

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 Pacheco Koch Consulting Engineers, Inc., (hereinafter "Consultant"), a company authorized to conduct business in the State of Texas.

### **WITNESSETH**

WHEREAS, County desires that Consultant provide professional civil engineering and land surveying services for the realignment of Church Street at Colony Road under Project No. 20119 of the Fort Bend County Mobility Program (hereinafter "Services") pursuant to SOQ 14-025; and

WHEREAS, County has determined Consultant is the most highly qualified provider of the desired Services on the basis of demonstrated competence and qualifications, and County and Consultant 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, Consultant 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**

Consultant shall render the professional engineering and land surveying services as described in Consultant's Scope of Services dated September 9, 2021, attached hereto as Exhibit A, and incorporated herein for all purposes.

#### **Section 2. Personnel**

2.1 Consultant 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 Consultant 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 Consultant shall have such knowledge and experience as will enable them to perform the duties assigned to them. Any employee of Consultant 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 The Maximum Compensation for the performance of Services within the Scope of Services described in Exhibit A is two hundred four thousand eight hundred thirty-five dollars and 60/100 (\$204,835.60) 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 Consultant 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 Consultant based on the following procedures: Upon completion of the tasks identified in the Scope of Services, Consultant 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 Consultant 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 four thousand eight hundred thirty-five dollars and 60/100 (\$204,835.60) specifically allocated to fully discharge any and all liabilities County may incur.

4.2 Consultant does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that Consultant may become entitled to and the total maximum sum that County may become liable to pay to Consultant shall not under any conditions, circumstances, or interpretations thereof exceed two hundred four thousand eight hundred thirty-five dollars and 60/100 (\$204,835.60).

### **Section 5. Time of Performance**

Time for performance of the Scope of Services under this Agreement shall begin with receipt of the Notice to Proceed and end no later than December 31, 2025. Consultant 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 Consultant 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 Consultant 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 Consultant 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 Consultant 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. Consultant'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 Consultant.

## **Section 8. Ownership and Reuse of Documents**

All documents, data, reports, research, graphic presentation materials, etc., developed by Consultant 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. Consultant shall promptly furnish all such data and material to County on request.

## **Section 9. Inspection of Books and Records**

Consultant will permit County, or any duly authorized agent of County, to inspect and examine the books and records of Consultant 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, Consultant 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. Consultant shall provide certified copies of insurance endorsements and/or policies if requested by County. Consultant 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. Consultant shall obtain such insurance written on an Occurrence form (or a Claims Made form for Professional Liability insurance) from such companies having Best's rating of A/VII or better, licensed or approved to transact business in the State of Texas, and shall obtain such insurance of the following types and minimum limits:

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

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

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

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

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

10.2 County and the members of Commissioners Court shall be named as additional insured to all required coverage except for Workers' Compensation and Professional Liability. All Liability policies including Workers' Compensation written on behalf of Consultant 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, Consultant 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 Consultant 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 Consultant 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 Consultant 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 Consultant) publicly known or is contained in a publicly available document; (b) is rightfully in Consultant'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 Consultant who can be shown to have had no access to the Confidential Information.

12.2 Consultant agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Consultant 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. Consultant 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, Consultant shall advise County

immediately in the event Consultant 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 Consultant will at its expense cooperate with County in seeking injunctive or other equitable relief in the name of County or Consultant against any such person. Consultant agrees that, except as directed by County, Consultant 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, Consultant will promptly turn over to County all documents, papers, and other matter in Consultant's possession which embody Confidential Information.

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

12.5 Consultant 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 Consultant**

13.1 In the performance of work or services hereunder, Consultant 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 Consultant 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

Consultant: Pacheco Koch Consulting Engineers, Inc.  
7557 Rambler Road, Suite 1400  
Dallas, Texas 75231

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**

Consultant 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, Consultant shall furnish County with certification of compliance with said laws, statutes, ordinances, rules, regulations, orders, and decrees above specified.

## **Section 16. Standard of Care**

Consultant 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, Consultant 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 Consultant 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 Consultant release any material or information developed or received in the performance of the Services hereunder without the express written permission of County, except where required to do so by law.

## **Section 23. Captions**

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

## **Section 24. Conflict**

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

## **Section 25. Certain State Law Requirements for Contracts**

25.1 Agreement to Not Boycott Israel Chapter 2271 Texas Government Code: By signature below, Consultant verifies that if Consultant employs ten (10) or more full-time employees and this Agreement has a value of \$100,000 or more, Consultant 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, Consultant represents pursuant to Section 2252.152 of the Texas Government Code, that Consultant is not listed on the website of the Comptroller of the State of Texas concerning the listing of companies that are identified under Section 806.051, Section 807.051 or Section 2253.153.

## **Section 26. Human Trafficking**

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


[THE REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK.]

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

FORT BEND COUNTY

PACHECO KOCH CONSULTING ENGINEERS, INC

\_\_\_\_\_  
KP George, County Judge

  
\_\_\_\_\_  
Authorized Agent – Signature

\_\_\_\_\_  
Date

Brian D. O'Neill, P.E., CFM  
\_\_\_\_\_  
Authorized Agent – Printed Name

ATTEST:

\_\_\_\_\_  
Principal  
Title

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

09/23/2021  
\_\_\_\_\_  
Date

APPROVED:

  
\_\_\_\_\_  
J. Stacy Slawinski, P.E., County Engineer

### 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



September 9, 2021  
PK No.: 0100

**Mr. Kevin Mineo, P.E.**  
*Senior Project Manager*  
**BINKLEY & BARFIELD, INC.**  
1710 Seamist Drive  
Houston, Texas 77008

Re: Church Street Realignment at Colony Road - REVISED PROPOSAL  
**FORT BEND COUNTY MOBILITY PROJECT NO. 20119**  
*Fort Bend County, Texas*

Dear Mr. Mineo:

**Pacheco Koch Consulting Engineers, Inc.** is pleased to submit this revised proposal to provide professional civil engineering, land surveying services relating to the referenced project. It is our understanding the project consists of a topographic survey, geotechnical investigation, traffic count collection, and ROW document preparation. The roadway is proposed as 2-12' lanes and reconstruction of the intersection as needed.

Based on our preliminary discussions and the information received to date, our perception of the project is as shown on the attached documents. For your reference, please find the attached documents:

- Exhibit A – Scope of Services;
- Exhibit B – Compensation and Method of Payment; and
- Exhibit C – Schedule

**Pacheco Koch Consulting Engineers, Inc. is pleased to have this opportunity to submit this proposal and look forward to working with you on this project.**

Sincerely,

A handwritten signature in blue ink, appearing to read 'J. Roberts', is positioned above the printed name.

James C. Roberts, P.E., CFM

JCI

## **EXHIBIT 'A' – SCOPE OF SERVICES**

### **CHURCH STREET REALIGNMENT AT COLONY ROAD FORT BEND COUNTY PROJECT NUMBER 20119**

#### **PROJECT DESCRIPTION:**

The project consists of pavement and intersection improvements to realign the existing skewed intersection of Church Street and Colony Road. The project includes topographic survey, geotechnical investigation, traffic count collection, and ROW document preparation. The roadway is proposed as 2-12' lanes and reconstruction of the intersection as needed. Pavement at the intersection shall have large radii of approximately 40ft. The Church Street northbound lane may be flared to 14ft or 16ft at the intersection to make it easier for Colony west bound traffic to turn on Church Street northbound lane. Both streets are to have shoulders near the intersection. (PROJECT)

#### **BASIC SERVICES:**

- A. Project Management, Coordination & Permitting
  - 1. Manage the Team:
    - Lead, manage and direct design team activities
    - Ensure quality control is practiced in performance of the work
    - Communicate internally among team members
    - Allocate team resources
    - Manage sub-consultants
  - 2. Communications and Reporting:
    - Attend a pre-design project kickoff meeting with OWNER staff to confirm and clarify scope, understand OWNER objectives, and ensure economical and functional designs that meet OWNER requirements.
    - Conduct review meetings with the OWNER at the end of each design phase.
    - Prepare and submit monthly invoices in the format acceptable to the OWNER.
    - Prepare and submit monthly progress reports.
    - Prepare and submit baseline Project Schedule initially and Project Schedule updates.
    - Coordinate with other agencies and entities as necessary for the design of the proposed infrastructure and provide and obtain information needed to prepare the design.
    - With respect to coordination with permitting authorities, CONSULTANT shall communicate with permitting authorities such that their regulatory requirements are appropriately reflected in the designs. CONSULTANT shall work with regulatory authorities to

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obtain approval of the designs and make changes necessary to meet their requirements.

3. Utility Clearance:

- The CONSULTANT will consult with the OWNER, public utilities, private utilities and government agencies to determine the approximate location of above and underground utilities, and other facilities (current and future) that have an impact or influence on the project. CONSULTANT will design OWNER facilities to avoid or minimize conflicts with existing utilities, and where known and possible consider potential future utilities in designs.
- CONSULTANT will provide plans to and coordinate with utility owner related to the relocation efforts of franchise utilities that remain in conflict with the proposed construction.

B. Preliminary Engineering Report (PER)

The Preliminary Engineering Report (PER) shall be performed in accordance with the Design Manual and submitted to OWNER per the approved Project Schedule. The purpose of the PER is for the CONSULTANT to:

- Study the project,
- Identify and develop alternatives,
- Present (through the defined deliverables) these alternatives to the OWNER,
- Recommend the alternatives that successfully address the design problem, and
- Obtain the OWNER's endorsement of the selected concept.

CONSULTANT will develop the PER of the infrastructure as follows.

1. Data Collection

- In addition to data obtained from the OWNER, CONSULTANT will research proposed improvements in conjunction with any other planned future improvements known by the OWNER that may influence the project.
- The CONSULTANT will also identify and seek to obtain data for existing conditions that may impact the project including but not limited to; available drainage studies related to the project area, utilities, agencies (TxDOT and USCOE), OWNER Master Plans, and property ownership as available from the Tax Assessor's office.
- The data collection efforts will also include conducting special coordination meetings with affected property owners and businesses as necessary to develop the design.

2. The PER shall include the following:

- Technical memorandum containing the following sections:
  - Project Location and scope
  - Existing Conditions

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- Existing Utilities and potential conflicts
  - Proposed Roadway Design
  - Existing and Proposed drainage and detention
  - Proposed ROW
  - Proposed traffic signal
  - Geotechnical Investigation
  - Environmental Investigation
  - Permit and Regulatory Requirements
  - Cost Estimate
  - Other applicable sections outlined in the engineering design manual for consultants
  - 30% Submittal plans
    - Typical Sections
    - Paving Plan and Profile sheets
    - Detention Layout
    - Traffic Control plans
3. Submit PDF set of PER to the OWNER for review. In addition to the PER a .kmz file containing existing and proposed ROW and proposed improvements shall be submitted.

C. Detailed Design (70% Submittal)

1. Prepare preliminary construction plans. Prepare the following sheets at the engineering scale indicated:
- Cover Sheet
  - Typical Section Sheet
  - Project Layout & Control Sheet
  - Paving plan and profile sheets including striping.  
Scale 1" = 40' Horizontal; 1" = 4' Vertical
  - Paving Cross Sections at 100' interval
  - Drainage Area Map and Calculations
  - Drainage plan and profile sheets.  
Scale 1" = 40' Horizontal; 1" = 4' Vertical
  - Detention Detail Sheet
  - Water (smaller than 12" diameter) plan sheets.  
Scale 1" = 40' Horizontal;
  - Sanitary Sewer plan and profile sheets.  
Scale 1" = 40' Horizontal; 1" = 4' Vertical
  - Traffic Control Plan
  - Erosion Control Plans
  - Construction Detail sheets
- Information required can be combined on sheets if the information can be clearly shown and is approved by OWNER's project manager.
2. Assemble OWNER's standard construction contract documents and modify special technical specifications, if needed, for the project (if any).



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3. Prepare and complete standard County checklist for preliminary design.
4. Prepare an estimate of construction quantities and develop the preliminary opinion of probable construction costs.
5. Submit PDF set of 11"x17" preliminary 70% plans, one (1) PDF set of preliminary construction contract documents, special conditions and preliminary opinion of probable construction costs to the OWNER for review. In addition to the preliminary plans, OPCC, and contract documents a .kmz file containing existing and proposed ROW and proposed improvements shall be submitted.

**D. Final Design (95% & 100% Submittals)**

1. Revise preliminary plans incorporating comments from the OWNER.
2. Prepare the following sheets in addition to the sheets listed in the Preliminary Design:
  - General Notes Sheet
  - Pavement Marking and Signage Sheet
3. Submit PDF set of 11"x17" set of 90% plans, PDF set of 90% construction contract documents and 90% opinion of probable construction costs for OWNER review. In addition to the final plans, OPCC, and contract documents a .kmz file containing existing and proposed ROW and proposed improvements shall be submitted.
4. Incorporate final OWNER review comments into the plans and construction contract documents to finalize construction plans for proposed improvements.
5. Include a comment response log for all OWNER review comments from the preliminary design review.
6. Finalize construction contract documents including OWNER standard specifications, special technical specifications and special conditions (if any).
7. Estimate of final construction quantities and final opinions of construction cost.
8. Submit PDF of sealed (100%) set of final plans, construction documents and .kmz file.
9. Prepare and complete standard County checklist for Final design.

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**E. Direct Expenses**

1. Included in this item are usual and customary expenses normally incurred during performance of the services described. These expenses could include courier delivery charges, copies of existing engineering plans and/or maps, printing and reproduction (either in-house or by reproduction company) and mileage.

**SPECIAL SERVICES:**

**F. Hydrology & Hydraulics Drainage Report**

1. Drainage Impact Analysis – Hydrologic and Hydraulic analysis of the pre- and post-project drainage conditions. Detailed tasks include:
  - Determine pre- and post-project peak flow rates based on Atlas 14 rainfall data for the 100-year storm event
  - Define pre- and post-project impervious area
  - Determine the required detention storage rate per Fort Bend County Drainage District criteria
  - Determine detention volume required to offset increase in impervious area
  - Determine outfall restrictor size(s) for the 100-year storm event based on orifice equation
  - Sizing of proposed drainage ditches and culverts for the design storm event per current Fort Bend County Drainage District Drainage Criteria Manual
  - No adverse impact statement in accordance with current Fort Bend County Drainage District criteria.
2. Detention Volume Alternatives Analysis
  - Determine optimal location of detention volume based on but not limited to potential rights-of-way or easement requirements, existing utilities, environmental permitting, existing drainage features, roadway realignment, existing roadways and proposed construction methods.
3. Preliminary and Final Report – CONSULTANT will prepare a narrative drainage report based on the drainage impact and detention volume alternatives analysis referenced above. The report will document procedures and findings of our analysis and will be submitted to City of Needville and Fort Bend County Drainage District for approval prior to construction. The report will include all model files, GIS files, and report files on agreed upon transfer method.

**G. Field Survey and ROW Documentation**

1. See attached subconsultant proposal for Field Survey and ROW Documentation scope.

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H. Geotechnical Investigation:

1. See attached subconsultant proposal for Geotechnical Investigation scope.

I. Traffic Analysis

1. See attached subconsultant proposal for Traffic Signal Analysis and Design scope.

J. Construction Phase Services

CONSULTANT will support the bid phase and construction phase of the project as follows.

1. Bid Documents:

- CONSULTANT shall prepare and combine project manual with administrative documents provided by the OWNER and documents prepared by CONSULTANT.
- Provide 27 compact discs containing project manual and plan sets to the Fort Bend Purchasing Agent and Program Manager

2. Bidder Assistance:

- The CONSULTANT will assist in answering bidders' questions and requests for additional information. The procedures shall include a log of all significant bidders' questions and requests, and the response thereto. The CONSULTANT will provide technical interpretation of the contract bid documents and will prepare proposed responses to all bidders' questions and requests, in the form of addenda.
- Attend the pre-bid conference in support of the OWNER.

3. Bid Analysis and Recommendation of Award:

- The CONSULTANT will assist the OWNER in determining the qualifications and acceptability of prospective contractors, subcontractors, and suppliers.
- The CONSULTANT shall make a recommendation of award to the OWNER.

4. Conformed Construction Documents:

- Upon award of a contract by the OWNER, the CONSULTANT shall assist with the execution, assembly and distribution of the construction contract documents for the Project.

6. Preconstruction Conference:

- The CONSULTANT shall attend the preconstruction conference.

**EXHIBIT A** to Agreement between the  
County of Fort Bend, Texas (OWNER)  
and Pacheco Koch Consulting  
Engineers, Inc. (CONSULTANT) for  
Consulting Services

7. Site Visits:

- The CONSULTANT shall visit the project site at appropriate intervals as construction proceeds to observe and report on progress. CONSULTANT shall make up to four (4) site visits at OWNER's request. Additional visits will be charged hourly per attached rate sheet.

8. Shop Drawing and Lab Report Review

- The CONSULTANT shall review shop and erection drawings submitted by the contractor for compliance with design concepts. The CONSULTANT shall review laboratory, shop, and mill test reports on materials and equipment.

9. Instructions to Contractor

- The CONSULTANT shall provide necessary interpretations and clarifications of contract documents, through RFIs. CONSULTANT shall review and process shop drawing submittals.

10. Final Inspection

- The Engineer shall attend final inspection of the Project with representatives of the OWNER and the construction contractor.

11. Project Completion

Prepare construction "Record Drawings" based upon mark-ups and information provided by the construction contractor(s). Submit PDF 11"x17" set of the record drawings (with "record drawing stamp" bearing the signature of the Engineer and the date) to the OWNER on a CD-ROM disk or flash drive containing black and white PDF images, AutoCAD DWG files, and KMZ file.

K. Survey Services

1. See attached subconsultant proposal for Survey Services scope.

Services not included in this contract:

- *Hydrologic and Hydraulic modeling software such as HEC-HMS, HEC-RAS or SWMM*
- *LOMR and CLOMR preparation or submittal*
- *Construction inspection services including change orders and pay applications.*
- *Pole foundations are standards and no special foundation will be designed to accommodate custom situations.*
- *ROW appraisal and negotiation*
- *As-built surveys of constructed improvements*
- *Public hearings or Commission meetings*
- *Utility coordination meeting(s) to start relocation process with affected franchise utilities.*

**EXHIBIT A** to Agreement between the  
County of Fort Bend, Texas (OWNER)  
and Pacheco Koch Consulting  
Engineers, Inc. (CONSULTANT) for  
Consulting Services

- *Reset property corner monumentation disturbed or removed during or after construction*
- *Required application and permitting fees (LOMR) or special insurance premiums are not included*
- *Phase II Environmental Site Assessments*

END OF EXHIBIT 'A'

**EXHIBIT 'B' – COMPENSATION AND METHOD OF PAYMENT**

**CHURCH STREET REALIGNMENT AT COLONY ROAD  
PROJECT NUMBER 20119**

**COMPENSATION:**

For all professional services included in EXHIBIT 'A', Scope of Services, the CONSULTANT shall be compensated a lump sum fee of \$ 175,850.60 as summarized below. The total lump sum fee shall be considered full compensation for the services described in EXHIBIT A, including all labor materials, supplies, and equipment necessary to deliver the services.

**Basic Services**

A.	Project Management, Coordination & Permitting	\$ 21,020.00
B.	Preliminary Engineering Report (PER)	25,430.00
C.	Preliminary Design (70%, 95%, 100% Submittal)	63,440.00
D.	Direct Expense (Not to Exceed)	884.00
		<u>\$ 110,774.00</u>

**Special Services**

E.	Hydraulics & Hydrology Engineering Report	\$ 15,000.00
F.	Field Survey and ROW Documentation - CivilCorp	32,385.00
G.	Geotechnical Investigation - Paradigm	9,972.00
H.	Traffic Analysis - Transcend	7,719.60
		<u>\$ 65,076.60</u>

**TOTAL** **\$ 175,850.60**

**Special Services (Hourly, Not to Exceed)**

I.	Construction Phase Services	\$ 15,285.00
J.	Survey Services – CivilCorp	13,700.00
		<u>\$ 28,985.00</u>

**TOTAL CONTRACT BUDGET** **\$ 204,835.60**

**EXHIBIT B** to Agreement between the  
County of Fort Bend, Texas (OWNER)  
and Pacheco Koch Consulting  
Engineers, Inc. (CONSULTANT) for  
Consulting Services

**METHOD OF PAYMENT:**

The CONSULTANT shall be paid monthly payments as described in the AGREEMENT. The cumulative sum of such monthly partial fee payments shall not exceed the total current project budget including all approved Amendments. Each invoice shall be verified as to its accuracy and compliance with the terms of this Agreement by an officer of the CONSULTANT.

END OF EXHIBIT 'B'



Project No.: 0100

Client: Fort Bend County Engineering

Project Title: Church Street Realignment at Colony Road - Project Number 20119

FEE BUDGET ESTIMATE  
BASIC DESIGN & CONSTRUCTION SERVICES

September 9, 2021

DESCRIPTION OF WORK TASK	BASIS OF MAN-HOUR ESTIMATE		LEVEL OF EFFORT BY CLASSIFICATION								TOTAL MH'S PER TASK		TOTAL FEE PER TASK
	QNTY	UNIT	PROJ MGR \$245	SENIOR ENGR \$170	PROJECT ENGR \$125	DESIGN TECH \$115	EIT \$100	TECH. CADD \$85	QA/QC REVIEW \$170	ADMIN ASST \$75	PER TASK		
PROJECT MANAGEMENT													
CONTRACTS AND ADMIN		HR	16.0							16.0	32.0	\$ 5,120.00	
MANAGE SUBCONSULTANTS		HR	8.0	8.0						16.0	32.0	\$ 4,520.00	
MANAGE SCHEDULE		HR	6.0	2.0	8.0						16.0	\$ 2,810.00	
											SUB-TOTAL =	\$ 12,450.00	
PROJECT START-UP AND COORDINATION													
COORDINATE WITH OUTSIDE AGENCIES / FRANCHISE UTILITY	1	HR	2.0	4.0	2.0	24.0	4.0				42.0	\$ 5,010.00	
COLLECT & REVIEW EXISTING DATA	1	HR		2.0	2.0		12.0				16.0	\$ 1,790.00	
SITE VISIT	1	EACH	4.0	2.0	2.0		2.0				10.0	\$ 1,770.00	
											SUB-TOTAL =	\$ 8,570.00	
PRELIMINARY ENGINEERING REPORT (PER)													
DOCUMENT EXISTING CONDITIONS	0	N/A		2.0	2.0	4.0					8.0	\$ 1,050.00	
DETERMINE PROPOSED IMPROVEMENTS	0	N/A	2.0	4.0		12.0	8.0				26.0	\$ 3,350.00	
PREPARE ENGINEERING REPORT	1	EACH	2.0	8.0	16.0	4.0	4.0			4.0	40.0	\$ 5,350.00	
30% CONSTRUCTION PLANS	6	SHEET	2.0	8.0	4.0	24.0	8.0			2.0	56.0	\$ 6,930.00	
QUANTITY TAKE-OFF AND OPINION OF COST	0	N/A		2.0		8.0	4.0				16.0	\$ 2,000.00	
SITE VISITS / CLIENT CONFERENCE/REVIEW MEETING	1	EACH		2.0	2.0						4.0	\$ 590.00	
NARRATIVE REPORT W/REVIEW & APPROVAL	1	EACH	4.0	4.0	36.0						44.0	\$ 6,160.00	
											SUB-TOTAL =	\$ 25,430.00	
DETAILED DESIGN (70% 95% & 100% SUBMITTALS)													
COVER SHEET / INDEX	1	SHEET		1.0	1.0	3.0	5.0			1.0	16.0	\$ 1,735.00	
GENERAL NOTES SHEET	1	SHEET			1.0					1.0	2.0	\$ 295.00	
TYPICAL SECTIONS	1	SHEET		2.0	3.0	6.0				1.0	20.0	\$ 2,255.00	
PROJECT LAYOUT	1	SHEET		4.0	5.0	6.0	6.0			4.0	35.0	\$ 4,125.00	
SURVEY CONTROL	1	SHEET		1.0	2.0	3.0	5.0			1.0	21.0	\$ 2,200.00	
PAVING PLAN & PROFILE SHEETS W/HORIZONTAL CONTROL	4	SHEET	4.0	12.0	8.0	48.0	32.0			8.0	120.0	\$ 14,780.00	
WATER AND SEWER PLAN AND PROFILE SHEETS	2	SHEET		6.0	4.0	16.0	12.0			4.0	78.0	\$ 8,600.00	
TRAFFIC CONTROL PLAN	4	SHEET		4.0	4.0	20.0	32.0			6.0	79.0	\$ 8,665.00	
STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	1	SHEET		2.0	1.0	2.0	4.0			0.5	17.5	\$ 1,860.00	
PAVEMENT MARKING AND SIGNAGE SHEET	1	SHEET		2.0	2.0	4.0	16.0			2.0	30.0	\$ 3,330.00	
DRAINAGE AREA MAP / CALCULATION SHEET	3	SHEET	1.0	2.0	6.0	4.0	6.0			2.0	23.0	\$ 2,905.00	
PAVING CROSS SECTION SHEETS	1	SHEET		3.0	2.0		4.0			4.0	17.0	\$ 2,180.00	
CONSTRUCTION DETAILS	4	SHEET			1.0		6.0			1.0	16.0	\$ 1,575.00	
SPECIFICATIONS	1	BOOK	1.0	2.0	4.0		4.0			1.0	14.0	\$ 1,805.00	
QUANTITY TAKE-OFF AND OPINION OF COST	0	N/A	2.0	4.0	4.0					1.0	19.0	\$ 2,640.00	
SITE VISITS / CLIENT CONFERENCE/REVIEW MEETING	1	EACH	8.0	8.0	8.0		8.0			1.0	25.0	\$ 4,490.00	
											SUB-TOTAL =	\$ 63,440.00	

Project No.: 0100

Client: Fort Bend County Engineering

Project Title: Church Street Realignment at Colony Road - Project Number 20119

FEE BUDGET ESTIMATE  
BASIC DESIGN & CONSTRUCTION SERVICES

September 9, 2021

DESCRIPTION OF WORK TASK	BASIS OF		LEVEL OF EFFORT BY CLASSIFICATION										TOTAL MHS PER TASK	TOTAL FEE PER TASK
	MAN-HOUR ESTIMATE	QNTY UNIT	PROJ MGR	SENIOR ENGR	PROJECT ENGR	DESIGN TECH	EIT	TECH. CAD	QA/QC REVIEW	ADMIN ASST				
			\$245	\$170	\$125	\$115	\$100	\$85	\$170	\$75				
CONSTRUCTION PHASE SERVICES - SEE TAB B FOR HOURLY ESTIMATES														
HOURS SUB-TOTALS	25		63.0	101.0	128.0	188.0	182.0	130.0	44.5	38.0	874.5	\$ 109,890.00		
TOTAL LABOR COSTS			15,435.00	17,170.00	16,000.00	21,620.00	18,200.00	11,050.00	7,565.00	2,850.00	\$ 109,890.00	\$ -		
% OF TOTAL HOURS			7.2%	11.5%	14.6%	21.5%	20.8%	14.9%	5.1%	4.3%	100.0%			
PRINTING & REPRODUCTION EXPENSES														
PRINTING - 11 X 17 PLANS (REVIEW SETS)	0	SETS	26	PLOTS/SET	0	1.00	-	ENGINEERING					\$ 109,890.00	
PRINTING - 22 X 34 PLANS (REVIEW SETS)	0	SETS	26	PLOTS/SET	0	1.50	-	LABOR COSTS:					\$ 884.00	
PRINTING - 22 X 34 PLANS (UTILITY CLEARANCE SETS)	0	SETS	26	PLOTS/SET	0	1.50	-	TOTAL ENGINEERING (Basic Services)					\$ 110,774.00	
PLOTTING - 22 X 34 PAPER PLOTS	0	SETS	26	PLOTS/SET	0	3.00	-	OTHER DIRECT COSTS -(Special Services)* HYDRAULICS & HYDROLOGY ENGINEERING REPORT FIELD SURVEY AND ROW DOCUMENTATION - CIVIL CORP GEOTECHNICAL INVESTIGATION - PARADIGM TRAFFIC ANALYSIS - TRANSCEND						
PRINTING - 22 X 34 PLANS (BID SETS)	0	SETS	26	PLOTS/SET	0	1.50	-							
PRINTING - 11 X 17 PLANS (BID SETS)	0	SETS	26	PLOTS/SET	0	1.00	-							
PRINTING - 22 X 34 PLANS (AS-BUILT SETS)	0	SETS	26	PLOTS/SET	0	1.00	-							
COMPACT DISC PREPARATION	28	SETS	1	PLOTS/SET	28	2.00	56.00							
PDF PREPARATION	5	SETS	26	PLOTS/SET	5	8.00	40.00						\$ 7,719.60	
SPECIFICATIONS - 8.5 X 11 PAPER COPIES	0	SETS	100	COPIES/SET	0	0.10	-							
SPECIFICATIONS - 8.5 X 11 PAPER COPIES (BID SETS)	0	SETS	100	COPIES/SET	0	0.10	-							
TOTAL PRINTING & REPRODUCTION EXPENSES												\$ 65,076.60		
TOTAL DESIGN FEE														
\$ 175,850.60														
DIRECT EXPENSES														
PLOTTING - 11 X 17 PAPER PLOTS	6	SETS	26	PLOTS/SET	156	1.00	156.00	* SubConsultant Contracts Attached						
REPRODUCTION - 8.5 X 11 PAPER COPIES	500	COPIES			500	0.10	50.00							
DELIVERY SERVICE	8	PKGS			8	15.00	120.00							
AUTO EXPENSE	14	TRIPS	60	MI /TRIP	840	0.55	462.00							
TOTAL PER PHASE DIRECT EXPENSES							\$ 788.00							

ATTACHMENT 2-B													
ADDITIONAL DESIGN SERVICE LEVEL OF EFFORT (LOE) FEE ESTIMATE - APPENDIX B													
Church Street Realignment at Colony - FBC Project Number 20119													
Fort Bend County Precinct 1													
Pacheco Koch Consulting Engineers													
		Project Manager	Sr. Engineer	Project Engineer	Design Tech	EIT	CAD Tech	QA/QC	Admin Asst	Total Hours	Total Cost		
	HOURLY RATE	\$245	\$170	\$125	\$115	\$100	\$85	\$170	\$75				
2	CONSTRUCTION PHASE SERVICES												
	A. BID PHASE SERVICES												
	1. Bidding Package Assembly and Addenda			1.0	2.0	6.0				9.0	\$ 955		
	2. Prep and Attend Pre-Bid Meeting	2.0	2.0							4.0	\$ 830		
	3. Recommendation of Award		2			4				6	\$ 740		
	B. CONSTRUCTION (TIME & MATERIALS)												
	1. Review Shop Drawing Submittals		2	2		8				12	\$ 1,390		
	2. Address RFIs		8	4		8				20	\$ 2,660		
	3. Site Visits (4)	4	8	8						20	\$ 3,340		
	C. PROJECT COMPLETION										\$ -		
	1. Record Drawings	2.0		4.0			24.0			30	\$ 3,030		
	2. Closeout Documentation	4.0	8.0							12	\$ 2,340		
	Subtotal Hours	12	30	19	2	26	24	0	0	113	\$ 15,285		
	Subtotal Fee	\$ 2,940	\$ 5,100	\$ 2,375	\$ 230	\$ 2,600	\$ 2,040	\$ -	\$ -				
3	SURVEY SERVICES - CMLCORP	RPLS Proj. Mgr.	RPLS Task Lead	St. Survey Tech.	Survey Tech.	Admin / Clerical	2-Person Crew	3-Person Crew	Level A Test Hole				
		\$165	\$150	\$105	\$95	\$90	\$180	\$215	\$2,000				
	A. Additional Services												
	1. Interim ROW Staking, Construction Staking, and Construction ROW Staking	2	4	4	12	1.4	16				\$ 5,500		
	2. Re-establish control for Contractor (1 field day and office support)	2	4	8	8	2.6	8				\$ 4,200		
	3. Level A Test Hole (1.5 field day and office support)								2		\$ 4,000		
	Subtotal Hours	4	8	12	20	4	24	0	2	74			
	Subtotal Fee	\$ 660	\$ 1,200	\$ 1,260	\$ 1,900	\$ 360	\$ 4,320	\$ -	\$ 150		\$ 13,700		
	GRAND TOTAL	\$ 3,600	\$ 6,300	\$ 3,635	\$ 2,130	\$ 2,960	\$ 6,360	\$ -	\$ 150		\$ 28,985		
* Proposals for Subconsultants are attached													



### **SCHEDULE OF STANDARD HOURLY BILLING RATES**

*(Our hourly rates are subject to change at any time.)*

#### **ENGINEERING**

Principal.....	\$245.00/Hr.
Associate Principal .....	\$210.00/Hr.
Director.....	\$210.00/Hr.
Senior Project Manager.....	\$170.00/Hr.
Senior Project Coordinator.....	\$170.00/Hr.
Project Manager.....	\$125.00/Hr.
Project Coordinator .....	\$125.00/Hr.
Project Engineer.....	\$100.00/Hr.
Senior Technician .....	\$115.00/Hr.
Technician .....	\$85.00/Hr.
Drafter.....	\$80.00/Hr.
Research Manager .....	\$100.00/Hr.
Research Coordinator .....	\$65.00/Hr.
Research Assistant .....	\$55.00/Hr.
Executive Assistant .....	\$100.00/Hr.
Senior Administrative Assistant.....	\$90.00/Hr.
Administrative Assistant .....	\$75.00/Hr.
Expert Witness Testimony .....	\$350.00/Hr.

#### **LANDSCAPE ARCHITECTURE**

Principal.....	\$245.00/Hr.
Associate Principal .....	\$210.00/Hr.
Director.....	\$210.00/Hr.
Senior Project Manager.....	\$160.00/Hr.
Project Manager.....	\$120.00/Hr.
Project Landscape Architect .....	\$100.00/Hr.
Landscape Task Lead .....	\$95.00/Hr.
Technician .....	\$85.00/Hr.
Landscape Designer.....	\$80.00/Hr.
Drafter.....	\$80.00/Hr.
Executive Assistant .....	\$100.00/Hr.
Senior Administrative Assistant.....	\$90.00/Hr.
Administrative Assistant .....	\$75.00/Hr.
Expert Witness Testimony .....	\$350.00/Hr.

#### **SURVEYING**

Principal.....	\$245.00/Hr.
Associate Principal .....	\$210.00/Hr.
Director.....	\$210.00/Hr.
Senior Project Manager.....	\$165.00/Hr.
Senior Project Coordinator.....	\$165.00/Hr.
Project Manager.....	\$120.00/Hr.
Project Coordinator .....	\$120.00/Hr.
Project Surveyor .....	\$100.00/Hr.
Survey Intern .....	\$95.00/Hr.
Senior Technician .....	\$95.00/Hr.
Technician .....	\$85.00/Hr.
Drafter.....	\$80.00/Hr.
Research Manager .....	\$100.00/Hr.
Research Coordinator .....	\$65.00/Hr.
Research Assistant .....	\$55.00/Hr.
Executive Assistant .....	\$100.00/Hr.
Senior Administrative Assistant.....	\$90.00/Hr.
Administrative Assistant .....	\$75.00/Hr.
Expert Witness Testimony .....	\$350.00/Hr.
Survey Field Crew (1-person) .....	\$100.00/Hr.
Survey Field Crew (2-person) .....	\$150.00/Hr.
Survey Field Crew (3-person) .....	\$210.00/Hr.
Survey Field Crew (4-person) .....	\$270.00/Hr.
Survey Scanner Crew (1-person)...	\$180.00/Hr.
Survey Scanner Crew (2-person)...	\$225.00/Hr.
Survey Scanner Crew (3-person)...	\$310.00/Hr.

rev. 01/2019

September 10, 2021

Pacheco Koch

20329 State Highway 249, Ste 350

Houston, TX 77070

Attn: Jim Roberts, P.E., CFM

Re: Fee Proposal for Surveying Services – Church St From Steffek St to Colony Rd

CivilCorp, LLC is pleased to submit this fee proposal for surveying services for the above referenced project. We propose the following scope of work, deliverables, schedule, fee and exclusions for our services.

## **I. SCOPE OF WORK - ROADWAY SURVEY**

### CONTROL SURVEY

Temporary benchmarks and baseline control will be set, both with 1,000-foot maximum spacing between points. Existing Fort Bend County monuments provided will be recovered/verified and or re-established by observing with GPS instrument. A survey control map sheets will be provided in PDF format.

**Control Survey Fee Subtotal: \$ 6,425.00**

### ROADWAY DESIGN SURVEY

#### **TOPOGRAPHIC SURVEY-**

The topographic survey shall be along the existing alignment of Church Street from Steffek Street to Colony Road and will include 300' in the northeast and southwest directions on Colony Road. The topographic survey will be taken within the existing and proposed right-of-way and extend 20 feet beyond the proposed right-of-way on each side except where prohibited by fences. Structures in clear view and within 50 feet of the existing right-of-way should be surveyed. The topographic survey is to include edge of pavements, driveways, signs, mailboxes, traffic signals, sidewalks, pavement markings, etc. Pavement material types will be indicated as determined on the surface. Crossing drainage channels will be profiled and cross sectioned up and down stream. Existing underground utilities will be collected as marked by other as well as visible surface features. Overhead utilities will be indicated. Gravity sanitary and storm sewers will be located as to top of manholes and inlets, flow line elevations, type, size, and direction of pipes. Water lines will be located by tops of valves, fire hydrants (flush valves) and visible surface features. Cross section of the existing roadway will be obtained at 100-foot intervals. A project base line will be established in concert with the design engineer. An existing condition 2-D planimetric topographic survey base map of the project limits will be provided in Autocad with text, line types, and feature blocks scaled to be plotted at agreed upon scales. Underground utilities will be located on the base map from resolution of field data and record information provided to the surveyor by others. An illustration of general location of the survey limits is provided the attached EXHIBIT A–Limits of Survey.

**UTILITY COORDINATION-**

One-Call/811 will be activated for the project limits. All public utility, private utility and pipeline providers will be contacted via the current utility coordination process and all on-site utility markings and other information provided to CivilCorp by these utility and pipeline providers will be collected by standard survey methods and incorporated into the topographic survey base map.

**RIGHT OF ENTRY AGREEMENTS-**

CivilCorp shall prepare Right of Entry Agreements to allow the surveyor, design engineer, and geotechnical engineer access to all private property needed.

**DIGITAL TERRAIN MODEL (DTM)-**

A three-dimensional surface model or DTM will be created from a TIN which will be based on conventionally collected three-dimensional survey point data including cross sections and other relevant surface elevation points. The TIN and DTM will be provided in a medium compatible with AutoCAD Civil3D.

**Roadway Design Survey Fee Subtotal: \$ 16,590.00**

**ABSTRACTING & MAPPING**

Abstracting will be performed without the use of a title company to gain a determination of property ownership and existing right-of-way widths. During topographic survey, found property corners should be documented so that the approximate location of the right-of-way can be determined. An abstract map with the overall project map showing existing and proposed right-of-way, proposed parcel takes, ownership information, parcel numbers and preliminary roadway layout will be provided. Deliverables include a CAD file containing the determined right of way, PDF plot and CAD file of project limits, a CAD file containing all points, an .xls file of all points, and a KMZ file of the abstract map.

**Abstracting and Mapping Fee Subtotal: \$ 7,170.00**

**RIGHT-OF-WAY ACQUISITION SURVEY**

Once right-of-way needs have been determined and approved by the County, a Category IA survey will be performed to produce a parcel map and metes-and-bounds description for each parcel to be acquired in the project. These documents will be submitted separately from other design documents and will be paid for on a per-parcel basis.

**Right-of-way Acquisition Survey Fee Subtotal: \$2,200.00 Per-Parcel (Estimate 1)**

**ADDITIONAL SURVEY SERVICES**

Additional Survey Services requested will be paid for as Time & Expense based on CivilCorp's provided rate schedule.

- Interim ROW staking (estimated 1 field day and office support): \$5,500.00
- Re-establish control for contractor (estimated 1.5 field days and office support): \$4,200
- Utility Test Holes Max Depth 10 feet: \$2,000 Per Test Hole (Estimate 2)

**Additional Services Fee Not to Exceed: \$13,700.00**

**II. FEE**

The estimated fee for the above-mentioned Scope of Work for Lump Sum payment tasks is **\$ 32,385.00.**

The estimated fee for the above-mentioned Scope of Work for hourly payment tasks is not to exceed **\$ 13,700.00.**

**III. Schedule**

Work will begin 1 week after official notice to proceed is received. The survey is expected to progress as follows:

Control Survey – Week 1

Roadway Design Survey – Weeks 2 and 3

Abstracting, Mapping, and existing ROW Survey – Weeks 4 and 5

Proposed right of way/ acquisition surveys - Week 6

**EXCLUSIONS**

Base profile drawing; Extra work that is not included in our Scope of Work.

If you have any questions or require additional information, please don't hesitate to call me. We are looking forward to working with you on this project.

Very truly yours,

**CivilCorp, LLC**



Brandon Absher, RPLS  
Project Manager

**Pacheco-Koch.**

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

Title: \_\_\_\_\_

Date: \_\_\_\_\_





4611 E. Airline Rd. Ste 300  
Victoria, TX 77904

TBPLS Firm No.: 10057600  
TBPE Firm No.: 10283

### Exhibit A Limits of Survey

0 25 50 100 150 200  
Feet


Drawn By: MPP

Date: 3/17/2021

Job No.: N/A



### Legend

 Survey Limits

## 2021 Standard Rate Table

<b>Labor/Staff Classifications</b>	<b>Hourly Rate</b>
Senior Project Manager / Support Manager	\$220.00
Senior Engineer / Project Manager	\$200.00
Utility Engineer	\$155.00
Project Engineer	\$155.00
Design Engineer	\$125.00
Engineer-In-Training	\$100.00
Senior Engineer Technician	\$107.00
Engineer Technician	\$98.00
Senior CADD Operator	\$98.00
CADD Operator	\$84.00
Senior GIS Operator	\$120.00
GIS Technician	\$95.00
Admin / Clerical	\$90.00
Registered Professional Land Surveyor Project Manager	\$165.00
Registered Professional Land Surveyor Task Leader	\$150.00
Senior Survey Technician	\$105.00
Survey Technician	\$95.00
Flagger	\$50.00
Abstractor	\$80.00
1-Man Survey Crew	\$130.00
2-Man Survey Crew	\$180.00
3-Man Survey Crew	\$215.00
Unmanned Aerial System (includes UAS, Vehicle, FAA Licensed Pilot & Observer). Vehicle mileage not included. Does not include mobilization to site – this is listed as ODE.	\$175.00

<b>Type</b>	<b>Unit</b>	<b>Rate</b>
Lodging/Hotels including taxes/fees	Day/Person	Current Rate
Meals (Requires Overnight Stay)	Day/Person	Current Rate
Travel Mileage	Mile	Current Rate
Overnight Mail – Letter size	Each	Current Rate
Overnight Mail – Oversized Box	Each	Current Rate
Toll Charges	Each	\$5.00
ATV Rental (includes taxes & fees; insurance costs will not be reimbursed)	Day	\$185.00
Parking	Day	\$30.00
Photocopies (B&W) (8 ½" x 11")	Each	\$0.15
Photocopies (B&W) (11" x 17")	Each	\$0.25
Photocopies (Color) (8 ½" x 11")	Each	\$1.00
Photocopies (Color) (11" x 17")	Each	\$1.25
Roll Plots (B/W)	Square Foot	\$1.00

Roll Plots (Color)	Square Foot	\$1.75
Railroad - Flagger (Service provided by RR)	Day	\$1,600.00
Railroad - Insurance in addition to STD Min. Required (Min. of \$1 MM coverage required by RR.)	Each	\$2,500.00
Railroad - Permit	Each	\$1,750.00
Railroad - Safety Training (If required - Heavy Rail Safety Training Certificate, includes classroom training and employee certification card.)	Per Person	\$525.00
Traffic Control Services, Arrow Boards and Attenuator trucks - Small Project (Includes labor, equipment and fuel)	Day	\$3,000.00
Traffic Control Services, Arrow Boards and Attenuator trucks - Medium Project (Includes labor, equipment and fuel)	Day	\$4,000.00
Traffic Control Services, Arrow Boards and Attenuator trucks - Large Project (Includes labor, equipment and fuel)	Day	\$5,000.00
Attenuator trucks - (Lane/Shoulder Closure) (Includes labor, equipment and fuel)	Day	\$1,600.00
Attenuator trucks - (No Lane Closure) (Includes labor, equipment and fuel)	Day	\$1,000.00
Boat / Skiff with Motor	Day	\$400.00
Fathometer	Day	\$90.00
Bulldozer Rental	Day	\$3,000.00
Backhoe Rental	Day	\$1,500.00
Rental Equipment – Gasoline Powered Auger	Day	\$100.00
Law Enforcement/Uniform Officer w/ Vehicle	Hour	\$150.00
GPS Receiver (rates applied to actual time GPS units are in use)	Hour	\$30.00
GPS RTK (rates applied to actual time GPS units are in use)	Hour	\$30.00
GPS Static (rates applied to actual time GPS units are in use)	Hour	\$30.00
Deed Copies	Sheet	\$3.00
Certified Deed Copies	Sheet	\$4.00
Reprographics	Per Sq. Ft.	\$4.00
Unmanned Aerial Vehicle (UAV) (equipment)	Hour	\$75.00
Ground Target (includes paint, panel material, etc.)	Each	\$30.00
Terrestrial Laser Scanner (rates applied to actual time scanner unit is in use)	Hour	\$125.00
Type II ROW Monument - Excavated/Drilled, rocks, rocky soil. 2-4 inch depth (Includes crew time, equipment, materials, rentals, & labor.) Brass Marker supplied by TxDOT.	Each	\$110.00
Type II ROW Monument - Poured 2-3 Feet (Includes One Call, crew time, equipment, materials, rentals, labor.) Brass Marker supplied by TxDOT.	Each	\$300.00
Subsurface Utility Engineering (equipment and operator)	Day	\$2,500.00

*Rates valid from January 1, 2021 through December 31, 2021*



March 29, 2021  
Proposal No.: 21-048



**Paradigm  
Consultants, Inc.**

9980 W. Sam Houston Pkwy S.  
Suite 500  
Houston, Texas 77099

Main: 713.686.6771  
Dispatch: 713-686-6999  
*paradigmconsultants.com*  
TBPE Reg. No. F-001478

Mr. Jim Roberts, PE, CFM  
Senior Project Manager  
Pacheco Koch  
20329 State Highway 249, Ste. 350  
Houston, TX 77070

**Geotechnical Engineering Proposal  
Church Street Realignment  
Fort Bend County, Texas**

Mr. Roberts:

Paradigm Consultants, Inc., (Paradigm) appreciates the opportunity to submit this proposal to perform a geotechnical study for the referenced project. We prepared our proposal based on the information provided and our experience with similar projects.

**Project Descriptions**

Plans are to upgrade 572-ft Church Street from Colony Road to Stefek Street in Fort Bend County, Texas. In addition, 6' shoulders on Colony Road and 2' shoulders on Church Road will be constructed as well.

**Scope of Services**

Our scope of services will consist of exploring subsurface soil conditions and developing geotechnical engineering recommendations to assist others in the design and construction of the proposed improvements. Our geotechnical study will be performed in general according to the Fort Bend County Engineering Design Manual. The following subsections present details of our proposed scope of service.

**Field Exploration**

Based on the information provided, we proposed to drill and sample two borings to a depth of 10-ft for this project. Our geotechnical technician will be present during the field exploration activities to oversee the drilling operations, direct the sampling efforts, and log the borehole in general accordance with applicable ASTM standards. We will coordinate with the surveyors to tie down the borehole locations.

Cohesive soils will be sampled using a 3-in. diameter, thin-walled tube and granular soils will be sampled with a split-barrel sampler while performing a Standard Penetration Test (SPT). Soil sampling will be performed in general accordance with applicable ASTM standards. We will transport portions of the recovered samples to our soil mechanics laboratory for testing.

Mr. Jim Roberts, PE, CFM  
Senior Project Manager  
Pacheco Koch  
March 29, 2021  
Page 2 of 3

We will collect samples at 2-ft intervals to the completion depth of borings. We will take depth-to-water measurements within the open boreholes on the day of drilling. The open boreholes then will be grouted.

### **Laboratory Testing**

We will perform laboratory tests on selected samples to evaluate the physical and engineering properties of the recovered soils. The testing will include measurement of the undrained shear strength, unconfined compressive strength test, total unit weight, in situ moisture content, and liquid limit and plastic limit testing to determine plasticity characteristics of the cohesive soils. For granular soils, laboratory testing will include determination of fines content and possibly grain size distribution. Laboratory testing will be performed using applicable ASTM methods.

### **Engineering Analyses and Reporting**

The details of our field and laboratory programs, our findings, and our recommendations will be presented in our signed and sealed geotechnical report. Our geotechnical engineering recommendations will include design and construction recommendations for the proposed roadway.

### **Fee and schedule**

Our lump sum fee to provide the scope of services described in this proposal will be **\$9,972**. Our fee included potential coring in the street and traffic control if the soil borings cannot be drilled in the grass areas due to the underground utilities conflict. Barring any weather delays, we will provide a complete report in about 3 weeks to 4 weeks following drilling.

Variations in the scope of the project may necessitate a change in the scope of services outlined and a change in fees. We will not proceed with a change in the scope of services without your approval.

### **Assumptions and Conditions**

We assumed the borings are accessible to a truck drill rig. Access, right-of-entry, and/or other permits will be provided by the client. Professional services (engineering recommendations) required/requested beyond the scope mentioned above will be authorized by an amendment.

### **Closing**

We appreciate having the opportunity to develop this proposal and look forward to working with you on this project. If you have any questions, please contact us at your convenience.

Mr. Jim Roberts, PE, CFM  
Senior Project Manager  
Pacheco Koch  
March 29, 2021  
Page 3 of 3

Sincerely,  
**Paradigm Consultants, Inc.**

A handwritten signature in blue ink, appearing to read "Frank S. Ong", with a stylized flourish at the end.

Frank S. Ong, P.E.  
Engineering Manager

Geotechnical Study Budget					
Church Street		Worksheet			
Proposal No. 21-048					
<b>Subcontract Field Charges</b>		<i>Units</i>	<i>Rate</i>		
Mobilization (LS)		1	349.00		349.00
Traffic Control		1	2,500.00		2,500.00
Asphalt Coring (6" dia., to 6" thickness), each		2	120.00		240.00
Asphalt Coring (6" dia., 6" to 12" thickness), in.		8	13.50		108.00
Drilling - truck		20	19.00		380.00
Grouting boreholes		20	10.00		200.00
<b>Subtotal Subcontract Field</b>					<b>3,777.00</b>
<b>PCI Field Charges</b>		<i>Units</i>	<i>Rate</i>		
Logging, Logger		10	65.00		650.00
Vehicle		10	10.00		100.00
<b>Subtotal PCI Field</b>					<b>750.00</b>
<b>Laboratory Services</b>		<i>Units</i>	<i>Rate</i>		
Unconfined compression		4	45.00		180.00
Liquid and plastic limits		4	62.00		248.00
Natural moisture contents		10	9.00		90.00
Percent finer than no. 200		1	48.00		48.00
Unconsolidated undrained		2	63.00		126.00
<b>Subtotal Laboratory Services</b>					<b>692.00</b>
<b>PCI Engineering Fees</b>		<i>Units</i>	<i>Rate</i>	<i>Staff</i>	
Field Schedule		4	101.00	Grad Engineer	404.00
Lab assignments		1	101.00	Grad Engineer	101.00
Logs		3	101.00	Grad Engineer	303.00
Draft report		25	101.00	Grad Engineer	2,525.00
Review		5	183.00	Seni Engineer	915.00
Finalize report		5	101.00	Grad Engineer	505.00
<b>Subtotal Engineering Fees</b>					<b>4,753.00</b>
<b>Total Fee</b>					<b>9,972.00</b>



April 16, 2021

Mr. Jim Roberts, P.E, CFM  
Senior Project Manager  
Pacheco Koch  
20329 State Hwy 249, Suite 350  
Houston, TX 77070

Subject: **Traffic Engineering Services**  
**Turn Lanes at Church Street and Colony Road**  
**Needville, TX**  
**Fort Bend County - Project No. 20119**

Dear Jim,

Transcend Engineers & Planners, LLC (Transcend) is pleased to submit this proposal to provide engineering services for turn lane analysis at the intersection of Church Street and Colony Road in the City of Needville, Fort Bend County, TX. These services will be provided as part of the intersection improvements to adjust the tie-in of Church Street to Colony Road to meet perpendicular, which is part of the 2020 Fort Bend Mobility program.

#### **Assumption**

Pacheco Koch will be responsible to provide the proposed intersection alignment including survey.

#### **Scope of Work**

Transcend will coordinate turn lane analysis work with Pacheco Koch, prime design consultant.

#### **PER Support Services**

Transcend shall support the Preliminary Engineering Report (PER) preparation to include the following:

- Collect and Process 24hr traffic volumes and peak hour turning movement counts
- Perform Turn Lane Analysis
- Prepare PER technical memo

#### **Compensation**

Transcend's estimated lumpsum is as follows which includes labor and non-labor reimbursable expenses. The hours estimate and cost breakdown for Transcend are shown in Attachment A.

<b>Task</b>	<b>Fee</b>
PER Support Services	\$6,780.00
Expenses	\$939.60
<b>TOTAL</b>	<b>\$7,719.60</b>

Transcend shall submit monthly Invoices as lumpsum showing percent work complete. Transcend will consider work not specifically stated above as additional with a right to negotiate.

**Schedule**

Transcend estimates that the PER Support Services can be completed within 45 calendar days from Notice to Proceed (NTP). If the schedule needs to be revised, Transcend will defer to Pacheco Koch. Note that Transcend shall not proceed with any work or additional services without written NTP from Pacheco Koch and Fort Bend County.

Please contact me at 832.492.4499 or at [raj@transcendengineers.com](mailto:raj@transcendengineers.com) with any questions. We appreciate the opportunity to work with Pacheco Koch in serving Fort Bend County and look forward to NTP.

Regards,

Transcend Engineers & Planners, LLC.



Raj Basavaraju, P.E., PTOE  
Principal

**Attachment:**

Transcend Hours Estimate & Cost Breakdown

ATTACHMENT A  
HOURS ESTIMATE & COST BREAKDOWN  
TURN LANE ANALYSIS AT CHURCH STREET AND COLONY ROAD

Task Description	Project Manager	Project Engineer	Traffic Engineer	CADD Technician	Project Admin.	Total Hours	Cost
<b>PER SUPPORT SERVICES</b>							
Project Management (incl. QA/QC)		4				4	\$1,224.00
Traffic Volume Data Processing			2			2	\$726.00
Turn Lane Analysis		2	16			18	\$2,490.00
PER Technical Memo		2	10			16	\$2,340.00
<b>PER SUPPORT SERVICES HOURS/COST</b>	<b>6</b>	<b>4</b>	<b>28</b>	<b>6</b>	<b>4</b>	<b>48</b>	<b>\$6,780.00</b>

<b>Misc Expenses</b>							
Mileage [40 miles round trip/Assumes 2 visits/\$0.56 (2021 rate)] - Assumes two separate cars on each trip due to COVID-19							\$89.60
Traffic Data Collection (24-hrs & Peak Hour Counts)							\$800.00
Printing							\$50.00
<b>Expenses</b>							<b>\$939.60</b>

<b>GRAND TOTAL</b>							<b>\$7,719.60</b>
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