechnical: Earth Engineering, Inc.s

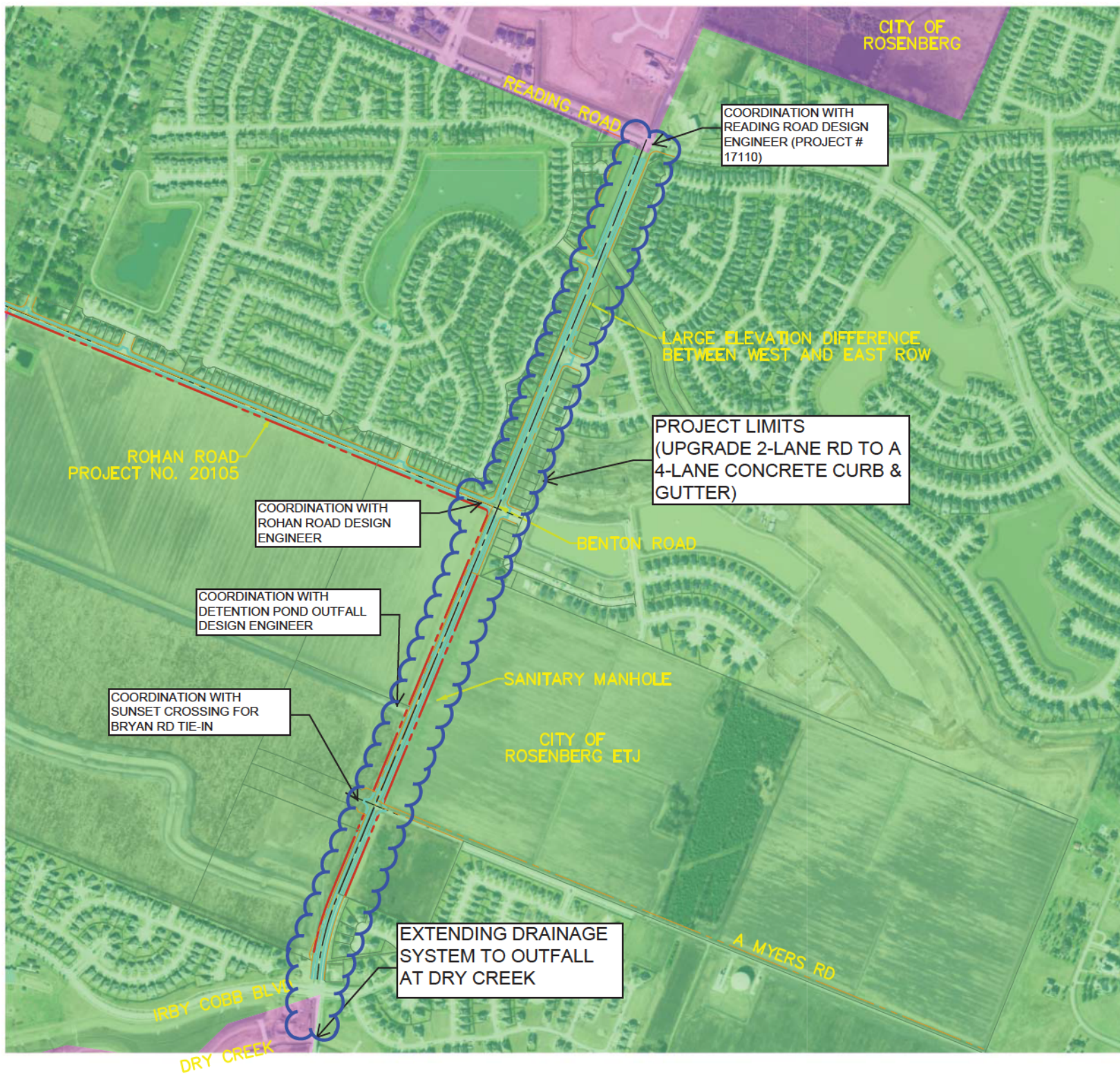
Exhibit "E"

Isani Consultants, LP

2021 Schedule of Raw Hourly Rates

<u>PERSONNEL/TITLE:</u>	<u>HOURLY RATE</u>
Principal	\$80.00
Senior Project Manager	\$70.00
Project Manager	\$62.00
Senior Project Engineer	\$57.00
Project Engineer	\$50.00
QA/QC Engineer	\$55.00
Senior Civil Engineer	\$51.00
Civil Engineer	\$43.50
Engineer-In-Training (EIT)	\$40.00
Senior Designer	\$48.00
Designer	\$43.50
Project Coordinator	\$38.00
CAD Technician	\$35.00
GIS Technician	\$35.00
Document Control	\$35.00
Administrative Assistant	\$28.00

EXHIBIT - F: PROJECT LIMITS





EARTH ENGINEERING, INC.

Geotechnical, Materials Testing & Environmental Consultants
4877 Langfield Road • Houston, TX 77040 • T: (713) 681-5311 • F: (713) 681-5411 • www.eartheng.com

March 29, 2021

Mr. Ram Guliani, P.E.
Project Manager
Isani Consultants
10488 Westoffice Dr.
Houston, Texas 77042

Proposal No.: P-EE 2113503R-G
sent via email: r.guliani@isaniconsultants.com

O (713) 747-2399 |

**GEOTECHNICAL EXPLORATION PROPOSAL
BENTON ROAD
WATER, SANITARY, DRAINAGE, PAVING
DETENTION POND
FORT BEND COUNTY, TEXAS**

Dear Mr. Guliani,

Earth Engineering, Inc. is pleased to present this proposal to perform geotechnical evaluation for the above project in Fort Bend County, TX.

FURNISHED INFORMATION

1. Road Alignment is about 6,500 feet from Reading Road to Irbby Cobb Boulevard.
2. Convert the current road from two (2) lane asphalt to four (4) lane concrete curb & gutter.
3. ~~There will be a roundabout instead of traffic lights per county's plan at the intersection of Benton & Bryan Rd.~~

New roundabout
4. Ten-foot-deep detention pond with an area of ~~less~~ one (1) acre.
5. The storm sewer depth is about 10 feet.

SCOPE OF WORK

The scope of our services is based on Fort Bend County Engineering Design Manual for the road and HCFCD Specifications for the detention pond as follows:

- Drilling and sampling 13 borings along the road alignment to a depth of 20-feet each.
- Drilling and sampling two (2) borings to a depth of 25-feet in the detention pond area.
- Obtaining continuous soil samples to a depth of 15 feet, and then at five (5) foot intervals thereafter to the borings' termination depths.
- Earth Engineering will perform granular soil sampling utilizing the Standard Penetration Test (split spoon sampler) by driving. Blow counts will be recorded as produced by a 140-pound weight falling 30 inches (ASTM D-1558). Cohesive soils will be sampled using a thin-walled sampler (Shelby Tube) hydraulically pushed into the soil (ASTM D-1587).
- Performing laboratory tests on selected representative soil samples to develop the engineering properties of the soil. These tests may include pocket penetrometers, unconfined compression, present moisture content, percent passing 200 sieves, dry densities, Atterberg Limits, and swell tests, as deemed appropriate.
- Utilizing the results of observations both in the field and in limited laboratory tests, Earth Engineering will author a report that will include the following subjects:
 1. soil stratigraphy: soil encountered up to 25 feet.
 2. groundwater conditions and groundwater control during construction
 3. boring log information will include all laboratory test results and field observations.
 4. develop design recommendations for the underground utilities. The recommendations will include buried structures such as manhole etc.
 5. classify the soils types in accordance with OSHA requirements based on the characteristics of the soils along the alignment.
 6. recommend the utility bedding in accordance with Fort Bend County, City of Houston specifications and Harris County.
 7. Perform laboratory Proctor Compaction tests on the subgrade soil from the



pavement areas in accordance with ASTM D-698 to obtain 95% soil density.

8. Perform California Bearing Ratio test "CBR".
 9. Present Resilient Modulus "Mr" to be used for flexible pavement.
 10. Present Modulus of Subgrade Reaction "Ks" to be for Rigid pavement design.
 11. Provide rigid pavement recommendations.
 12. Present subgrade stabilization option such as lime/fly-ash for cohesion-less soils and lime for cohesive soils.
 13. Detention pond and the drainage channel recommendations including:
 14. Stability of the basin side slopes for short- and long-term conditions
 15. Evaluation of bottom instability due to excess hydrostatic pressure.
 16. Groundwater table and its variability.
 17. Identification of dispersive soils.
 18. Potential erosion problems.
 19. Constructability issues.
 20. Evaluation of seepage (natural clay liner and/or sealing agents, if needed).
 21. recommend construction considerations, as deemed necessary.
 22. recommend back-fill material specifications.
 23. discuss effects of poor drainage and presence of trees on the performance of the utilities and pavement.
- Incorporating all the above into a geotechnical engineering report which is performed under the direction of, and signed by, a professional engineer registered in the State of Texas.



SCHEDULING

We anticipate that the utilities marking (811), field exploration and limited laboratory testing will require about three (3) weeks. Engineering analyses and report preparation will require approximately three (3) to four (4) weeks. Consequently, we anticipate our final report could be submitted within approximately 5 (6) to six (6) weeks after successful drilling of the borings. **We will work with you to meet your deadline.**

ROAD ESTIMATED FEES (13 borings @ 20') =260 feet

The total cost for the geotechnical study is estimated to be **\$40,372.00**

SERVICE DESCRIPTION	UNIT FEE	AMOUNT	UNIT	ESTIMATED COST
Field Exploration				
Mobilization/Demobilization	\$700	2	Mob	\$1,400.00
Drilling and Sampling	\$25	220	feet	\$5,500.00
Grout all borings	\$12	220	hour	\$2,640.00
Traffic Control	\$150	24	hour	\$3,600.00
Field Engineer Supervision & Layout	\$115	24	hour	\$2,760.00
Vehicle Charge	\$12	18	hour	\$216.00
		Subtotal:		\$16,116.00
Laboratory Testing				
Atterberg Limits (LL, P _i 's)	\$72.00	36	tests	\$2,592.00
Moisture Contents	\$12.00	60	tests	\$720.00
Percent Passing # 200 Sieve	\$55.00	14	tests	\$770.00
Unconsolidated Undrained "UU"	\$72.00	14	tests	\$1,008.00
Unconfined Compression Tests	\$52.00	12	tests	\$624.00
Proctor Compaction Test ASTM D-	\$231.00	2	tests	\$462.00
California Bearing Ration "CBR" test	\$245.00	2	tests	\$490.00
Dispersive Characteristic Crumb Test	\$45.00	12	tests	\$540.00
		Subtotal:		\$7,206.00
Engineering and Report Writing				
Principal Engineer, P.E.	\$250.00	8	hours	\$2,000.00
Geotechnical Engineer "EIT"	\$115.00	110	hours	\$12,650.00
Support Personnel	\$60.00	40	hours	\$2,400.00
		Subtotal		\$17,050.00
			TOTAL	\$40,372.00

DETENTION POND ESTIMATED FEES (2 borings @ 25') =50 feet

SERVICE DESCRIPTION	UNIT FEE	AMOUNT	UNIT	ESTIMATED COST
Field Exploration				
Mobilization/Demobilization	\$700	1	Mob	\$700.00
Drilling and Sampling	\$25	50	feet	\$1,250.00
Grout all borings	\$12	50	hour	\$600.00
Traffic Control	\$150	6	hour	\$900.00
Field Engineer Supervision & Layout	\$115	8	hour	\$920.00
Vehicle Charge	\$12	8	hour	\$96.00
		Subtotal:		\$4,466.00
Laboratory Testing				
Atterberg Limits (LL, P _i 's)	\$72.00	8	tests	\$576.00
Moisture Contents	\$12.00	14	tests	\$168.00
Percent Passing # 200 Sieve	\$55.00	6	tests	\$330.00
Unconsolidated Undrained "UU"	\$72.00	6	tests	\$432.00
Unconfined Compression Tests	\$52.00	6	tests	\$312.00
Consolidated Undrained CU Bar	\$1,800.00	2	tests	\$3,600.00
Dispersive Characteristic Crumb Test	\$45.00	10	tests	\$450.00
		Subtotal:		\$5,868.00
Engineering and Report Writing				
Principal Engineer, P.E.	\$250.00	5	hours	\$1,250.00
Geotechnical Engineer "EIT"	\$115.00	60	hours	\$6,900.00
Support Personnel	\$60.00	15	hours	\$900.00
		Subtotal		\$9,050.00
TOTAL				\$19,384.00

Notes:

1. Additional site visits, drilling, concrete coring, engineering analysis, and/or consultation beyond the scope of work specified in this proposal will be charged as additional fees using the above rates.
2. Our invoice will be submitted along with our final report. We request final payment within 30 days after the submission of the report. The fee outlined in this proposal will be valid for a period for 45 days. After that time, adjustments may be required.

INSURANCE

Earth Engineering Inc. maintains the following insurance:

- Professional Liability (errors and omissions): one **million**.
- General Liability: **two million**.
- Workman's Compensation: **one million**.
- Commercial Auto Insurance: **one million**.
- Umbrella Insurance: **five million**.



CLIENT RESPONSIBILITIES

Earth Engineering, Inc. requests that you provide the following information prior to the site visit and our site activities:

- Formal written authorization.
- Name and telephone number of a responsible client contact, if other than yourself.
- Any geotechnical, environmental, geologic, and hydrological report previously prepared for the study area, to which you have access, as well as information regarding any similar report currently being undertaken.
- Any restrictions or limitations to, or requirements for site access to be adhered to by Earth Engineering personnel.

Should you have any questions concerning this proposal or other services we may provide, please feel free to contact us at (713) 681-5311 or by e-mail at moes@eartheng.com. We will be pleased to discuss them with you.

Yours very truly,

EARTH ENGINEERING, INC.

Moe A. Shihadeh

Moe A. Shihadeh, P.E., D.GE
Principal/Diplomate Geotechnical Engineering

Attachments: Agreement Form



EARTH ENGINEERING, INC. PROFESSIONAL SERVICES AGREEMENT

THIS AGREEMENT, entered on the day of March 29, 2021 by and between **Isani Consultants, L.P.** (hereinafter referred to as "**Client**") and **Earth Engineering, Inc.** a Texas Corporation (hereinafter referred to as "**EET**"), is as follows:

For mutual consideration stated herein, Client engages Earth Engineering, Inc. to perform professional services as presented in our proposal number P-EE-2113503R-G. The general Conditions agreed to by the parties are as follows:

1. **PARTIES:** Earth Engineering, Inc. (hereinafter "CONSULTANT") refers to the company performing the scope of work described herein. "Client" refers to the person or business entity ordering the scope of work to be performed by CONSULTANT. If the Client is ordering work on behalf of another, Client represents and warrants the duly authorized agency from the party that will benefit from the work. Unless otherwise stated in writing, Client assumes sole responsibility for the sufficiency for the work ordered. Client shall communicate these General Conditions to any third party to whom Client transmits any part of Consultant's work. CONSULTANT shall have no duty or obligation to any third party greater than that set forth in this Agreement.
2. **SCOPE OF WORK:** "Work" means the specific environmental, geotechnical, analytical, construction materials testing or other service to be performed by CONSULTANT as mentioned above including necessary field and laboratory testing as well as providing geotechnical recommendations in a report form. CONSULTANT will commence the services upon Client's written notification to proceed.
3. **AMENDMENTS:** Client, without validating this Agreement, may request changes within the general scope of the services required by this Agreement by altering or adding to the Services to be performed, and any such changes in Services shall be performed subject to this agreement. Upon receiving client's request, CONSULTANT shall return to CLIENT a change proposal setting forth an adjustment to the Services and Project Cost estimated by CONSULTANT to represent the value of the requested changes. Following Client's review of Consultant's changes proposal, CLIENT shall execute a written change order or contract amendment directing CONSULTANT to perform the changes in services.
4. **TESTS AND INSPECTIONS:** Client shall ensure all tests and inspections of the site, all materials provided, and work performed by others are delivered in a timely manner in accordance with the plans, specifications, contract documents, and Consultant's recommendations. No claims for loss, damage or injury shall be brought against CONSULTANT by Client or any third party unless all reviews, tests, and inspections have been so performed and unless Consultant's recommendations have been followed. If CLIENT objects to all or any portion of any invoice, it shall notify CONSULTANT in writing of the same within fifteen (15) days from the date of actual receipt of the invoice and shall pay timely that portion of the invoice not in dispute.
5. **SCHEDULING OF WORK:** The services in the proposal will be accomplished in a timely, workmanlike and professional manner by CONSULTANT personnel or authorized subcontractors. If CONSULTANT is required to delay commencement of work or if, upon undertaking work, CONSULTANT is required to halt work due to changes in the scope of work, interruptions in other aspects of the Project, or other causes beyond the reasonable control of CONSULTANT, additional charges will be applicable and payable by the Client.
6. **ACCESS TO SITE:** Client will provide access to the site for CONSULTANT to perform the work. CONSULTANT shall take reasonable measures to minimize damage to the site and any improvements as the result of its work; however, CONSULTANT has not included in its fee the cost of restoration of damage, which may occur. CONSULTANT will restore the site to its former condition upon written request from Client that provides for payment to CONSULTANT for the cost thereof.
7. **DAMAGE TO EXISTING MAN-MADE OBJECTS:** Unless CONSULTANT assumes in writing the responsibility of locating subsurface or latent conditions, Client agrees to indemnify and save CONSULTANT harmless from all claims, suits, losses, cost and expenses, including reasonable attorneys' fees as a result of personal injury, death or property damage occurring with respect to Consultant's performance of its work and arising from subsurface or latent conditions, or damage to subsurface or latent objects, structures, lines or conduits where the actual presence and location thereof was not revealed to CONSULTANT by Client.
8. **CONFIDENTIALITY:** During the Project, CONSULTANT and its employees may obtain, directly or indirectly, secret, and confidential information considered proprietary by Client. CONSULTANT agrees on behalf of itself and its employees, to maintain the confidentiality of all proprietary information unless directed by Client in writing to disclose the information to others.
9. **LIABILITY LIMITATION:** With respect to the services performed by CONSULTANT, its employees, agents, affiliates and subcontractors, damage, costs, expenses, or other liability, direct or indirect, shall be limited to \$59,720.00
10. **RESPONSIBILITY:** consultant's work shall not include determining or implementing the means, methods, techniques, sequences, or procedures of construction. CONSULTANT will not be responsible for evaluating, reporting, or affecting job conditions relative to the health, safety, or welfare of any persons other than its own employees. consultant's work or failure to perform same shall not in any way excuse any contractor, subcontractor, or supplier from performance of its work in accordance with the contract documents.



CONSULTANT RESPONSIBILITIES

11. **SAMPLE DISPOSAL:** Unless otherwise agreed, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed thirty (30) days after submission of consultant's report. All archaeological samples will be returned to Client for permanent curation following submittal of consultant's final report.
12. **PAYMENT:** Client shall be invoiced once the report is completed. Client agrees to pay the invoice upon receipt. **Reports will be mailed once the payment is received.** Client further agrees to pay interest on all amounts invoiced and not paid or objected to for valid cause within thirty (30) days at the rate of eighteen percent (18%) per annum (or the maximum interest rate permitted under applicable law, whichever is the lesser) until paid. Client agrees to pay consultant's cost of collection of all amounts due and unpaid after sixty (60) days, including court costs and reasonable attorney's fees. Remedies available to CONSULTANT for collection of amounts due, including mechanic's liens, shall not be limited by a contractual provision or other agreement that is not specifically made a part of this Agreement.
13. **TERMINATION:** This Agreement may be terminated by either party upon forty-eight (48) hours written notice. In the event of termination, CONSULTANT shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses, and or the completion of such services and records as are necessary to place consultant's files in order and/or to protect its professional reputation. In the event Services cannot be performed on or before the projected due date because of circumstances beyond the control of CONSULTANT, including, but not limited to, strike, fire, riot, excessive precipitation, act of God, environmental conditions, governmental action, third party action or action or omission by CLIENT, the Services shall be amended by CLIENT and CONSULTANT in accordance with paragraph 2 of this agreement.
14. **WARRANTY:** consultant's services will be performed, its finds obtained, and its reports prepared in accordance with the proposal, Client's acceptance thereof, this Agreement, and with generally accepted engineering principles and practices. In performing its professional services, CONSULTANT will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. This warranty is in lieu of all other warranties, either express or implied. Should CONSULTANT, or any of its professional employees be found to have been negligent in the performance of professional services or to have breached the express warranty made herein, Client and all third parties claiming through Client agree that the maximum, aggregate liability of CONSULTANT and its professional employees shall be limited to the total amount of the fee paid to CONSULTANT for professional services with respect to the Project.
15. **ARBITRATION:** CONSULTANT shall not be bound by any contractual provision or other agreement requiring or providing for arbitration of disputes or controversies arising out of consultant's work, which is not specifically made a part of this Agreement.
16. **PRIORITY OF DOCUMENTS:** The terms of this Agreement shall control over any conflicting provisions within purchase orders, work orders, letters of intent, or other similar documents.
17. **APPLICABLE LAW:** This Agreement shall be governed by and construed according to the laws of the State of Texas. The venue for all claims asserted under this Agreement shall be Harris County, Texas.
18. **WAIVER OF SUBROGATION:** In the event the client requests Waiver of Subrogation as part of the insurance coverage, an additional fee of \$200 will be invoiced to cover the additional insurance charges.
19. **COLLECTIONS/MECHANIC'S LIEN:** In the event that client fails to pay for said report, an additional fee of \$200.00 will be assessed to invoice to cover the cost of collections and filing fees of mechanic's lien with the courts.

The parties hereto have accepted the terms and conditions stated herein and have caused this Agreement to be executed by their duly authorized representatives, as follows:

EARTH ENGINEERING, INC.

Isani Consultants, L.P.

Moe A. Shihadeh

Signature

Signature

Moe A. Shihadeh, P.E., D.GE

Print Name

Print Name

Principal - Diplomate Geotechnical Engineering

Title

Title

March 29, 2021

Date

Date





REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

Mr. Ram Guliani, P.E. / Project Manager

March 24, 2021

Isani Consultants L.P - 10448 Westoffice Drive, Houston, TX 77042

RE: Proposal and Letter of Agreement for: Professional Land Surveying for 2020 Fort Bend County Mobility Project - Roadway Design Mobility Project - Fort Bend County Project 20104 - Benton Rd from South of Reading Rd to Irby Cobb Blvd (6500 L.F.) - Fort Bend County, Tx

REKHA ENGINEERING, INC. ("RE") is pleased to submit the following proposal and letter of agreement to provide professional land surveying services for the referenced project. Included in the overall scope is to prepare a) Survey Control Map, b) Topographic Survey Category 6 and c) Boundary Category 1A survey proposed right of way plus 20' outside of right-of-way plus all structures within 100' of the right-of-way) performed by our field land survey crews, calculation and AutoCAD cad technicians with professional review by our inhouse Registered Professional Land Surveyor.

The Topographic Survey Category 6 will consist of topographic cross sections showing all improvements within the right-of-way including utilities, pavement, drainage structures, ditches, swales, signage, striping, existing property corners and markers of right-of-way plus adjoining tracts, and other improvements, 20' outside of the right-of-way. Included is establishing temporary benchmarks at 1000' intervals based on a current FEMA benchmarks and Fort Bend County benchmarks with baseline control. Abstracting of the right-of-way plus adjoining tracts within the project area shall be performed with ownership so right-of-way widths plus boundary tracts adjacent are established. Structures within 100' of the right-of-way shall be located horizontal and vertically. A complete utility investigation will be performed for water, sewer, drainage, electric, telephone plus gas utilities (including optic) per Exhibit scope attached from Isani Engineers dated March 12, 2021. Except all cad worked shall be performed in AutoCAD 19 3 D – not MicroStation. We can provide a MicroStation format(dgn, tin file, point file & dtm file) format at the end of the survey as discussed on March 16, 2021 by email.

Once right-of-way needs have been determined and approved by the county, a Boundary Category 1A survey will be performed to produce: 1) an overall map showing the existing and proposed right-of-way adjoiner tracts with ownership including abstract information and stationing, 2) a parcel map and metes-and-bounds description for each parcel required for right-of-way acquisition plus setting of property corners and 3) a KMZ file (used by Google Earth) showing existing right-of-way with ownership information, proposed takings with parcel numbers, and a preliminary roadway layout. Right-of-way documents will be provided separately from other design documents and paid per-parcel basis.

Deliverable items shall be a) 2D Plainview drawing in AutoCAD Civil 3D Format b) ASCII files c) Texas RPLS signed and stamp Survey Control Map including swing ties.

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7676 Hillmont Street, SUITE 350 - HOUSTON, TEXAS 77040
PHONE: (713) 895-8080/8081 - FAX: (713) 895-7686
Website: www.rekhaengineering.com - E-mail: jake1@pdq.net

①



REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

Note **not included** are the following: any other land surveying services except as referenced above including no profile preparation plus cross section drafting. Proposed schedule is to complete the land surveying this scope in 6 weeks together.

REKHA Engineering, Inc. will perform the referenced services for the referenced project for a lump sum fee of:

- | | |
|--|---------------------|
| 1. Right of way verification and Topographic surveys as above | \$ 45,495.00 |
| 2. Right of Way Parcel Maps including a) overall boundary map of tract | |
| b) exhibit map of parcel being obtained c) metes and bounds of | |
| parcel tract being obtained (tracts range 12 ac to 30 ac) | 3,000.00 ea. Parcel |
| 2 - a) Intersections of Reading & Benton | 2,500.00 |
| 2- b) Intersection of Irving Cobb & Benton | 2,500.00 |
| 3. Offsite Detention Pond - | 3,000.00 / ac |
| 4. Level A SUE investigation radar - | by others |

Including reimbursable expenses and no state sales tax (na). Reimbursable Expenses (RE) consist of mileage, plots, reproduction, filing fees, etc. as shown on Exhibit "A". Note if the scope of services is adjusted or changed, and upon your **written** approval, we shall invoice extra services on an hourly basis as per Exhibit "A", attached hereto and made a part hereof. If this is acceptable to you, please sign below and return one fully executed original to us, at which time this will become a binding Agreement between us. Upon receipt thereof, we will immediately commence performance of our services. **Payment will be due upon receipt of this invoice per overall agreement.** In the event this account is placed for collection with any party or through judicial proceedings, you agreed to pay all costs incurred and/or are awarded by the court and in addition to any principal, prejudgment interest and all costs associated with the collection, including deliveries, etc... Furthermore, you agree that all past sums bear interest of at the 1.5% per month or 18% per annum on any and all outstanding balances. Venue for any dispute under this contract is Houston, Harris County, Texas. All sums are due and payable in Houston, Harris County, Texas. **Presently, RE has 2,000,000 professional liability Insurance coverage; workman compensation coverage; and \$2,000,000 umbrella liability coverage. However, it is agreed that RE will be responsible only for loss or injury caused by acts or omissions of its agents and employees, and Owner will indemnify and hold RE harmless from any and all claims or causes of action arising, in whole or in part, from the act or omissions of Owner, Owner's agents, employees, third parties and/or consultants associated with the Owner & the herein referenced project.**

RE Appreciates the opportunity to submit this proposal and we are ready to perform for you!!

REKHA ENGINEERING, INC.

By: 
John H. English, Sr. Vice President

AGREED AND ACCEPTED BY CLIENT:

By: _____
(Note: the entity and person that is
signing this proposal is responsible for payment).
Type Name: _____
Date _____
Telephone & Email _____

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REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

EXHIBIT "A"

2021 Hourly Rates (for RE, INC. = REKHA Engineering, Inc. REI-RE) Consultant)

2-10-21

Principal	\$ 185.00 per hour
Project Manager	\$ 150.00 per hour
Surveyor (RPLS)	\$ 135.00 per hour
Technician	\$ 95.00 per hour
Sr. Technician – Designer	\$ 115.00 per hour
Secretary	\$ 55.00 per hour
Survey Crew (Crew with Data Coll + Robotic Total Station with GPS)	\$ 130.00 per hour
Survey Crew (2-Man Crew with Data Coll + Robotic Total Station with GPS)	\$ 175.00 per hour
Permitting expediter process and services	\$ 45.00 per hour

All Bid Phase and Construction Services are hourly per this schedule (Specs, Quantities, coordination)

Reimbursable Expenses and Handling Charges (REI) – see below list

a. Reproduction	\$ 4.00 per plot
b. Mileage	\$ 0.75¢ per mile
c. <u>Reproduction - In Office</u> – computer plots (D size)	\$ 7.00 per plot
d. <u>Reproduction - In Office</u> – computer plots (E size)	\$ 5.00 each
e. Black Line and check plots for design	\$ 20.00 each
f. Mylars, Vellums and/or Sepia	\$ 3.00 each
g. Field Supplies - Survey lathes, hubs, iron rods, etc...	\$ 45.00 each
Delivery including handling in office (separate charge – outside of REI)	\$ 45.00 per day
<u>Out of Town Expenses</u> - Meal Cost per person per day	Cost + 15%
Airplane Flight, rent car, expenses from trip, REI, Motel, Hotel	Cost +15%
\$ 0.75¢ per mile	

Items which are charged hourly per this exhibit & additional conditions of this agreement

- a) Civil Engr. shop Drawing reviews (lift station, bridges, civil items, etc...) is hourly per this Ex. A
- b) All Meetings Outside of the REKHA Office shall be charged additionally of scope & charged hourly per this exhibit. - hourly + REI**
- c) State Sales Tax for boundary surveys and subdivision plats only - 8.25% of total fees + REI
- d) In the event that payment is not made within 45 calendar days of the date of the invoice submitted per the proposal agreement, referenced Client agrees fully to make full payment at the time the civil engineering and/or land surveying product is ready for pickup at RE, Inc. office. (RE, Inc.= REKHA Engineering, Inc.). All meetings are port to port.
- e) All Fees for application fees, building fee, subdivision plat fees, HL&P (CenterPoint or others) Plan fees (\$125.00) plus handling and any other municipal / public utility company fee shall be paid by the client directly plus other consultant fees (soils, etc....) Plus City of Houston plat fees – recordation review fee - \$ +500.00, Harris County plat review fee - \$ +700.00.
- f) Set Property Corners after the survey is complete is additional & charged Hourly @ 130/hr + calculations**
- g) Client to provide all original tax certificates & updated title reports for all subdivision plat submittals for review & recordation at their cost. REKHA can obtain all tax certificates for a hourly charge of a technician rates per this exhibit plus REI.
- h) On all update surveys (in the proposal ref: it will say Update), if additional improvements are found compared to the previous survey completed, surveying and cadding the additional improvements shall be charged hourly per this exhibit A plus the original survey update fee plus reimbursable expenses and sale tax.
- I) If this proposal is not executed after 30 work days of the date of the proposal, this proposal is void unless RE, Inc. approves an extension. If this proposal is executed for a project and the phases start 3 months after the date of the previous phase ends, this proposal is void unless re-executed or extension is granted by RE, Inc. If work has started on this proposal and then ceased for 60 days – an hourly rate may be charged to re-activate the work.
- k) **Subdivision Plat – Variance Request and/or Public Hearing** to a Plat- if a Variance and/or Public Hearing for a subdivision plat is required before or after submittal, there is an estimated budget of \$ 950.00 charge additional hourly per Exhibit A to the original engineering fee per item plus reimbursable per this exhibit to the original proposal plat fee to prepare, submit and coordinate this submittal for a variance and hopefully approval.
- L) Risk Allocation- In recognition of the relative risks, rewards and benefits of the project to both Client and Consultant, the risks have been allocated such that the Client agrees that, to the fullest extent permitted by law, the Consultant's total liability to the Client for any and all injuries, claims, losses, expenses or damages from any cause or causes, shall not exceed Consultant's fee. Such causes include, but are not limited to, the Consultant's negligence, errors, omission, strict liability, breach of contract or breach of warranty.
- M) All original civil engineering documents, land surveys, exhibits, electronic files and all other items prepared by RE, Inc. for clients on each approved proposals is copy right and the sole ownership of property of REKHA Engineering, Inc.. If clients desires to obtain a copy of the electronic file of a

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drawing, there will be a charge of \$ 600.00 per sheet, payment prior to release, beyond the original fee of the proposal plus a release noting copyright will need to be executed prior to releasing the file.

M) Classification of completion of projects and invoicing are as follows: a) 40% is Preliminary Engineering, b) 90% is Final Engineering and submittals to agencies - 100% is approvals from agencies for civil engineering. Agency comments being 3 month after the plans has been issued for review shall be hourly as per this Exhibit A.

N) Note that others will provide a title report or city planning letter at their expense with all backup documents plus adjoiner deeds showing the boundary of the tract and REI shall not be responsible for any and all abstracting including adjoiner deeds for the referenced project. Additional updates with new title reports after this survey is issued and attorney comments shall be additional and shall be charged hourly as per Exhibit "A".

o) & P) Note that this proposal for professional services do not include diligence investigations for utility service and connection points for all utilities, platting, approvals, and other items out of the scope of services of the above described proposed services. The land owner / developer is responsible for all diligences for any and all tracts of land they are planning to purchase / lease/ develop unless they specifically request REKHA (REI) to perform those services as described in this proposal.

Q) Based on the execution of this agreement by the client gives permission to RE to enter referenced property to perform all services as quoted attached in this proposal.

R) It is agreed by client that RE will be responsible only for loss or injury caused by acts or omissions of its agents and employees, and Owner will indemnify and hold RE harmless from any and all claims or causes, of action arising, in whole or in part, from the act or omissions of Owner, Owner's agents, employees, third parties and/or consultants associated with the Owner & the herein referenced project.

S) The survey is being provided solely for the use of the current parties and no license has been created, express or implied, to copy the survey except as is necessary in conjunction with the original transaction, as referenced in this proposal, which shall take place within a six months from the date of the referenced proposal is executed.

T) Note not included in any survey efforts or feasibility efforts in this proposal are location of fiber optic, electrical, cables and other underground utilities that are installed by owner or other entities that are not located on the top of the ground and/or not disclosed by owner at the time of the approval of this proposal by owner. Surveyor will make best attempt to collect this information and show as estimated locations per maps collected but no warranties are provided for these items in this proposal.

U) For plan and profile approvals at the city of Houston or other agencies, walk through approvals are hourly per this Exhibit A for technician at 85/hr at the city. Walk through for plan and profile plans are meetings at a central location at Washington Street – Permit office Houston and attend walk through on each Thursday of the week only. Meet 6-7 engineers from different departments and obtain their approvals and signature on the referenced set of plans prepared by REKHA Engineering, Inc. The also applies to private utility companies (ATT and CenterPoint) and city of Houston meeting with plan checker. These services are separate and are charged separate for this service at \$ 95/hr from port to port.

V) REKHA Engineering, Inc draws, drafts and AUTOCAD all land surveys and civil engineering projects in AUTOCAD 19. If REKHA are asked by the owner, signee of this proposal or others for the cad file and upon signing the REKHA release form, the cad file is accepted "as is". REKHA Engineering, Inc is not responsible or liable for any sub consultant use of that referenced cad file. Also, REKHA is not responsible for CAD files released to sub consultants, owners and all others for AUTOCAD files to be converted to lower versions of AutoCAD. For their use. As-is is a term used in warranty law to disclaim the seller's liability for faults in the item sold or released free. The owner, signee of this proposal or others accepts the item in the present condition, whether the faults are apparent or not. "As-is" language clarifies that no written or verbal warranties were made to the owner, signee of this proposal or others and is used to protect the seller or provider (REKHA Engineering, Inc)

W) All City of Houston Form A for driveway alignment and traffic control in the parking lot submittals will be performed hourly charges per by REKHA Engineering, Inc per Exhibit A of this agreement if requested in city comments by the city of Houston. REKHA Engineering, Inc. Note that RE are not traffic engineers and upon review by RE of comments, RE may recommend client to obtain the services of a traffic engineer to complete Form A at the owner's cost.

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FORT BEND COUNTY MOBILITY 2020

Description	Proj Mgr	RPLS	Tech	Survey Crew	Admin	Total
Proj Mangement	4	4	4		1	\$1,535.00
Data Collection & Review	2	16	12			\$3,440.00
Field Right-of-way	2	8	8	40		\$9,060.00
Field Topographic	2	4	8	40		\$8,560.00
Utility Investigation	2	4	12			\$1,940.00
Abstracting	2	8	8			\$2,060.00
Boundary 1A Map	2	8	24	4		\$4,280.00
Topographic Cat 6 Map	2	8	40	4		\$5,800.00
Control Map	4	8	16	4		\$3,820.00
Final Review & Coor	4	17	16	4	1	\$5,000.00
Total Hours	26	85	148	96	2	357
<i>Rate Per Hour</i>	\$150	\$125.00	\$95.00	\$175.00	\$55.00	
Total Fee	\$3,900.00	\$10,625.00	\$14,060.00	\$16,800.00	\$110.00	\$45,495.00



March 12, 2021

John English
Rekha Engineering, Inc.
7676 Hilmont St, Suite #350
Houston, Texas 77040

**RE: Benton Road: From South of Reading Rd to Irby Cobb Blvd
Proposal for Professional Surveying Services**

Dear Mr. English:

Isani Consultants, L.P. (ISANI) has been requested by the Fort Bend County Engineering Department (FBCED), to provide Surveying Services for Benton Rd from South of Reading Rd to Irby Cobb Blvd.

The scope of the project includes the following:

- Construct the Concrete Pavement 4-lane Boulevard Section with 2-lane on each side with 33 feet median for Benton Road for the limits as shown above.
- A new traffic signal at the intersection of Benton Road and Bryan Rd (A Meyers Rd- EB) per the new geometry.
- Acquire Right of Way (ROW) for 100' ROW. 120' ROW at intersections of two major thoroughfares.
- Storm Sewer System.
- Detention Pond design (location to be determined).

Existing Conditions:

- Benton Road is a 2-lane asphalt pavement boulevard section.
- The Existing Right-of Way along Benton Road varies from 30-feet to 100-feet. The existing ROW from Reading Rd to Rohan Rd and from Irby Cobb Blvd to 700-feet North of Irby Cobb Blvd is 100-feet. From Rohan Rd to 500-feet South of it, the existing ROW is 90-feet. From 500-feet South of Rohan Rd to A Meyers Rd, the existing ROW varies from 30-40 feet. From A Meyers Rd to 700 feet South of it, the existing ROW is 30 feet.
- Residential Area throughout the project limit

ISANI requests a proposal from Rekha Engineering, Inc. to perform the following **Surveying Services** for the project.

The surveying services should follow and include the information as required in Chapter 6 (Survey) and Chapter 7 (Right-of-Way) of the latest FBCED Mobility Bond Program Design Manual. The following Basic Services shall have fixed fees for below mentioned individual tasks:

The Basic Services are as follows:

- **Existing ROW Maps and Topographic Survey**
 - Prepare Right of Way Maps of the existing ROW. Existing ROW maps shall be signed and sealed and certified as Category 1B, Condition II and Category 6, Condition II for Topographic Survey Mapping and Survey Control. Right-of-way maps shall be at a scale of 1"= 40' on 11 x 17.
 - Maps shall include a topographic survey with the following:
 - I. 20 feet outside the existing or proposed right-of-way (ROW)
 - II. Structures in clear view and within 100 feet of the existing or proposed right-of-way
 - III. Extend beyond project limits sufficient distance to establish existing roadway centerlines in plan and profile, and locate any pertinent features (e.g., visible utilities, signs, driveways, pedestrian crossings, etc.)
 - IV. Intersecting streets shall include 100 feet at a minimum beyond the proposed pavement. All the Utilities will be located to Level B SUE. Final Mylars will be on 22x34.

The Survey Services (from Reading Rd to Irby Cobb Blvd) shall include the following:

- Verify existing Right-of-Way (ROW) along the corridor and identify property owners.
- Obtain 100-year floodplain information from FEMA flood maps
- Obtain Level B SUE
- Field verify as-built information (e.g., road signs, inverts, curbs, OH poles, driveway slopes)
- Make recommendations for any proposed ROW that may be necessary for corner cuts, embankment, and/or drainage. Survey and stake all proposed ROW as shown on the proposed design documents for the roadway and providing ROW acquisition documents (survey drawings and metes and bounds description) for all proposed ROW acquisitions.

- Perform abstracting as necessary.
- Tie the soil boring locations.
- Tie coordinate geometry to TSARP coordinates.
- Provide topographical survey and cross-sections at no more than every 100 feet of the proposed roadway including cross-sections at all cross streets along the project. The topographic survey shall extend a minimum of 100 feet at all intersecting streets and a minimum of 25 outside the existing or proposed ROW, wherever feasible; and shall include significant items 60 feet outside the existing or proposed ROW takings that may have an impact on the value of the taking.
- Provide topographic survey files (DTM, TIN file and other related files) in MicroStation platform.
- Prepare Survey Control Sheets, and survey control data monument sheets for each control point set in the field.
- Provide a Survey Control Index Sheet and Horizontal and Vertical Control Sheet signed, sealed and dated by a Registered Public Land Surveyor for insertion into the plans.
- Included in the budget will be the location of utilities and pipelines both horizontally and vertically and obtaining information from record drawings and shooting elevations of utilities marked or uncovered by the utility companies.
- Survey to include multiple pipelines present within the project limits along with CPE easement and transmission lines.

The Optional and Additional Services are as follows:

- Proposed ROW Maps (Category 1A, Condition II) (\$/parcel)
- Level A SUE
- Detention Pond Survey (\$/acre)

We request separate proposals for individual no later than **Wednesday, March 17, 2021**. Your proposals should include a scope of work, estimated fee with breakdown shown under each heading listed above, and schedule. Please also furnish your current rate schedule along with your proposal.

We thank you in advance for your prompt attention. Should you have any questions or need any clarifications, please contact me at 713-747-2399.

Request for Proposal for Professional Engineering Services
Benton Road from Reading Road to Irby Cobb Boulevard
Fort Bend County Precinct 1
Page 4 of 4 | March 12, 2021

Sincerely,



Ram Guliani, P.E.
Project Manager
Isani Consultants, L.P.

Attachment: Aerial photo showing project vicinity and location map. In addition to exhibit showing Surveying Services.

Cc: File