

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 Amani Engineering, Inc., (hereinafter "Contractor"), a company authorized to conduct business in the State of Texas.

#### WITNESSETH

WHEREAS, County desires that Contractor provide professional engineering services for the improvements to the intersections at Benton Road at A Myers and Benton Road at Rohan Road for the Intersection Improvements Project, Number 17114, under the 2017 Mobility Bond Program (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, including the design services, bidding services, construction administration services, final design services, surveying, mapping, hydrologic and hydraulic, storm water pollution prevention and signage and pavement marking services as described in Contractor's Proposal for Engineering Services – Revision 5, dated June 18, 2018 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 two hundred twelve thousand four hundred sixty-eight dollars and no/100 (\$212,468.00) 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 two hundred twelve thousand four hundred sixty-eight dollars and no/100 (\$212,468.00) 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 two hundred twelve thousand four hundred sixty-eight dollars and no/100 (\$212,468.00).

### **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, 2022. 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. 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.

10.1.2 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.

10.1.3 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.

10.1.4 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 NEGLIGENT ACT, 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, 1<sup>st</sup> Floor  
Richmond, Texas 77469

Contractor: Amani Engineering, Inc.  
Attn: H. Prasad Kolluru, P.E., President  
8303 Southwest Freeway, Suite 600  
Houston, Texas 77074

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**

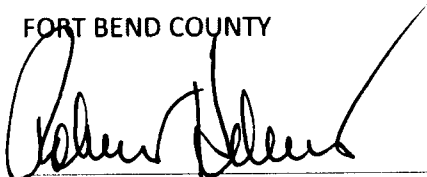
25.1 Agreement to Not Boycott Israel Chapter 2270 Texas Government Code: By signature below, Contractor verifies Contractor does not boycott Israel and will not boycott Israel during the term of this Agreement.

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.

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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



Robert E. Hebert, County Judge

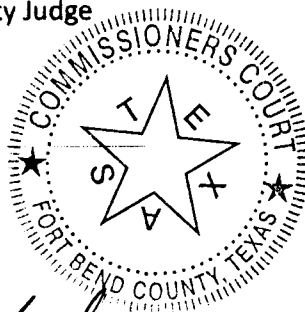
AMANI ENGINEERING, INC



H. Prasad Kolluru, P.E., President

724-2018

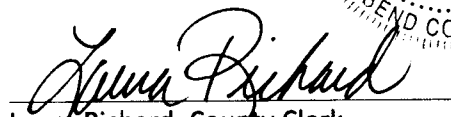
Date



July 13, 2018

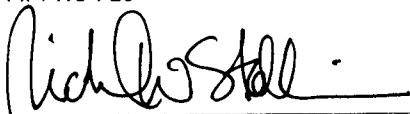
Date

ATTEST:



Laura Richard, County Clerk

APPROVED:



Richard W. Stolleis, 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 \$ 212,468 to accomplish and pay the obligation of Fort Bend County under this contract.



Robert Ed Sturdivant, County Auditor

\\Ms01s\Agreements\Engineering\Road Construction\Avenue 1\17114\Agreement - Engineering - Intersection Improvements AFD.docx 7/9/2018

# EXHIBIT A



# Amani Engineering, Inc.

• Engineers • Surveyors • Construction Managers

June 18, 2018

Mr. Kevin Mineo, P.E.  
Binkley & Barfield, Inc.  
1710 Seamist Drive  
Houston, Texas 77008

Via. E-mail:  
[KMineo@BinkleyBarfield.com](mailto:KMineo@BinkleyBarfield.com)

Re: Fort Bend County Mobility Bond Program  
Project Number: I-14  
**Proposal for Engineering Services – Revision 5**

Dear Mr. Mineo:

Thank you for selecting Amani Engineering, Inc. (Amani) to provide professional engineering services for the referenced project. Amani is pleased to provide this revised fee proposal for the services described herein.

## 1. PROJECT SCOPE

Fort Bend County Precinct 1 (County) proposes to make improvements to two existing roadway intersections so as to provide traffic congestion relief to the traveling public. Specifically, left turn lanes will be added to the northbound and eastbound approaches of the Benton Road–Rohan Road intersection, and to the southbound and westbound approaches of the Benton Road–A. Meyers Road intersection. Also, larger radii will be installed at the intersections' corners to facilitate the movement of both larger and longer vehicles.

Based on our visits to the sites, discussions with you and Mr. Stacy Slawinski, P.E., the County's Assistant County Engineer, and Amani's review of the County's roadway design requirements, we have prepared the following scope of services as the basis for this fee proposal.

### A. Benton Road–Rohan Road Intersection

#### 1. Design Services (Lump Sum)

- a. Provide two left turn lanes for the intersection's northbound and eastbound approaches.
- b. Widen (taper, transition and storage lanes) the existing two-lane, two-way asphalt roadways along each approach to accommodate the new left turn lanes.
- c. Determine the drainage system needs (i.e. modifications to existing roadside ditches; drainage report).
- d. Provide storm water detention for runoff resulting from the increased impervious area.
- e. Request utility information from private utility companies. Determine critical path items.
- f. Determine permit and regulatory requirements.
- g. Perform topographic survey including establishment of existing rights-of-way.
- h. Perform utility conflict analysis and coordination for relocation.
- i. Perform subsurface utility engineering (Levels D, C and B), if necessary, to establish the locations of critical utility conflicts.
- j. Perform geotechnical investigation and submit report of findings and recommendations.
- k. Prepare traffic control plan.
- l. Prepare storm water pollution prevention plan.
- m. Prepare signage and pavement marking plan.
- n. Prepare drawing set comprising cover, index, general notes, typical section, layout, survey control, plan-profile, drainage map, drainage calculation, traffic control, storm water pollution prevention, signage and pavement marking, detail, roadway cross section, and other sheets as necessary.

- o. Prepare project manual comprising front end documents, bid form, specifications table of contents, special specifications, and summary of work.
      - p. Prepare an opinion of probable construction cost.
    - 2. Bidding Services (Lump Sum)
      - a. Attend pre-bid meeting at the County and be prepared to briefly describe the project.
      - b. Prepare an addendum, if necessary, for distribution by the County.
      - c. Prior to the pre-construction meeting, determine from the County's Project Manager the required number of hardcopy drawing and project manual sets.
    - 3. Construction Administration Services (Time and Materials) – To be provided by both Amani and Kavi for the respective design scope.
      - a. Attend pre-construction meeting together with the County, Project Manager, general contractor and construction materials testing contractor. Distribute to the parties the hardcopy drawing and project manual sets from Item A.2.c. above.
      - b. Review and respond to contractor's submittals and shop drawings.
      - c. Respond to requests for information.
      - d. Participate in the substantial completion walkthrough meeting.
      - e. Prepare record drawings of the project based on the contractor's as-built markups and deliver to the County one hardcopy of same.
  - B. Benton Road–Andy Meyers Road intersection
    - 1. Final Design Services (Lump Sum)
      - a. Provide left turn lanes for the intersection's southbound and westbound approaches.
      - b. Items 1.B.1.b. through 1.B.3.e. for this intersection are identical to the corresponding items in Item 1.A.1.b. through 1.A.3.e. above.
      - c. The Contract Documents from this intersection will be incorporated into the Contract Documents from Item 1.A. above and bid as a single package: there will not be two separate Contract Document packages.
  - C. Additional Services (Lump Sum)
    - 1. REKHA Engineering, Inc. will serve as our subconsultant for surveying and mapping services.
    - 2. Earth Engineering will serve as our subconsultant for geotechnical services.
    - 3. Kavi Consulting, Inc. will serve as our subconsultant for hydrologic and hydraulic, storm water pollution prevention, and signage and pavement marking design services. Kavi will also develop construction cost estimate during PER, for the entire project.
    - 4. Amani will prepare the traffic control plans.

## 2. EXCLUSIONS

- A. Professional surveying and engineering services associated with the acquisition of additional right-of-way to facilitate the widening of the roadways, the increased radii at the intersections' corners, or the corner clips required to establish sight lines.
- B. Subsurface utility engineering services.
- C. Wetlands investigations.
- D. Project notification to the Texas Historical Commission.
- E. Phase 1 Environmental Site Assessment.
- F. Traffic signal design.
- G. Relocation of third-party (private, franchise, etc.) utilities within the roadways' rights-of-way.
- H. Storm Water Quality Management Plan (SWQMP)
- I. Offsite detention design and related property acquisition services.
- J. Performing periodic field visits during the construction period to observe the progress of the work.
- K. Attending progress meetings during the construction period.

### 3. DELIVERABLES

#### A. Preliminary Design (30% Milestone)

1. Submit three copies of an informal (non-presentation), preliminary engineering report (PER) which includes:
  - a. Proposed improvements in plan view with minor annotation
  - b. Typical cross sections
  - c. Drainage system design / drainage report
  - d. Right-of-way acquisition needs (subject to Item 2.A. above)
  - e. Potential conflicts with existing facilities
  - f. Critical path items
  - g. Permit and regulatory requirements
  - h. Opinion of probable construction cost. This task will be performed by Kavi.
  - i. Topographic survey, including existing utilities in plan and profile
  - j. Geotechnical investigations and report

#### B. Final Design (Interim 70% Milestone)

1. Submit three copies of the drawing set on 11" x 17" sheets including:
  - a. Cover sheet
  - b. Typical and non-standard cross sections
  - c. Project layout map
  - d. Survey control map
  - e. Drainage area map and hydraulic calculations
  - f. Plan-profile sheets
  - g. Traffic control plan
  - h. Storm water pollution prevention plan
2. Submit a digital copy in PDF format of the drawing set (Item 3.B.1. above) and a project manual including:
  - a. Specification table of contents
  - b. Special specifications (as applicable)
  - c. Opinion of probable construction cost.

#### C. Final Design (Interim 95% Milestone)

1. Drawing set submittal is the same as for the 70% submittal (Item 3.B.1 above) plus the following:
  - a. General notes
  - b. Earthwork quantities with cross sections 100' on center.
  - c. Signage and pavement marking plan
  - d. Standard construction details
2. Project manual submittal is the same as for the 70% submittal (Item 3.B.2 above) plus the following:
  - a. Front end documents (provided by County)
  - b. Bid form
  - c. Specifications table of contents with link to County website
  - d. Summary of Work

#### D. Final Design (100% Milestone)

1. Submit one sealed and signed hardcopy 11" x 17" drawing set to the County, and a PDF submittal of the drawing set, project manual and opinion of probable construction cost to the Project Manager. Final design will be considered complete when the County approves the Contract Documents as evidenced by the County Engineer's signature on the drawing set's hardcopy cover sheet.

#### E. Bid Phase

1. Prepare a single file in PDF format of the entire drawing set (with electronic seals and signatures and approvals) of the project's final design.

2. Prepare a single file of the project manual in PDF format comprising the administrative documents (cover, notice to bidders, etc.), the bid form, the specification table of contents (sealed), and all applicable specifications and documents.
  3. Prepare and provide to County 27 compact discs, each having one drawing set file and one project manual file. Printed documents are not required.
  4. Attend the pre-bid meeting and respond to written bidder questions furnished by the County, in the form of an addendum to be distributed by the County.
- F. Construction Phase
1. Attend the pre-construction meeting. Furnish drawing and project manual sets per County's instruction.
  2. Review contractor's timely and written submittals, shop drawings and requests for information.
  3. Participate in substantial completion inspection
  4. Prepare and furnish to County record drawings prepared based on contractor's as-built redlined drawings from the field.
4. **SCHEDULE** (see attached Gantt Chart)
- A. Eighteen weeks<sup>1</sup> (90 d) for 30% submittal (Preliminary Engineering Report).
  - B. Twelve weeks (60 d) from receipt of County's comments to 30% submittal for 70% submittal.
  - C. Four weeks (20 d) from receipt of County's comments to 70% submittal for 95% submittal.
  - D. Two weeks (10 d) from receipt of County's comments to 95% submittal for 100% submittal.

5. **FEE**

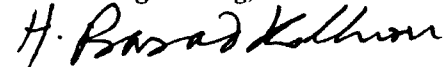
Basic Services		\$ 107,241
Additional Services		
Survey	\$ 42,000	
Geotechnical	\$ 22,055	
Hydrological and Hydraulic	\$ 30,142	
Signing and Pavement Marking	\$ 6,510	
Storm Water Pollution Prevention	\$4,520	
<b>Total Engineering Services Fee</b>		<b>\$ 212,468</b>

Services that are not included in the scope can be provided as-needed, based upon Amani's attached labor rate schedule.

We appreciate the opportunity to propose on this project. If you have questions or need additional information, please call me at 713-270-5700 x101, or Mr. Mahesh Dutta at x109.

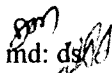
Yours sincerely,

Amani Engineering, Inc.



H. Prasad Kolluru, P.E.  
President

TBPE Firm Reg. No. F-4528  
TBPLS Firm Reg. No. 100282-00

HPK: md: 

<sup>1</sup> Schedule is based on working days.

June 18, 2018  
Mr. Kevin Mineo, P.E.  
Page 5 of 5

Attachments: Amani Level of Effort Estimate  
Amani 2018 Labor Rate Schedule  
Amani Gantt Chart Schedule  
Earth Engineering, Inc. 05/15/2018 Proposal (P-EE1816104-G)  
REKHA Engineering, Inc. 04/30/2018 (Rev 05/02/2018) Proposal  
Kavi Consulting, Inc. 06/18/2018 Proposal



**LEVEL OF EFFORT ESTIMATE**  
**Fort Bend County 2017 Mobility Bond Program**  
**Intersection Improvements: Benton Road at Rohan Road and Benton Road at A. Meyers Road**  
**Project No.: 1-14**

Client: FBC

6/18/2018

Item No.	Task Description	Principal Engineer	Project Manager	Senior Civil Engineer	Graduate Engineer / EIT	CADD Operator	Admin.	Subtotal Man Hours	Subtotal Labor Cost
<b>Hourly Billing Rate:</b>		<b>\$ 195.00</b>	<b>\$ 165.00</b>	<b>\$ 150.00</b>	<b>\$ 105.00</b>	<b>\$ 90.00</b>	<b>\$ 60.00</b>		
<b>1.0</b>	<b>Preliminary Design Phase:</b>								
1.1	Visit Sites		8					8	\$ 1,320
1.2	Obtain and Review Record Drawings		2		4			6	\$ 750
1.3	Identify and Contact Governing Agencies and Stakeholders		1		10			11	\$ 1,215
1.4	Typical Cross Sections (Existing)		1		2	24		27	\$ 2,535
1.5	Typical Sections (Proposed)		2		4	32		38	\$ 3,630
1.6	Right-of-Way Needs		1		8			9	\$ 1,005
1.7	Identify Problem Areas and Potential Resolutions (SUE D, C & B Analysis)		6	3	12	6		27	\$ 3,240
1.8	Permit and Regulatory Requirements		2		10			12	\$ 1,380
1.9	Opinion of Probable Construction Cost (Kavi)								\$ 1,600
1.10	Prepare PER for County's internal review		20	4	40	40		104	\$ 11,700
1.11	Review Meeting with County Staff		4		4			8	\$ 1,080
1.12	<b>Subtotal Preliminary Design:</b>	0	47	7	94	102	0	250	\$ 29,455
<b>2.0</b>	<b>Final Design Phase:</b>								
2.1	Cover and Sheet Index		0.5		2	4		6.5	\$ 653
2.2	General Notes		0.5		2	4		6.5	\$ 653
2.3	Project Layout Map		0.5		2	6		8.5	\$ 833
2.4	Roadway Plan and Profile		24	12	48	120		204	\$ 21,600
2.5	Traffic Control Plan		12	4	24	54		94	\$ 9,960
2.6	Standard Construction Details		2		4	8		14	\$ 1,470
2.7	Design Cross Sections (Key Locations and 100-ft Stations)		8		40	16		64	\$ 6,960
2.8	Earthwork Cut & Fill Quantities		0.5	4	16	8		28.5	\$ 3,083
2.9	Front End Documents (from County)		2	2				4	\$ 630
2.10	Bid Form		2		8			10	\$ 1,170
2.11	Summary of Work		2	1	8			11	\$ 1,320
2.12	Specifications Table of Contents (Linked to County Website)		4	1	8			13	\$ 1,650
2.13	Special Specifications		2	4	8			14	\$ 1,770
2.14	Opinion of Probable Construction Cost		4		8	12		24	\$ 2,580
2.15	Project Management and Quality Control	4		12			6	22	\$ 2,940
2.16	<b>Subtotal Final Design:</b>	4	64	40	178	232	6	524	\$ 57,270
<b>3.0</b>	<b>Bidding &amp; Construction Phases:</b>								
3.1	Attend Pre-Bid Meeting		3					3	\$ 495
3.2	Prepare and Issue Addendum for County Distribution		1		2			3	\$ 375
3.3	Attend Pre-Construction Meeting		3					3	\$ 495
3.4	Review and Respond to Contractor's Submittals and Shop Drawings		2		4			6	\$ 750
3.4a	Review and Respond to Contractor's Submittals and Shop Drawings (Kavi)								\$ 1,690
3.5	Respond to Requests for Information		8		8			16	\$ 2,160
3.5a	Respond to Requests for Information (Kavi)								\$ 1,690
3.6	Attend Substantial Completion Walk-through Meeting		4					4	\$ 660
3.7	Prepare and Submit Record Drawings		2		4	6		12	\$ 1,290
3.8	Indirect Costs & Supplies								\$ 388
3.9	<b>Subtotal Bidding &amp; Construction:</b>	0	23	0	18	6	0	47	\$ 9,993



**LEVEL OF EFFORT ESTIMATE**  
**Fort Bend County 2017 Mobility Bond Program**  
**Intersection Improvements: Benton Road at Rohan Road and Benton Road at A. Meyers Road**  
**Project No.: 1-14**

Client: FBC

6/18/2018

Item No.	Task Description	Principal Engineer	Project Manager	Senior Civil Engineer	Graduate Engineer / EIT	CADD Operator	Admin.	Subtotal Man Hours	Subtotal Labor Cost
Hourly Billing Rate:		\$ 195.00	\$ 165.00	\$ 150.00	\$ 105.00	\$ 90.00	\$ 60.00		
4.0	<b>Survey &amp; Mapping Services: REKHA Engineering, Inc.</b>								
4.1	Topographic survey of existing conditions and utilities at all approaches. Tie-in geotechnical bore holes.								\$ 42,000
4.2	Survey Management, Coordination and QA/QC	1	12		10	8	4	35	\$ 4,185
4.3	<b>Subtotal Survey &amp; Mapping:</b>								<b>\$ 46,185</b>
5.0	<b>Geotechnical Investigation Services: Earth Engineering, Inc.</b>								
5.1	Geotechnical Investigations and Report								\$ 22,055
5.2	Geotech Management, Coordination and QA/QC	1	8		4.5		4	17.5	\$ 2,227.50
5.3	<b>Subtotal Geotechnical Investigation:</b>								<b>\$ 24,282.50</b>
6.0	<b>Hydrologic &amp; Hydraulic Services: Kavi Consulting, Inc.</b>								
6.1	Drainage analyses and design including storm water detention.								\$ 30,142
6.2	Drainage Management, Coordination and QA/QC	1	8		8	6	5	28	\$ 3,195
6.3	<b>Subtotal Hydrologic &amp; Hydraulic:</b>								<b>\$ 33,337</b>
7.0	<b>Signing &amp; Pavement Marking Services: Kavi Consulting, Inc.</b>								
7.1	Signing and pavement marking plans and details								\$ 6,510
7.2	Signage and Pavement Markings Management, Coordination and QA/QC		2		2			4	\$ 540
7.3	<b>Subtotal Signing &amp; Pavement Marking:</b>								<b>\$ 7,050</b>
8.0	<b>SWPPP Design Services: Kavi Consulting, Inc.</b>								
8.1	SWPPP Layouts								\$ 3,455
8.2	SWPPP Details								\$ 1,065
8.3	SWPPP Management, Coordination and QA/QC		1		2			3	\$ 375
8.4	<b>Subtotal SWPPP:</b>								<b>\$ 4,895</b>
7.0	<b>Summary</b>								
7.1	Preliminary Design Phase (1.12)								\$ 27,855
7.1a	Construction Cost Estimate during Per - Kavi								\$ 1,600
7.2	Final Design Phase (2.16)								\$ 57,270
7.3	Bidding & Construction Phases (3.9) - Amani's portion								\$ 6,613
7.3a	Construction Phase - Kavi's portion								\$ 3,380
7.4	Survey & Mapping (4.2) - Rekha								\$ 42,000
7.4a	Survey & Mapping Coordination								\$ 4,185
7.5	Geotechnical Investigation (5.2) - Earth Engg.								\$ 22,055
7.5a	Geotechnical Investigation Coordination								\$ 2,228
7.6	Hydrologic & Hydraulics (6.2) - Kavi								\$ 30,142
7.6a	Hydrologic & Hydraulics Coordination								\$ 3,195
7.7	Signing & Pavement Marking (7.2) - Kavi								\$ 6,510
7.7a	Signing & Pavement Marking Coordination								\$ 540
7.8	SWPPP (8.3) - Kavi								\$ 4,520
7.8a	SWPPP Coordination								\$ 375
7.9	<b>Total Engineering Services Fee for Base Solution:</b>								<b>\$ 212,468</b>

*Amehy*  
*008*



## Amani Engineering, Inc.

• Engineers • Surveyors • Construction Managers

### LABOR RATE SCHEDULE

(Effective January 1, 2018)

<u>Category</u>	<u>Hourly Rate</u>
• Principal Engineer (P.E)	\$195.00
• Project Manager (P.E)	\$165.00
• Senior Civil Engineer (P.E.)	\$150.00
• Registered Professional Land Surveyor (R.P.L.S)	\$150.00
• Civil Engineer (P.E.)	\$140.00
• Structural Engineer (P.E.)	\$155.00
• Mechanical/ HVAC (P.E.)	\$155.00
• Electrical Engineer, (P.E.)	\$155.00
• Graduate Engineer/E.I.T.	\$105.00
• Senior Designer	\$105.00
• Designer/ Estimator/ Scheduler	\$ 90.00
• Construction Inspector	\$ 65.00 *
• Senior Construction Inspector	\$ 85.00 *
• CADD Operator	\$ 90.00
• Survey Technician	\$ 95.00
• SUE Technician	\$105.00
• Secretarial	\$ 60.00
• 4- Man Survey crew (6-hour minimum)	\$185.00
• 3- Man Survey crew (6-hour minimum)	\$160.00
• 2- Man Survey crew (6-hour minimum)	\$145.00
• GPS Instrument (6-hour minimum)	\$ 50.00
• SUE Crew w/ Vacuum Truck (8-hour minimum)	\$450.00

\* Hourly rates for Construction Inspector vary depending upon the duration of contract and the skill level.







down to earth solutions  
for your complex projects

## **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](http://www.eartheng.com)

May 15, 2018

Mr. Dan Simeone, P.E.  
Senior Project Manager  
Amani Engineering Inc  
8303 SW Frwy, Ste 600| Houston, TX 77074|  
Tel: 713.270.5700 x104

Proposal No.: P-EE1816104-G  
Sent Via E-Mail: DSimeone@AmaniEngineering.com

**FORT BEND COUNTY MOBILITY BOND PROJECT:  
TWO INTERSECTIONS:  
AT BENTON ROAD AT ROHAN ROAD AND BENTON ROAD AT A. MYERS ROAD  
FORT BEND COUNTY PRECINCT (1), RICHMOND, TX 77469**

Dear Mr. Simeone,

Earth Engineering, Inc. is pleased to present this proposal to perform geotechnical investigation for above project in Richmond, Texas.

Furnished information indicated that improvements to the intersections at Benton road at Rohan road and Benton road at A. Myers will be made to provide congestion relief.

Improvements include the addition of left-turn lanes added to the northbound and eastbound approaches at the Benton road at Rohan intersection with larger radii at the corners.

Improvements also include the addition of left-turn lanes added to the southbound and westbound approaches at the Benton road at A. Myers with larger radii at corners.

The approximate total length of the roads at both intersections is 3,000 L. FT. The total length of each intersection is 1,500 L. FT. Each segment is approximately 500 L. FT. Please see the attached image.

## SCOPE OF WORK

The scope of our services was specified based on Harris County Criteria and City of Houston Department of Public Works and Engineering as follows:

The scope of our services was specified by the client as follows:

- Cut (8) cores prior to drilling for soil samples at both intersections.
- Drilling and sampling six (6) borings to a depth of 10-feet each at the proposed intersection as shown in the attached plate.
- Drilling and sampling two (2) borings to a depth of 20-feet each at the proposed intersection as shown in the attached plate.
- 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, Unconsolidated-Undrained Triaxial test, California Bearing Ratio (CBR), and OMD Standard Compaction 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:
  - soil stratigraphy: soil encountered up to 20 feet
  - groundwater conditions and groundwater control during construction
  - 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 manhole etc.
  - classify the soils types in accordance with OSHA requirements based on the characteristics of the soils along the alignment
  - recommend the utility bedding in accordance with City of Houston specifications



- present subgrade stabilization option such as lime/fly-ash for cohesion-less soils and lime for cohesive soils
- Equivalent Single Axle Load (ESAL) calculation (Traffic counts must be provided by the client)
- 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 structures and pavement
- Incorporating all of 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 we can commence the fieldwork within two (2) to three (3) business days subsequent to our receiving your formal written authorization to proceed.

We anticipate that the field exploration and limited laboratory testing will require about 15 business days. Engineering analyses and report preparation will require approximately (20) business days. *Consequently, we anticipate our final report could be submitted within approximately seven (7) weeks subsequent to successful drilling of the borings.*

**We will work with you to meet your deadline.**



## ESTIMATED FEES

The total cost for the geotechnical study is estimated to be **\$ 22,055.00.**

<b>SERVICE DESCRIPTION</b>	<b>UNIT FEE</b>		<b>AMOUNT</b>		<b>ESTIMATED COST</b>
<b>Field Exploration</b>					
	Rate				
Mobilization/Demobilization	\$300	Mob	2	Mob	\$600.00
Drilling and Sampling ( 6 borings at 10 feet and 2 at 20 feet)	\$16	foot	100	feet	\$1,600.00
Asphlat coring 6"	\$130	each	8	each	\$1,040.00
Grouting of completed borings	\$10	foot	100	feet	\$1,000.00
Traffic Control	\$60	hour	32	hours	\$1,920.00
Field Engineer supervision and layout	\$90.00	hour	4	hours	\$360.00
Vehicle Charge	\$10.00	hour	4	hours	\$40.00
			<b>Subtotal:</b>		<b>\$6,560.00</b>
<b>Laboratory Testing</b>					
Measuring the length of core	\$10.00	test	8	tests	\$80.00
Atterberg Limits (LL, Pi's)	\$60.00	test	26	tests	\$1,560.00
Moisture Contents	\$10.00	test	34	tests	\$340.00
Percent Finer than No. 200 Sieve	\$45.00	test	6	tests	\$270.00
Unconfined Compressive Strength	\$45.00	test	4	tests	\$180.00
California Bearing Ratio (CBR)	\$180.00	test	2	tests	\$360.00
OMD Standard Compaction	\$180.00	test	2	tests	\$360.00
			<b>Subtotal:</b>		<b>\$3,150.00</b>
<b>Engineering and Report Writing</b>					
Principal Engineer, P.E.	\$180.00	hour	25	hours	\$4,500.00
Project Engineer, EIT	\$90.00	hour	80	hours	\$7,200.00
Support Personnel	\$43.00	hour	15	hours	\$645.00
			<b>Subtotal</b>		<b>\$12,345.00</b>
			<b>TOTAL</b>		<b>\$22,055.00</b>

### Notes:

1. Please note, due to the size of the drilling rig in comparison to the width of the road and since the road is only two (2) lane and mostly without shoulders, two (2) traffic controllers must be utilized at the same time.
2. 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.





## 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](mailto: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



## EARTH ENGINEERING, INC. PROFESSIONAL SERVICES AGREEMENT

**THIS AGREEMENT**, entered into on the 15<sup>th</sup> day of May 2018 by and between **Amani Engineering Inc** (hereinafter referred to as "Client") and **Earth Engineering, Inc.** a Texas Corporation (hereinafter referred to as "EEI"), is as follows:

For mutual consideration stated herein, Client engages Earth Engineering, Inc. to perform professional services as presented in our proposal number P-EE1816104-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 of 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 another 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.** The 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:** 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 \$22,055.00 or CONSULTANT'S FEE under paragraph 3, whichever is less. In no cases shall CONSULTANT be liable for punitive, special, incidental, exemplary or consequential damages.
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 the 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 of 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 the collection of amounts due, including mechanic's liens, shall not be limited by a contractual provision or other agreement that is not specifically made apart 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 his 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 the 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.**

**Amani Engineering Inc**

*Moe A. Shihadeh*

Signature

Signature

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

Print Name

Print Name

Principal - Diplomate Geotechnical Engineering

Title

Title

15<sup>th</sup> May 2018

Date

Date





# **REKHA ENGINEERING, INC.**

**CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS**

Mr. Dan Simeone, P.E.

Senior Project Manager



**Amani Engineering, Inc.**

8303 SW Frwy, Ste 600| Houston, TX 77074| Tel: 713.270.5700 x104

[DSimeone@AmaniEngineering.com](mailto:DSimeone@AmaniEngineering.com)

April 30, 2018(Rev5-2-18)

**RE: Proposal and Letter of Agreement for: Professional Land Surveying for 2017 Fort Bend County Mobility Project - Roadway Design Mobility Project - Various Intersections I-14 a) Intersection of Benton Road @ Rohan Road b) Benton Road @ A. Meyers Road – 1000' each leg (6,000 l.f.) Fort Bend County, Tx (18 ac)**

**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 for each Intersection (1000 L.F. each 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).

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.

TBPE FIRM NO. F-3712    TBPLS FIRM NO. 10133800  
5301 HOLLISTER, SUITE 190 - HOUSTON, TEXAS 77040  
PHONE: (713) 895-8080/8081 - FAX: (713) 895-7686  
Website: [www.rekhaengineering.com](http://www.rekhaengineering.com) - E-mail: [jake1@pdq.net](mailto:jake1@pdq.net)



# REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

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.

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 for each intersection is 6 weeks together.

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

1. Boundary 1a and Topographic surveys as referenced above \$ 42,000.00
2. Parcel Maps w/ Legal descriptions plus set property corners \$ 3,500.00 each

Including reimbursable expenses and no state sales tax (n.a.). 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.**

**AGREED AND ACCEPTED BY:**

By: \_\_\_\_\_

John H. English, Sr. Vice President

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"

### 2018 Hourly Rates (for RE, INC. = REKHA Engineering, Inc. REI-RE))

#### Land Surveying - 1-1-18

Principal	\$175.00/hr
Project Manager	150.00/hr
Surveyor (RPLS)	\$125.00/hr
Technician	\$95.00/hr
Secretary	\$55.00/hr
Survey Crew (Crew w/ Data Coll + Robotic Total Station w GPS)	\$130.00/hr
Survey Crew (2-Man Crew " " " )	\$155.00/hr
Permitting expediter process and services	45.00/hr

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

a. Reproduction (Out of Office)	( cost + 15%)
b. Mileage	\$ 0.65/mile
c. <u>Reproduction - In Office</u> - computer plots (D size)	6.00 per plot
d. " " " (E size)	9.00 per plot
e. Black Line and check plots for design	5.00 each
f. Mylars, Vellums and/or Sepia	20.00 each
g. Field Supplies - Survey lathes, hubs, iron rods, etc...	\$ 3.00 ea.
<u>Delivery</u> including handling by in office	35.00/del
<u>Out of Town Expenses</u> - Meal Cost per person per day	35.00/day
Airplane Flight, rent car, expenses from trip, REI, Motel, Hotel	(Cost + 10%)

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

1. In the event that payment is not made within 60 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.
2. All Fees for application fees, building fee, subdivision plat fees, HL&P (CenterPoint or others) Plan fees (\$50.00) 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 –estimated recordation review fee - \$ 400.00, Harris County plat review fee - \$ 600.00.
- 3) Set Property Corners after the survey is complete is additional & charged Hourly @ 130/hr + calculations - included
- 4) 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.

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# REKHA ENGINEERING, INC.

CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS

- 5) 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.
- 6) If this proposal is not executed after 45 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.
- 7) 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 a \$ 650.00 charge additional 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.
- 8) Client indemnifies RE, Inc. and limits the amount of liability to REKHA Engineering, Inc. for any and all civil engineering & land surveying services performed for the referenced client to twice the amount of the engineering &/or survey fee being charged per project as described on the cover sheet of this proposal. N.A.
- 9) Classification of completion of projects and invoicing are as follows: a) 50% is Preliminary Engineering, b) 90% is Final Engineering and submittals to agencies - 100% is approvals from agencies for civil engineering. Agency comments being 3 months after the plans has been issued for review shall be hourly as per this Exhibit A.
- 10) Note that others will provide a title report 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". (by REKHA)
- 11) 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 unless they specifically request REKHA (REI) to perform those services.
- 14) 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.
- 15) 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.
- 16) 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 month from the date of the referenced proposal is executed.

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17) 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.

Description	Proj Mgr	RPLS	Tech	Survey Crew	Admin	Total
Proj Mangement	4	4	4		4	\$1,700.00
Data Collection & Review	2	12	16		2	\$3,430.00
Field Right-of-way	2	6	6	40		\$6,820.00
Field Topographic	2	6	6	40		\$6,820.00
Utility Investigation	2	4	12			\$1,940.00
Abstracting	2	6	12			\$2,190.00
Boundary 1A Map	4	8	32	4		\$5,160.00
Topographic Cat 6 Map	4	8	36	4		\$5,540.00
Control Map	4	8	20	4		\$4,020.00
Final Review & Coord	4	16	8		4	\$3,580.00
total hours	30	78	152	92	10	\$41,200.00
rate	\$ 150/hr	\$ 125/hr	\$95.00	\$ 130/hr	\$55.00	
Total Fee	\$4,500.00	\$9,750.00	\$14,440.00	\$11,960.00	\$550.00	\$41,200.00
expenses						\$800.00
						\$42,000.00

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# Kavi Consulting, Inc.

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June 18, 2018

Mahesh Dutta, P.E., CFM  
Vice President  
Amani Engineering, Inc.  
8303 Southwest Freeway, Suite 600  
Houston, Texas 77074

RE: Intersection Improvements for Benton Rd@A.Meyers Rd and Benton Rd @ Rohan Rd for FBC mobility projects.

Dear Mr. Mahesh:

Please find the attached proposal for sub consulting services (Drainage, SWPPP& Signing and Pavement Markings) for above referenced projects.

Fee:	
Phase I:	\$22,277.75
Design Phase:	\$20,544.25
Construction Phase (Time and Material-Not to Exceed):	\$ 3,380.00

Total fee for both Phase 1, Design Phase and Construction Phase Services is: \$ 46,152.00

Please let us know if you need any additional information.

We truly appreciate and looking forward to work with you.

Sincerely,  
Vijaya Rapolu, P.E.  
Kavi Consulting, Inc.

Encl:

Phase 1 LOE  
Design Phase LOE  
Construction Phase LOE

1011 Highway 6S, # 307  
Houston TX-77077  
Ph: 281.772.9643  
E-Mail: [rapolu.vijaya@gmail.com](mailto:rapolu.vijaya@gmail.com)

**FEE PROPOSAL FOR FORT BEND COUNTY MOBILITY PROJECTS**  
**FORT BEND COUNTY**  
**BENTON RD @ A.MEYERS RD AND BENTON RD @ ROHAN RD**

**PROJECT NAME: INTERSECTION IMPROVEMENTS FOR BENTON RD@ A.MEYERS RD AND BENTON RD@ROHAN RD PER PHASE**

Description	Principal Hours	Project Mgr/Eng Hours	Project Engineer Hours	Senior Designer Hours	CADD Tech III Hours	CADD Tech III Hours	Admin	Total Hours	Total Cost
Basic Services									
Monthly Progress Meetings		2	2					4	\$530.00
<b>Phase I</b>									
Define Reported Problem		1	1					2	\$265.00
Site Visits		1	2					3	\$385.00
Document Site Photos		1	1					2	\$265.00
Project and Utility Research									
<b>Storm Conveyance Facilities</b>									
Coordination with Drainage District									\$0.00
Review of existing Studies		1	2					3	\$385.00
Prepare the Drainage Areas		2	4		6			12	\$1,280.00
Perform the existing hydrology		1	4					5	\$625.00
Evaluate the existing hydraulics		1	5					6	\$745.00
Perform the proposed hydrology		1	4					5	\$625.00
Evaluate the proposed hydraulics		1	5					6	\$745.00
Propose the solutions to keep the HGL below banks		2	4		2			8	\$940.00
Prepare the Report		1	3				2	6	\$635.00
Exhibit Preparation		1	2		6			9	\$895.00
Cost Estimates		1	2				2	5	\$515.00
<b>Cross Culverts</b>									
Review as built plans for the culverts		1	2					3	\$385.00
Prepare the drainage area for the culvert		1	4		6			11	\$1,135.00
Perform the Hydrology (Hydrograph Preparation)		1	4					5	\$625.00
Evaluate the existing conditions (HY-8)		1	5					6	\$745.00
Identify the problem areas		1	4					5	\$625.00
Evaluate the proposed conditions (HY-8)		1	5					6	\$745.00
Recommend the solutions		1	4		2			7	\$795.00
Prepare the report		1	3				2	6	\$635.00
Exhibit Preparation		1	1		6			8	\$775.00
Cost Estimates		1	1				2	4	\$395.00
<b>Detention Mitigation</b>									
Coordination with Drainage District								0	\$0.00
Hydrology of Existing Conditions		1	5					6	\$745.00
(Hydrograph Computations)								0	\$0.00



**FEE PROPOSAL FOR FORT BEND COUNTY MOBILITY PROJECTS**  
**FORT BEND COUNTY**  
**BENTON RD @ A.MEYERS RD AND BENTON RD @ ROHAN RD**

**PROJECT NAME: INTERSECTION IMPROVEMENTS FOR BENTON RD@ A.MEYERS RD AND BENTON RD@ROHAN RD PER PHASE**

Hydrology of Proposed Conditions		1	5					6	\$745.00
(Hydrograph Computations)								0	\$0.00
Determine the impact		1	2					3	\$385.00
Propose the mitigation solution for the impact		1	2					3	\$385.00
Evaluate in the watershed level hydrology with detention								0	\$0.00
Identify any impacts		1	2					3	\$385.00
Solutions for any impact		1	2					3	\$385.00
Prepare the Report		1	2				2	5	\$515.00
Cost Estimates		1	1				2	4	\$395.00
Exhibit Preparation		1	1		4			6	\$605.00
Quantity and Construction Cost Estimate	1	2	6		5			14	\$1,600.00
Totals	1	38	102	0	37	0	12	190	
Raw Salary Rates w/3x multiplier	\$165.00	\$145.00	\$120.00	\$95.00	\$85.00	\$70.00	\$65.00		
Subtotal Labor Costs	\$165.00	\$5,510.00	\$12,240.00	\$0.00	\$3,145.00	\$0.00	\$780.00		\$21,840.00

Direct (Reimbursable) Costs	Unit	Qty	Unit cost	Total
Deliveries/Pickup	per trip	2	\$30.00	\$60.00
Mileage	mile	250	\$0.61	\$152.50
Large format copies	per SF			\$0.00
Bond Plots	Each		\$5.40	\$0.00
Mylar Plots	Each		\$18.00	\$0.00
8.5x11 B/W copies	Each	250	\$0.20	\$50.00
11x17 B/W copies	Each	125	\$0.33	\$41.25
8.5x 11 color copies	Each	40	\$0.85	\$34.00
11x17 color copies	Each	40	\$1.25	\$50.00
Subtotal Reimbursable costs				\$387.75

<b>Total Labor &amp; Direct Cost</b>	<b>\$22,227.75</b>
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**FEE PROPOSAL FOR FORT BEND COUNTY MOBILITY PROJECTS**  
**FORT BEND COUNTY**  
**BENTON RD @ A.MEYERS RD AND BENTON RD @ ROHAN RD**

**PROJECT NAME: INTERSECTION IMPROVEMENTS FOR BENTON RD@ A.MEYERS RD AND BENTON RD@ROHAN RD DESIGN PHASE**

Description	Principal Hours	Project Mgr/Eng Hours	Project Engineer Hours	Senior Designer Hours	CADD Tech III Hours	CADD Tech III Hours	Admin	Total Hours	Total Cost
Basic Services									
Monthly Progress Meetings		2	2					4	\$530.00
Drawings									
Drainage Area Map Sheet	1	2	4		8			15	\$1,615.00
H&H Calculations sheets	1	2	8		12			23	\$2,435.00
Culvert Layout Sheet	1	2	8		12			23	\$2,435.00
Storm Details	1	3	6		10			20	\$2,170.00
SWPPP Layout	1	2	8		24			35	\$3,455.00
SWPPP Details		1	2		8			11	\$1,065.00
Signing and Pavement Markings	2	4	24		32			62	\$6,510.00
Tree Protection not included									
Wetlands not included									
ESA not included									
Geotechnical Inv. not included									
Utility/Pipeline Relocation/ Adjustments not included									
Totals	7	18	62	0	106	0	0	193	
Subtotal Labor Costs	\$1,155.00	\$2,610.00	\$7,440.00	\$0.00	\$9,010.00	\$0.00	\$0.00		\$20,215.00

Direct (Reimbursable) Costs	Unit	Qty	Unit cost	Total
Deliveries/Pickup	per trip	2	\$30.00	\$60.00
Mileage	mile	250	\$0.61	\$152.50
Large format copies	per SF			\$0.00
Bond Plots	Each		\$5.40	\$0.00
Mylar Plots	Each		\$18.00	\$0.00
8.5x11 B/W copies	Each		\$0.20	\$0.00
11x17 B/W copies	Each	100	\$0.33	\$33.00
8.5x 11 color copies	Each	25	\$0.85	\$21.25
11x17 color copies	Each	50	\$1.25	\$62.50
Subtotal Reimbursable costs				\$329.25

**Total Labor & Direct Cost**

**\$20,544.25**



**FEE PROPOSAL FOR FORT BEND COUNTY MOBILITY PROJECTS**  
**FORT BEND COUNTY**  
**BENTON RD @ A.MEYERS RD AND BENTON RD @ ROHAN RD**

**PROJECT NAME: INTERSECTION IMPROVEMENTS FOR BENTON RD@ A.MEYERS RD AND BENTON RD@ROHAN RD CONSTRUCTION PHASE SERVICES**

Description	Principal Hours	Project Mgr/Eng Hours	Project Engineer Hours	Senior Designer Hours	CADD Tech III Hours	CADD Tech III Hours	Admin	Total Hours	Total Cost
Construction Phase Services									
(Drainage, Signing and Pavement and SWPPP)									
Review and Respond to Contractor Submittals and Shop Drawings		2	6		8			16	\$1,690.00
Respond to Request for Information		2	6		8			16	\$1,690.00
Tree Protection not included									
Wetlands not included									
ESA not included									
Geotechnical Inv. not included									
Utility/Pipeline Relocation/ Adjustments not included									
Totals	0	4	12	0	16	0	0	32	
Subtotal Labor Costs	\$0.00	\$580.00	\$1,440.00	\$0.00	\$1,360.00	\$0.00	\$0.00		\$3,380.00

Direct (Reimbursable) Costs	Unit	Qty	Unit cost	Total
Deliveries/Pickup	per trip		\$30.00	\$0.00
Mileage	mile		\$0.61	\$0.00
Large format copies	per SF			\$0.00
Bond Plots	Each		\$5.40	\$0.00
Mylar Plots	Each		\$18.00	\$0.00
8.5x11 B/W copies	Each		\$0.20	\$0.00
11x17 B/W copies	Each		\$0.33	\$0.00
8.5x 11 color copies	Each		\$0.85	\$0.00
11x17 color copies	Each		\$1.25	\$0.00
Subtotal Reimbursable costs				\$0.00

**Total Labor & Direct Cost** **\$3,380.00**

## **SCOPE OF SERVICES**

### **INTERSECTION IMPROVEMENTS FOR BENTON RD @ A. MEYERS RD AND BENTON RD @ ROHAN RD**

#### **Phase I**

Attend the initial meeting with County, BBI and Prime and discuss the project details. Perform the site visits and collect the information pertinent to the project. Obtain the utility information from Amani Engineering, Inc. (Amani) to review and evaluate the current conditions.

Schedule a meeting with Fort Bend County Drainage District and discuss the project scope and identify the drainage requirements.

After the meeting, begin the storm conveyance facilities, cross culverts and detention analysis that include:

#### **Storm Conveyance Facilities:**

1. Establish the drainage boundaries and prepare the drainage area map.
2. Existing hydrology for both design and extreme(100-year) events.
3. Existing hydraulic analysis of storm conveyance for design and extreme event
4. Proposed hydrology for both design and extreme events
5. Proposed hydraulic for both design and extreme events
6. Identify the problems areas and recommend the solutions to keep HGL below banks for design conditions
7. Prepare the report for proposed solutions.

#### **Cross Culverts:**

1. Review any existing as built plans for the culverts
2. Establish the drainage boundaries and create the drainage area map
3. Perform the hydrology for existing conditions for both design and extreme events
4. Evaluate the existing hydraulics for the culverts (HY-8)
5. Perform the hydrology for proposed conditions for design and extreme events
6. Evaluate the proposed hydraulics.
7. Recommend the solution for identified problems
8. Prepare the reports with the recommended solutions.

**Detention Mitigation:**

1. Perform the existing hydrology for 100-year event
2. Perform the proposed hydrology for 100-year event
3. Compute the required detention volume
4. Identify the mitigation locations within the ROW
5. If available space is sufficient to mitigate accommodate the storage
6. Prepare the report with proposed detention information
7. Quantity and Cost estimate for overall project during PER.

Note: Impact analysis for watershed will not be performed as part of the current scope to identify any impact due to proposed project.

**Phase II (Design Phase)**

1. Prepare the Drainage Area Maps for two project locations
2. Prepare the sheets for H&H calculations for two locations
3. Prepare the Culvert Layout sheets for two project locations
4. Prepare Storm Details sheets
5. Prepare the cost estimate for drainage facilities and provide the information to Prime
6. Prepare SWPPP Layout and details
7. Prepare pavement markings and signing sheets

**Phase III (Construction Phase Services for Drainage, Signing and Pavement Markings and SWPPP)**

1. Review and Respond to Contractor submittals and Shop Drawings
2. Respond to Requests for Information

### Intersection Improvements at Benton Rd @ A. Meyers Rd and Benton Rd @ Rohan Rd

ID	Task Name	Duration	Start	Finish	Pred.	Resource Names		'18	'19	'20	2019 '21
1	Phase-I Preliminary Design Phase	41 days	Fri 6/1/18	Fri 7/27/18							
2	Project Initiation	3 days	Fri 6/1/18	Tue 6/5/18							
3	Storm Conveyance Facilities	12 days	Wed 6/6/18	Thu 6/21/18	2						
4	Cross Culverts	11 days	Mon 6/11/18	Mon 6/25/18							
5	Detention Mitigation	14 days	Wed 6/13/18	Mon 7/2/18							
6	Report Submittal	1 day	Mon 7/2/18	Mon 7/2/18							
7	PHASE II - DESIGN SERVICES	29 days	Tue 7/3/18	Fri 8/10/18	6						
8	Initial Tasks	1 day	Tue 7/3/18	Tue 7/3/18	6						
9	Drainage Area Maps	3 days	Wed 7/4/18	Fri 7/6/18	8						
10	H&H Computations Sheets	4 days	Mon 7/9/18	Thu 7/12/18	9						
11	Culvert Layout Sheets	5 days	Fri 7/13/18	Thu 7/19/18	10						
12	Pavement Markings & Signing	5 days	Fri 7/20/18	Thu 7/26/18	11						
13	Storm Details	3 days	Fri 7/27/18	Tue 7/31/18	12						
14	SWPPP Layout and Details	3 days	Wed 8/1/18	Fri 8/3/18	13						
15	Internal Review	4 days	Mon 8/6/18	Thu 8/9/18	14						
16	1st Submittal	1 day	Fri 8/10/18	Fri 8/10/18	15						
17	Comments from BBI/County	14 days	Mon 8/13/18	Thu 8/30/18	16						
18	Address Comments	10 days	Fri 8/31/18	Thu 9/13/18	17						
19	Internal Review	2 days	Fri 9/14/18	Mon 9/17/18	18						
20	Final Submittal	1 day	Tue 9/18/18	Tue 9/18/18	19						

Project: Project Schedule  
Date: Sun 5/6/18

Task		Project Summary		Inactive Summary		Manual Summary		External Milestone	
Split		External Tasks		Manual Task		Start-only		Progress	
Milestone		External Milestone		Duration-only		Finish-only		Deadline	
Summary		Inactive Milestone		Manual Summary Rollup		External Tasks			



Title	Rate (\$)
Principal	165
Project Manager	145
Project Engineer	120
Senior Designer	95
CADD Tech III	85
Admin	65

# CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.  
Complete Nos. 1, 2, 3, 5, and 6 if there are no interested parties.

## OFFICE USE ONLY CERTIFICATION OF FILING

**1 Name of business entity filing form, and the city, state and country of the business entity's place of business.**

Amani Engineering, Inc.  
Houston, TX United States

Certificate Number:  
2018-379766

Date Filed:  
07/13/2018

Date Acknowledged:

**2 Name of governmental entity or state agency that is a party to the contract for which the form is being filed.**

Fort Bend County

**3 Provide the identification number used by the governmental entity or state agency to track or identify the contract, and provide a description of the services, goods, or other property to be provided under the contract.**

17114 [SOQ 14-025]

Professional Engineering Services for the improvements to the intersections at Benton Rod at A Myers and Benton Road at Rohan Road

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary

**5 Check only if there is NO Interested Party.**



**6 UNSWORN DECLARATION**

My name is \_\_\_\_\_, and my date of birth is \_\_\_\_\_.

My address is \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_.  
(street) (city) (state) (zip code) (country)

I declare under penalty of perjury that the foregoing is true and correct.

Executed in \_\_\_\_\_ County, State of \_\_\_\_\_, on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.  
(month) (year)

\_\_\_\_\_  
Signature of authorized agent of contracting business entity  
(Declarant)

# CERTIFICATE OF INTERESTED PARTIES

**FORM 1295**

1 of 1

Complete Nos. 1 - 4 and 6 if there are interested parties.  
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07/13/2018

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Fort Bend County

**Date Acknowledged:**  
07/24/2018

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Signature of authorized agent of contracting business entity  
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