

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 HJ Consulting, 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 construction of neighborhood roads within existing right of way with open ditches in Arcola, Texas, including Honey Grove Avenue, Rosen Avenue, Pinedale Avenue and Manor Avenue under Project Number 17120x of 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 surveying, right-of-way mapping, geotechnical investigations, roadway design, drainage design, traffic control design and utility coordination for the project as described Scope of Services 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 forty-seven thousand eight hundred ninety-eight dollars and no/100 (\$247,898.00) 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 forty-seven thousand eight hundred ninety-eight dollars and no/100 (\$247,898.00) 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 forty-seven thousand eight hundred ninety-eight dollars and no/100 (\$247,898.00).

### **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:	HJ Consulting, Inc. Attn: Harish Jajoo, P.E., CFM, President 4771 Sweetwater Boulevard, #254 Sugar Land, Texas 77479

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.

[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

HJ CONSULTING, INC

\_\_\_\_\_  
Robert E. Hebert, County Judge

Harish Jajoo  
Harish Jajoo, P.E., CFM, President

\_\_\_\_\_  
Date

8-13-18  
Date

ATTEST:

\_\_\_\_\_  
Laura Richard, County Clerk

APPROVED:

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

\_\_\_\_\_  
Robert Ed Sturdivant, County Auditor

# EXHIBIT A



August 2, 2018

## **“EXHIBIT A” – Scope of Services**

### **Various Roads – Arcola**

Honey Grove Road (Masterson to Approx. 600' South), Rosen Ave (Honey Grove to Dallas), Pinedale Ave (Honey Grove to Dallas), and Manor Ave (Honey Grove to Dallas), Precinct 1

### **FBC Project #**

Fort Bend County has requested a proposal to provide professional engineering services (Preliminary Engineering Phase, Design Phase, and Bid Phase services) for the design and construction/reconstruction of the existing narrow 2-lane asphalt road or dirt road with roadside ditches to proposed 2-lane asphalt road with open ditches, utilizing the latest FBC standards.

### **PROJECT LIMITS AND DETAILS:**

1. The proposed Honey Grove Road within the project limits is undeveloped narrow dirt road. The ROW for the project limits is to be verified. The road will be constructed to accommodate 2 lanes of traffic.
2. The proposed Rosen Ave within the project limits is undeveloped narrow gravel and dirt road with roadside ditches. The ROW for the project limits is to be verified. The road will be reconstructed to accommodate 2 lanes of traffic.
3. The proposed Pinedale Ave within the project limits is undeveloped narrow gravel and dirt road with roadside ditches. The ROW for the project limits is to be verified. The road will be reconstructed to accommodate 2 lanes of traffic.
4. The proposed Manor Ave within the project limits is undeveloped narrow asphalt and dirt road with roadside ditches. The ROW for the project limits is to be verified. The road will be reconstructed to accommodate 2 lanes of traffic
5. The existing roadside ditches outfall to the ditches on Dallas Street located within the project limits. The proposed storm system (roadside ditches) will be designed to accommodate drainage from the proposed roadway.
6. There are no signalized intersections within the project limits. All the cross streets present within the project limits do not have any Stop or Yield Signs.

### **Civil Engineers | Construction Managers**

4771 Sweetwater Boulevard, Suite 254, Sugar Land, Texas 77479  
832-338-3202 (C) | 832-553-3103 (F) | [www.hjconsultinginc.com](http://www.hjconsultinginc.com)

**Various Roads – Arcola, FBC Precinct 1**

Proposal for Professional Engineering Services

August 2, 2018

Page 2 of 10

---

7. It appears that the existing roadway is within the parcels owned by State of Texas/TxDOT. Coordination will be required from TxDOT for the proposed project.

**ROADWAY ALIGNMENT:**

The proposed Honey Grove Road will run North to South, whereas the other streets within the project project will run East to West with no (0) horizontal curve along the corridor. Right of way restrictions posed by any structures will be considered for the design. Sight triangles will be developed at all the existing intersections.

**BASIC SERVICES:**

***PRELIMINARY ENGINEERING PHASE:***

The Preliminary Engineering Phase Letter Report shall serve as a summary document that incorporates the recommendations from the supporting investigative reports, results from working meeting 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 primary goals of Preliminary Engineering Phase are:**

1. Establish a typical cross section and cross sections in non-standard areas
2. Determine drainage system needs (drainage report and/or preliminary roadway drainage design)
3. Positively determine right-of-way acquisition needs
4. Determine potential conflicts with existing facilities
5. Identify critical path items
6. Identify problem areas and potential resolution(s)
7. Determine permit and regulatory requirements
8. Prepare a reasonable construction cost estimate
9. Prepare a "30 percent" plan set, consisting of all existing features (seen and unseen) shown in plan and profile, and proposed improvements in plan only with minor annotations.

**The Preliminary Engineering Phase includes, but not limited to the following major tasks:**

- Review and Research existing conditions from the field visits and existing record drawings (to be confirmed with the topographic survey)
- Send Utility requests to the Utility companies and prepare Preliminary Utility Conflict Table
- Obtain Record Drawings from other entities as required for the project
- Creating existing Base maps
- Initiate Roadway Geometry
- Approved Geotechnical Reports
- Signed and Sealed Topographic Survey
- Exhibits and Drawings
- Construction Cost Estimate
- Coordination with sub-consultants
- Drainage Analysis (Detention Pond Requirements)

We will follow the latest Fort Bend County Design Guidelines and Standards for this project.

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.

HJ will coordinate with sub-consultants as necessary throughout the project.

The Preliminary Engineering Phase shall include a Client Presentation meeting.

At the Client Presentation meeting, the Consultant shall present the status of the of the project to include, but not limited to, Survey/Right-of-Way Maps, Roadway Alignment, Geotechnical, Drainage Concept, Utility Conflicts, and any Variance Requests if required. Consultant shall provide preliminary schematics and exhibits to supports discussions to solicit input from Fort Bend County on decision items.

A 90% working meeting will be scheduled, if required. At the 90% working meeting, the Consultant shall present the revisions from the Client Presentation meeting as well as the final working draft of the Preliminary Engineering Phase Letter Report including exhibits, supporting reports, and final recommendations. Any remaining issues identified during the Consultant's work effort to get to this project stage that require decision from Fort Bend County should be presented at this meeting for confirmation

prior to finalizing the Preliminary Engineering Report such that approval can be granted upon report submittal.

**Exhibits/Attachments shall include:**

- **Aerial Exhibit**
  - Provide an exhibit that shows the project limits and surrounding features. Identify notable features of interest, including drainage channels, floodplains, pipelines, roadways, future roadway alignments shown on the Fort Bend County's Major Thoroughfare Plan, latest available aerial photographs, and developments.
  
- **Schematic Layout of Roadway**
  - Provide a plan view layout with sufficient detail to ensure that the final design can be constructed without any major issues. The schematic layout shall be at a scale of 1" = 40' on roll plot. The schematic should show the pavement marking concept so that traffic movements can be considered and reviewed during the Preliminary Engineering 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.
  
- **Cost Estimates**
  - Provide a preliminary construction cost estimate for the final recommendation provided in the 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:
  
- **Level D SUE**
  - Identify all existing utilities within the existing and proposed rights-of-way. Provide list of existing utilities with owner and contact information. Meet with the utility companies and provide information and schematics as necessary.
  
  - Identify major utilities that will potentially require relocation. Major utilities are defined pipelines, concrete incased conduits, or other utilities of this nature. Overhead power lines, small gas service lines and other lines other line of this nature as not a concern. Provide a table of the existing utilities. The table shall include ID number for the potential conflicts, stations at the left right-of-way, the centerline, and right-of-way, the owner of the utility, contact name, address,

phone number, and email address, any notes such as it may be in possible conflict. The table shall also include clearances from overhead or underground utilities to the proposed roadway features noting utility diameters and clearances from the utility to proposed feature (depth top utility to proposed finished grade elevation).

- Identify any utilities that are within dedicated easements that will be within the proposed right-of-way.

**Survey Scope of Services:**

1. Establish survey control and benchmarks at intervals not to exceed 1000 feet along the confirmed alignment. Horizontal locations shall be based on NAD '83 Texas Coordinate System. Elevations shall be based on NAVD '88, 2001 Adjustment. Locate existing property monumentation along the route in order to reasonably determine the location of the subdivision lines and existing right-of-way. Prepare a Control Map Sheet showing the primary survey control on the project and approximate location of the existing right-of-way.
2. Notify the One Call Utility Location Center to provide utility marking along the site. Request utility maps from CenterPoint Energy and the municipal engineer for the City of Arcola. Perform the topographic survey with the limits being from Honey Grove Avenue to Dallas Avenue along Rosen, Pinedale and Manor Avenues, and only 615 linear feet along Honey Grove Ave measured from Masterson Road towards Pinedale Avenue. The width of the route survey shall be the existing right-of-way and approximately 20 feet beyond on both sides. Elevations shall be determined by taking cross sections at 100-foot intervals along the route and for intersecting streets, sections shall 50 feet past the centerline intersection. The route survey shall include all visible and apparent improvements, trees, and landscaping within the specified limits and any utility markings or flagging provided by the utility companies within 48 hours of the One Call notification. The deliverables shall be a background route survey map with topographic elevations in AutoCAD format, prepared to be plotted at a scale of 1" = 40', an ascii file of the points collected, and a PDF of the route survey.

The preparation of any documents which might be used for the acquisition of additional right-of-way or specific easements would be outside the scope of this proposal and would constitute additional services.

**Geotechnical Scope of Services:**

- Perform a desktop review of the existence of surface faults in the area that may impact the proposed construction.
- Drill and sample a total of 8 geotechnical borings, spaced at approximately 500 feet at alternating directions, to a depth of 10 feet beneath the road surface within the stretch of the proposed roadway improvements.
- Drill and sample a total of 4 geotechnical borings, spaced at road intersection and drainage features, to a depth of 15 feet beneath the surface within the stretch of the proposed improvements for utilities.
- Obtain both disturbed and relatively undisturbed samples from the borings with continuous samples being taken from the ground surface to a depth of 15 feet and intermittently thereafter.
- Measure the depth to groundwater during drilling, approximately 15 minutes after the water is initially encountered, as applicable, and after the completion of drilling.
- Measure the depth to groundwater during drilling, approximately 15 minutes after the water is initially encountered, as applicable, and after the completion of drilling.
- Backfill the borings with cement grout for the full depth of each boring after the completion of the groundwater measurements.
- Install 1 piezometer at a location near a utility within the project area and will be determined prior to the drilling activities. The piezometer will be installed to the maximum depth of 30 feet beneath the pavement surface.
- Measure groundwater levels in the piezometer at 1 day, and 1 month after the installation of the piezometers.
- Close and cap/plug the piezometer after the completion of the water level measurements in accordance with the guidelines of the TCEQ.
- Perform geotechnical laboratory tests on soil samples recovered during drilling in order to determine the engineering properties of the site subsurface soils. Laboratory testing will include: Atterberg limits tests, moisture content tests, percent soil finer than the No. 200 sieve tests, unconfined compression tests, and density of soils. Soil classification will be performed in accordance with the guidelines of ASTM D 2487 and ASTM D 2488.
- Characterize the site subsoil and groundwater conditions.
- Prepare boring logs based upon visual soil classifications and the results of laboratory tests using “gINT” LogWriter software. Soil profiles will also be prepared and included in the report.
- Perform engineering analyses for the purpose of developing and providing recommendations for the design and construction of the pavement as well as stabilization of the pavement subgrade soils. Perform engineering analyses as

necessary to develop recommendations pertaining to dewatering requirements for excavations, trench shoring and bracing requirements, OSHA soil type classifications pertinent to trench shoring and bracing design, and City of Houston utility excavation/bedding/backfill requirements. A trench safety report will also be prepared and provided separately.

- Prepare a draft report of the geotechnical investigation for the client's and FB County review.
- Prepare a final report of the geotechnical investigation that presents the data, finding, and recommendations and addresses the client's and County review comments. Along with the final report, an electronic file (pdf file) of the report will also be submitted to the client.

***DESIGN PHASE:***

The design phase of the project shall consist of the preparation of completely approved construction documents that reflect the approved Preliminary Engineering Report.

The Design shall build upon the framework identified in the Preliminary Engineering Report and include roadway design, profiles, drainage system and appurtenances, details and the bid documents necessary for a complete design review. The submittal shall be considered final and ready for construction, barring minor comments from Fort Bend County.

The Design Submittal shall address all comments from the Preliminary Engineering Phase of the project. The Design Submittal shall include the submittal of the construction ready plans on 11"x17", the project manual, final utility conflict table, and a final cost estimate in accordance with FBCED requirements. The design submittal includes the following milestones:

- **70% Submittal (1<sup>st</sup> Submittal):** The submittal shall consist of:
  - Address 30% Comments
  - Coversheet
  - Proposed Typical Sections
  - Overall Project Layout
  - Survey Control Map
  - Drainage Area Map
  - Hydraulic Calculations
  - Plan and Profile
  - Traffic Control Plan

- Storm Water Pollution Prevention Plan
- Specifications Table of Contents
- Spreadsheet based Bid Form with Estimated Unit and Total Costs
- Three copies of 70% Plans on 11"x17" Sheets
  
- **95% Submittal (2<sup>nd</sup> Submittal):** The submittal shall consist of:
  - Address 70% Comments
  - Bid Ready (Not Sealed)
  - General Notes
  - Cross Sections (100 foot intervals w/earthwork calcs)
  - Signage and Pavement Marking Plans
  - Project Manual with Bid Form, Specification Table of Contents, Special Specifications or Conditions, and Contract Documents Excluded
  - Three copies of 95% Plans on 22"x34" Sheets with Electronic PDF files, and KMZ file of existing conditions and current design
  
- **Final Submittal:** The submittal shall consist of:
  - Address 95% comments
  - Project Manual in Adobe Acrobat with Administrative Documents, Bid Form, Sealed Specification Table of Contents, and Applicable Specifications and Documents

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

- Meet with the utility companies and provide information and plans as necessary.
- Provide any documentation as necessary and assist Fort Bend County into entering an agreement with the utility companies for the relocation of the facility.
- Obtain approval from the Utility Section for all request made by utility companies prior to implementing changes.

**Additional Considerations for the Design Phase are:**

1. These services shall be performed in accordance with the latest Fort Bend County Design Guidelines.

2. The pavement elevation shall be set in accordance with the Fort Bend County Guidelines, or from coordination with FBCED if there are any special circumstances.
3. The pavement section shall be designed in accordance with the Guidelines. The results of the coring tests will be utilized to verify that the existing concrete pavement meets the Fort Bend County guidelines.
4. All the CAD work will follow Fort Bend County design standards.
5. Standard Sheets per Fort Bend County as provided in the website.
6. Any public utilities in conflict with the road construction will be adjusted/relocated in this phase.

**Traffic Control Plans (TCP):**

The Traffic Control Plans will be prepared per Fort Bend County Standards and per the latest Texas Manual on Uniform Traffic Control Devices.

As the project anticipates for construction of the new concrete pavement over existing pavement, the Traffic control plan can be phased to use the existing pavement for one-way traffic.

**Storm Water Pollution Prevention Plans (SWPPP):**

The Storm Water Pollution Prevention Plans will be prepared per Fort Bend County Standards and will follow TPDES General Permit # TXR150000 requirements.

1. Prepare the drawings based on Fort Bend County Criteria.
2. Prepare the SWPPP written plan including two Notices of Intent (NOI), two Notices on Termination (NOT), and two Construction Site Notices as/if required in accordance with the current Texas Commission on Environmental Quality, TPDES General Permit for storm water discharges associated with construction activities.

***BID PHASE (To Be Billed as Time & Material):***

The bid phase of the project shall consist of submitting final drawings (11x17) and documents, attending pre-bid meeting, answering questions from the bidders,

preparation of addenda, preparation of bid tabs, review for unbalanced bids and recommendation of award of the project. This task will include submitting CDs with all of Bid Documents after the project has been awarded.

***CONSTRUCTION PHASE (To Be Billed as Time & Material):***

The construction phase shall consist of attending Pre-Construction and Progress Meetings (when requested by FBC). The engineer will review and respond to Submittals, RFIs, RFPs and Change Orders as required. Substantial and Final Completion Walk-Thru and Punch List and Record Drawings will also be provided as required by Fort Bend County.



"EXHIBIT C" - Compensation for Professional Services

Project Name: Various Roads - Arcola

Project Limits: Honey Grove Road, Rosen Ave, Pinedale Ave And Manor Ave

FBC Project #

Construction Cost Estimate: \$ 1,685,200.00

BASIC SERVICES		
1	Preliminary Design Phase	\$ 45,548.00
2	Final Design Phase	\$ 145,277.00
3	Bid & Construction Phase	\$ 29,893.00
Sub-Total Basic Services (1-3):		\$ 220,718.00
ADDITIONAL SERVICES		
4	Survey	
	Establish Survey Control and Benchmarks	\$ 2,500.00
	Route Survey	\$ 16,700.00
		\$ 19,200.00
5	Geotechnical	
	Geotechnical Investigation	\$ 7,980.00
		\$ 7,980.00
Sub-Total Additional Services (4-5):		\$ 27,180.00
TOTAL SERVICES (BASIC & ADDITIONAL):		\$ 247,898.00



**VARIOUS STREETS - ARCOLA**  
**HONEY GROVE ROAD, ROSEN AVE, PINEDALE AVE AND MANOR AVE**  
**FBC PROJECT#**  
**HJ CONSULTING, INC.**  
**LEVEL OF EFFORT FOR PRELIMINARY DESIGN PHASE, AUGUST 2018**

8/1/2018

TASK	TASK DESCRIPTION	LEVEL OF EFFORT (PRELIMINARY DESIGN PHASE)										Total		
		No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Senior Designer	Graduate Engineer	Designer	CAD Technician	Admin		ESTIMATED HOURS	
<b>PRELIMINARY ENGINEERING</b>														
1	Key Maps, Vicinity Maps and Other Maps			1	2	3					6		\$	993.00
2	Narrative			1		4					12		\$	1,917.00
2.1	Introduction, Limits, Purpose and Scope			1		3					6		\$	1,011.00
2.2	Existing Conditions			2		6					8		\$	1,698.00
2.2	Proposed Improvements			2		8					12		\$	2,262.00
3	Right of Way Acquisition Needs			2	1	2							\$	720.00
4	Identify Potential Conflicts with Facilities and Utilities			1		4							\$	645.00
5	Utility Conflicts List			1		2					4		\$	729.00
5.1	Public water and sewer Private utilities and pipelines			1		2					4		\$	729.00
6	Identify Critical Path Items			2									\$	330.00
6.1	Level 1 schedule with Design, ROW, Bidding, and Construction					2					4		\$	564.00
7	Identify Problem Areas and Potential Resolution			1		3					6		\$	1,011.00
8	Identify Permit and Regulatory Requirements			1		3					6		\$	1,011.00
8.1	Environmental, FEMA, others as needed			1		1					1		\$	285.00
9	Construction Cost Estimate			1	2	4					8		\$	1,593.00
10	Drainage Analysis												\$	
10.1	Drainage Design			1	3	6					12		\$	3,531.00
10.2	Drainage Analysis Report			1	3	6					12		\$	2,307.00



**VARIOUS STREETS - ARCOLA**  
**HONEY GROVE ROAD, ROSEN AVE, PINEDALE AVE AND MANOR AVE**  
**FBC PROJECT#**  
**HJ CONSULTING, INC.**  
**LEVEL OF EFFORT FOR PRELIMINARY DESIGN PHASE, AUGUST 2018**

8/1/2018

Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Senior Designer	Graduate Engineer	Designer	CAD Technician	Admin	Total
Raw Labor Rates		\$195.00	\$165.00	\$150.00	\$120.00	\$105.00	\$81.00	\$80.00	\$78.00	\$60.00	
<b>LEVEL OF EFFORT (PRELIMINARY DESIGN PHASE)</b>											
<b>TASK</b>	<b>TASK DESCRIPTION</b>	<b>ESTIMATED HOURS</b>									
<b>11</b>	<b>30% Plans (11"x17" Sheets)</b>										\$ -
11.1	Existing Typical Section	1	1	1	3			6	6	6	\$ 1,623.00
11.2	Proposed Typical Section	1	1	1	3			6	6		\$ 1,623.00
11.3	Plan & Profile	9									
11.3.1	Existing Features in Plan & Profile			3	3			9	18		\$ 3,420.00
11.3.2	Proposed Features in Plan			3	3				12		\$ 4,293.00
11.3.3	Minor Annotations		1	6	6			12			\$ 3,717.00
	<b>PRELIMINARY ENGINEERING SUBTOTAL</b>	<b>11</b>									<b>\$ 36,012.00</b>
<b>PROJECT MANAGEMENT</b>											
12	Field Visit (Investigations and Findings)				6					6	\$ 1,206.00
13	Coordination for Survey & Geotechnical		2	4	4						\$ 1,530.00
14	Coordination with Public Utilities for Obtaining Record Drawings			4	4						\$ 1,140.00
15	Coordination with Centerpoint Energy, AT&T, Comcast and Other (Private Utilities)			2	4						\$ 810.00
16	Project Management and Meetings (Includes Study Phase Meetings)		4	8	8					4	\$ 3,300.00
17	Submittal Milestones (Draft & Final)			2	2					8	\$ 1,050.00
	<b>PROJECT MANAGEMENT SUBTOTAL</b>										<b>\$ 9,036.00</b>
<b>OTHER EXPENSES</b>											
18	Printing/Plotting/Copying										\$ 200.00
19	Mileage/Postage/Courier										\$ 300.00
	<b>OTHER EXPENSES SUBTOTAL</b>										<b>\$ 500.00</b>
	<b>TOTAL HOURS</b>	6	46	25	114	12	118	33	60	12	
	<b>TOTAL ESTIMATE</b>	\$1,170	\$7,590	\$3,750	\$13,680	\$1,260	\$9,558	\$2,640	\$4,680	\$720	<b>\$ 45,548.00</b>



**VARIOUS STREETS - ARCOLA**  
**HONEY GROVE ROAD, ROSEN AVE, PINEDALE AVE AND MANOR AVE**  
**FBC PROJECT#**  
**HJ CONSULTING, INC.**  
**LEVEL OF EFFORT FOR FINAL DESIGN PHASE, AUGUST 2018**

8/1/2018

Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Senior Designer	Graduate Engineer	Designer	CAD Technician	Admin	Total
<b>LEVEL OF EFFORT (DESIGN PHASE)</b>											
<b>ESTIMATED HOURS</b>											
<b>DRAWINGS &amp; DOCUMENTS</b>											
1	Coversheet	1									\$ 747.00
2	General Notes	2									\$ 2,841.00
3	Proposed & Existing Typical Sections	4									\$ 4,734.00
4	Overall Project Layouts	2									\$ 3,006.00
5	Drainage Area Maps	4									\$ 5,358.00
6	Hydraulic Calculations	4									\$ 5,373.00
7	Plan and Profile Sheets	9									\$ 17,064.00
7.1	Horizontal Alignment (Plan)/Design										\$ 3,357.00
7.2	Vertical Alignment (Profile)/Design										\$ 5,769.00
7.3	Intersection Details/Layouts	6									\$ 5,679.00
7.4	Street/Driveway Connection Details and Calculations	1									\$ 3,258.00
8	Demolition Plans	4									\$ 7,353.00
9	Traffic Control Plans	10									\$ 13,044.00
10	Storm Water Pollution Prevention Plans	4									\$ 5,742.00
11	Cross Sections & Earthwork Calculations	8									\$ 14,247.00
12	Signage & Pavement Marking Plans	4									\$ 7,101.00
13	Project Manual										\$ -
11.1	Administrative Documents		2								\$ 3,276.00
11.2	Bid Form (Est Unit and w/wo Total Costs)			4							\$ 8,940.00
11.3	Specification Table of Contents			2							\$ 2,886.00
11.4	Special Specifications or Conditions			2							\$ 1,758.00
14	Fort Bend County Standard Sheets	4									\$ 3,006.00
<b>DRAWINGS &amp; DOCUMENTS SUBTOTAL</b>											<b>\$ 124,539.00</b>



**VARIOUS STREETS - ARCOLA**  
**HONEY GROVE ROAD, ROSEN AVE, PINEDALE AVE AND MANOR AVE**  
**FBC PROJECT#**  
**HJ CONSULTING, INC.**  
**LEVEL OF EFFORT FOR FINAL DESIGN PHASE, AUGUST 2018**

8/1/2018

Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Senior Designer	Graduate Engineer	Designer	CAD Technician	Admin	Total
<b>LEVEL OF EFFORT (DESIGN PHASE)</b>											
<b>ESTIMATED HOURS</b>											
<b>PROJECT MANAGEMENT</b>											
15	Field Visit (Investigations and Findings)		4		12		12			8	\$ 3,552.00
16	Coordination with Public Utilities for Obtaining Record Drawings		4		8					4	\$ 1,860.00
17	Coordination with Centerpoint Energy, AT&T, Comcast and Other (Private Utilities)		4		8					4	\$ 1,860.00
18	Project Management and Meetings (Includes 2 Design Phase Meetings)	8	16		24					8	\$ 7,560.00
19	Submittal Milestones (Design Submittals - 70%, 95% and Final) & Attend to Comments		8		8		8		16	8	\$ 4,656.00
<b>PROJECT MANAGEMENT SUBTOTAL</b>											<b>\$ 19,488.00</b>
<b>OTHER EXPENSES</b>											
20	Printing/Plotting/Copying (Including Mylars)										\$ 750.00
21	Mileage/Postage/Courier										\$ 500.00
<b>OTHER EXPENSES SUBTOTAL</b>											<b>\$ 1,250.00</b>
<b>TOTAL HOURS</b>		10	91	79	286	42	390	36	514	32	
<b>TOTAL ESTIMATE</b>		\$1,950	\$15,015	\$11,850	\$34,320	\$4,410	\$31,590	\$2,880	\$40,092	\$1,920	<b>\$ 145,277.00</b>



**VARIOUS STREETS - ARCOLA**  
**HONEY GROVE ROAD, ROSEN AVE, PINEDALE AVE AND MANOR AVE**  
**FBC PROJECT#**  
**HJ CONSULTING, INC.**  
**LEVEL OF EFFORT FOR CONSTRUCTION PHASE, AUGUST 2018**

8/1/2018

Employee Classification	No. of Sheets	Principal	Project Manager	QA/QC Engineer	Project Engineer	Graduate Engineer	CAD Technician	Admin	Total
<b>LEVEL OF EFFORT (BID &amp; CONSTRUCTION PHASE)</b>									
<b>TASK</b>	<b>TASK DESCRIPTION</b>								
<b>BID PHASE (BILLED AS TIME AND MATERIALS)</b>									
1	Submit Final Drawings & Documents		8						\$ 1,320.00
2	Pre-Bid Meeting		4						\$ 660.00
3	Addendum (if required)		2	1	8	8	12		\$ 3,252.00
4	Bid Recommendation and Award of Contract (not required)								\$ -
<b>CONSTRUCTION PHASE (BILLED AS TIME AND MATERIALS)</b>									
5	Pre-Construction Meeting/Progress Meetings (as needed)		6		16	12		12	\$ 4,890.00
6	Construction Site Observation Visits (not required)								\$ -
7	Review and Respond to Submittals/RFI's/RFPI's		6		36	32	12	12	\$ 10,362.00
8	Monthly Construction Activity Reports until Completion (not required)								\$ -
9	Substantial/Final Completion Walk Through		4		8			2	\$ 1,740.00
10	Record Drawings (Review/Verify As-Built Drawings)	1	4		12	16	24		\$ 5,919.00
<b>OTHER EXPENSES (BILLED AS ACTUALS)</b>									
11	Printing/Plotting/Copying								\$ 1,500.00
12	Postage/Courier								\$ 250.00
<b>TOTAL HOURS</b>		10	6055	57	262	298	286	26	
<b>TOTAL ESTIMATE</b>		\$1,950	\$999,075	\$8,550	\$31,440	\$31,290	\$23,166	\$1,560	\$ 29,893.00