

**AGREEMENT BETWEEN  
THE CITY OF SAN MARCOS AND  
PROFESSIONAL FIRM FOR  
ENGINEERING SERVICES**

This Agreement is made as of \_\_\_\_\_, 2018 (the “**Effective Date**”), by and between:

**The Owner:** The City of San Marcos, Texas

and

**The Professional Firm:** Cobb, Fendley & Associates, Inc.

for

**The Project:** Bishop Street Improvements

Owner Standard Terms and Conditions: Parties have read and agree to be bound by the General Terms and Conditions found at <http://www.sanmarcostx.gov/DocumentCenter/Home/View/6608>.

**Further;**

The Owner and the Professional Firm agree as follows:

**ARTICLE 1  
PROFESSIONAL FIRM’S SERVICES**

Professional Firm agrees to perform the services specifically described in **Exhibit 1** and all other professional services reasonably inferable from **Exhibit 1** and necessary for complete performance of Professional Firm’s obligations under this Agreement (collectively, “**Professional Firm’s Services**”). To the extent of any conflict between the terms in **Exhibit 1** and this Agreement, the terms of this Agreement shall prevail.

**ARTICLE 2  
PROFESSIONAL FIRM’S RESPONSIBILITIES**

Professional Firm agrees to use Professional Firm's best efforts, skill, judgment, and abilities so as to perform Professional Firm's Services in an expeditious and timely manner consistent with professional standards of care and the orderly progress of the Project. Professional Firm shall at all times provide sufficient personnel to accomplish Professional Firm's Services in a timely manner. Professional Firm shall manage its services, administer the Project and coordinate other professional services as necessary for the complete performance of Professional Firm’s obligations under this Agreement.

Professional Firm agrees to perform Professional Firm's Services in compliance with all applicable national, federal, state, municipal, and State of Texas laws, regulations, codes, ordinances, orders and with those of any other body having jurisdiction over the Project.

Professional Firm's Services shall be reasonably accurate and free from material errors or omissions. Professional Firm shall promptly correct any known or discovered error, omission, or other defect in the plans, drawings, specifications, or other services provided by Professional Firm without any additional cost or expense to Owner.

Professional Firm shall designate a representative primarily responsible for Professional Firm's Services under this Agreement. The designated representative shall act on behalf of Professional Firm with respect to all phases of Professional Firm's Services and shall be available as required for the benefit of the Project and Owner. The designated representative shall not be changed without prior approval of the Owner, which approval shall not be unreasonably withheld.

The Professional Firm shall carry such professional liability and errors and omissions insurance, covering the services provided under this Agreement, with a minimum limit of \$1,000,000 each claim and \$1,000,000 aggregate. The fees for such insurance will be at the expense of the Professional Firm. The Professional Firm shall deliver a Certificate of Insurance indicating the expiration date, and existence, of the Professional Firm's professional liability insurance before commencement or continuation of performance of the services under this Agreement.

### **ARTICLE 3**

#### **THE OWNER'S RESPONSIBILITIES**

The Owner shall provide the Professional Firm with a full description of the requirements of the Project.

The Owner shall furnish surveys, geotechnical reports or other special investigations of the Project site as requested by the Professional Firm and as reasonably necessary for the completion of Professional Firm's Services. The Owner shall furnish structural, mechanical, chemical and other laboratory tests as reasonably required.

The Owner will review the Professional Firm's drawings, specifications and other documents of service produced by Professional Firm's in the performance of its obligations under this Agreement (collectively the "**Design Documents**") as required. Owner will notify Professional Firm of any design fault or defect in Professional Firm's Services or Design Documents of which Owner becomes aware.

The Owner shall furnish required information and services and shall render approvals and decisions as expeditiously as necessary for the orderly progress of Professional Firm's Services.

The Owner designates **Shaun Condor, P.E.**, as its representatives authorized to act in the Owner's behalf with respect to the Project. The contact information for Owner's representative is listed below:

**Name:** Shaun Condor, P.E.  
**Title:** Senior Project Engineer  
630 East Hopkins  
San Marcos, Texas 78666  
Ph. 512-393-8134  
**E-mail:** scondor@sanmarcostx.gov

#### **ARTICLE 4**

#### **OWNERSHIP AND USE OF DOCUMENTS**

The Design Documents prepared by Professional Firm as instruments of service are and shall remain the property of the Professional Firm whether the Project for which they are created is executed or not. However, the Owner shall be permitted to retain copies, including reproducible copies, of the Design Documents for information and reference in connection with the Owner's use and occupancy of the Project. In addition, Owner shall have an irrevocable, paid-up, perpetual license and right, which shall survive the termination of this Agreement, to use the Design Documents and the ideas and designs contained in them for any purpose, with or without participation of the Professional Firm. If the Owner modifies and/or uses the documents for any reason other than their intended use, without Professional Firm's authorization, the Professional Firm shall be released from any liability as a result of such action.

#### **ARTICLE 5**

#### **DISPUTE RESOLUTION**

If a dispute arises out of or relates to the Agreement or these Terms and Conditions, or a breach thereof, the parties agree to negotiate prior to prosecuting a suit for damages. However, this section does not prohibit the filing of a lawsuit to toll the running of a statute of limitations or to seek injunctive relief. Either party may make a written request for a meeting within fourteen (14) calendar days after receipt of the request or such later period as agreed by the parties. Each party shall include, at a minimum, one (1) senior level individual with decision-making authority regarding the dispute. The purpose of this and any subsequent meeting is to attempt in good faith to negotiate a resolution of the dispute. If, within thirty (30) calendar days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they will proceed directly to mediation as described below. Negotiation may be waived by a written agreement signed by both parties, in which event the parties may proceed directly to mediation as described below.

If the efforts to resolve the dispute through negotiation fail, or the parties waive the negotiation process, the parties may select, within thirty (30) calendar days, a mediator trained in mediation skills to assist with resolution of the dispute. Should they choose this option, the Owner and the Professional Firm agree to act in good faith in the selection of the mediator and to give consideration to qualified individuals nominated to act as mediator. Nothing in the Contract prevents the parties from relying on the skills of a person who is trained in the subject matter of the dispute or a contract interpretation expert. The parties agree to participate in mediation in good faith for up to thirty (30) calendar days from the date of the first mediation session. The Owner and Professional Firm will share the mediator's fees equally and the parties will bear

their own costs of participation such as fees for any consultants or attorneys they may utilize to represent them or otherwise assist them in the mediation.

## **ARTICLE 6**

### **PROJECT TERMINATION OR SUSPENSION**

This Agreement may be terminated by either party upon seven days written notice should the other party fail substantially to perform in accordance with its terms through no fault of the terminating party and such failure is not fully cured in the seven day notice period. This Agreement may be terminated by the Owner for any reason upon 15 days written notice to Professional Firm.

In the event of termination through no fault of the Professional Firm, Professional Firm shall be equitably compensated for all Professional Firm Services performed and Reimbursable Expenses incurred prior to termination in accordance with this Agreement.

## **ARTICLE 7**

### **MISCELLANEOUS PROVISIONS**

Entire Agreement. This Agreement supersedes all prior agreements regarding this Project, written or oral, between Professional Firm and Owner and constitutes the entire and integrated Agreement and understanding between the parties with respect to the subject matter of the Agreement. This Agreement may only be amended by a written instrument signed by both parties.

Assignment. This Agreement is a personal service contract for the services of Professional Firm, and Professional Firm's interest in this Agreement, duties hereunder and/or fees due hereunder may not be assigned or delegated to a third party.

Applicable Law. The Agreement will be governed by and construed under the laws of the State of Texas. Any controversy, claim or dispute arising out of or relating to this Agreement will be brought in a state court of competent jurisdiction in Hays County or, if in federal court, in the Federal Western District of Texas, Austin Division for trial.

Waiver. A delay or omission by either party in exercising any right or power under the Agreement shall not be construed as a waiver of that right or power. A waiver by either party of any term or condition of the Agreement shall not be construed as a waiver of any subsequent breach of that term or condition or of any other term or condition of the Agreement.

Severability. If any provision of this Agreement is determined to be invalid or unenforceable in any respect, that determination shall not affect any other provision of this Agreement which shall be interpreted as if the invalid or unenforceable provision had not been included.

Independent Contractor. Professional Firm recognizes that Professional Firm is engaged as an independent contractor and acknowledges that Owner shall have no responsibility to provide Professional Firm or its employees with any benefits normally associated with employee status. Professional Firm will neither hold itself out as nor claim to be an officer, partner, employee or agent of Owner.

Family Code Child Support Certification. If State funds are being used in the procurement of the services described in Exhibit A, pursuant to Section 231.006, Texas Family Code, Professional Firm certifies that it is not ineligible to receive the award of or payments under this Agreement and acknowledges that this Agreement may be terminated and payment may be withheld if this certification is inaccurate.

Prohibition on Contracts with Companies Boycotting Israel. Pursuant to Chapter 2270 and 808, Texas Government Code, Professional Firm certifies that is not ineligible to receive the award of or payments under the Agreement and acknowledges that the Agreement may be terminated and payment may be withheld if this certification is inaccurate. Failure to meet or maintain the requirements under this provision will be considered a material breach.

Section 2252 Compliance. Section 2252 of the Texas Government Code restricts the Owner from contracting with companies that do business with Iran, Sudan, or a foreign terrorist organization. Professional Firm hereby certifies that is not ineligible to receive the award of or payments under this Agreement. Failure to meet or maintain the requirements under this provision will be considered a material breach.

Proprietary Interests. All information owned, possessed or used by Owner which is communicated to, learned, developed or otherwise acquired by Professional Firm in the performance of services for Owner, which is not generally known to the public, shall be confidential and Professional Firm shall not disclose any such confidential information, unless required by law. Professional Firm shall not announce or advertise its engagement by Owner in connection with the Project or publicly release any information regarding the Project without the prior written approval of Owner.

Termination Due to Loss of Funding. If Owner funds are utilized to fund any part of this Agreement, the Professional Firm understands that those Owner funds for the payment for work performed by the Professional Firm under this Agreement have been provided through the Owner's budget approved by Owner Council for the current fiscal year only. State statutes prohibit the obligation and expenditure of public funds beyond the fiscal year for which a budget has been approved. The Owner cannot guarantee the availability of funds, and enters into this Agreement only to the extent such funds are made available. The Professional Firm acknowledges and agrees that it will have no recourse against the Owner for its failure to appropriate funds for the purposes of this Agreement in any fiscal year other than the year in which this Agreement was executed. The fiscal year for the Owner extends from October 1st of each calendar year to September 30th of the following calendar year.

Ethics Matters; No Financial Interest. Professional Firm and its employees, agents, representatives, and subcontractors have read and understand Owner's Ethics Policy available at <http://www.sanmarcostx.gov/380/Ethics>, and applicable state ethics laws and rules. Neither Professional Firm nor its employees, agents, representatives or subcontractors will assist or cause Owner employees to violate Owner's Conflicts of Interest Policy, provisions described by Owner's Standards of Conduct Guide, or applicable state ethics laws or rules. Professional Firm represents and warrants that no member of the City Council of San Marcos has a direct or indirect financial interest in the transaction that is the subject of this Agreement.

Subcontracting. The Professional Firm will not subcontract any work under this Agreement without prior written approval from the Owner. In the event approval is given by the Owner, the

Professional Firm will specify any work or services, the appropriate insurance requirements and miscellaneous provisions by separate written agreement with the subcontractor.

Mutual Waiver of Consequential Damages. In no event shall either party be liable, whether in contract or tort or otherwise, to the other party for loss of profits, delay damages, or for any special incidental or consequential loss or damage of any nature arising at any time or from any cause whatsoever.

Texas Tax Code 171.1011(g)(3). Notwithstanding anything in this agreement and for the purpose of complying with Texas Tax Code 171.1011(g)(3), the City agrees to the following:

- (1) Prior to commencing performance under this Agreement, Professional Firm will provide the City with a list of proposed subconsultants, subcontractors, or agents to be used in Professional Firm's services under this Agreement. The City shall have the right to accept or reject the use of any subconsultant, subcontractor, or agent on the Professional Firm's list. Such acceptance or rejection shall be given within a commercially reasonable time from the date the Professional Firm delivers it. and;
- (2) Any payment made by the Owner to Professional Firm that includes fees payable to a subconsultant, subcontractor or agent of Professional Firm under this Agreement shall constitute an acceptance by the Owner of Professional Firm's use of any such subconsultant, subcontractor or agent of Professional Firm under this Agreement.

Limitation of Liability. In recognition of the relative risks and benefits of the Agreement to both the Owner and Professional Firm, to the fullest extent permitted under applicable law, Owner agrees that Professional Firm's total liability for any and all claims, losses, costs, damages, or expenses including, without limitation, reasonable attorneys' fees and costs, of any nature whatsoever, shall not exceed the Professional Firm's total fee under the Agreement. It is intended that this limitation of liability shall apply to any and all liability or cause of action, whether in contract, warranty, tort, or otherwise, however alleged or arising.

Force Majeure. Professional Firm shall have no liability for any delay caused by an event of force majeure, the Owner or any of its consultant's or contractors, or circumstances outside of its reasonable control.

Termination for Convenience. The Owner may terminate the Agreement at any time upon 30-calendar days notice in writing to Professional Firm. Upon receipt of such notice, Professional Firm shall, unless the notice directs otherwise, discontinue all services in connection with the performance of the Agreement. As soon as practicable after the receipt of notice of termination, Professional Firm shall submit a statement to the appropriate department(s) showing in detail the services performed or items delivered under the Agreement to date of termination. The Owner agrees to compensate the Professional Firm for that portion of the prescribed charges for which the services were actually performed or items delivered under the Agreement and not previously paid.

Notices. All notices referenced in this Agreement shall be provided in writing. Notices shall be deemed effective when delivered by hand delivery or on the third business day after the notice is deposited in the U.S. Mail. Notices shall be sent to the following addresses:

If to Owner:                   The City of San Marcos  
630 East Hopkins  
San Marcos, Texas 78666  
Attn: Capital Improvements/Engineering  
scondor@sanmarcostx.gov

With Copies to:               The City of San Marcos  
630 East Hopkins  
San Marcos, Texas 78666  
Attn: City Attorney's Office  
LegalInfo@sanmarcostx.gov

If to Professional Firm       Lance Parish, P.E.  
Cobb, Fendley & Associates, Inc.  
505 East Huntland Drive, Suite 100  
Austin, Texas 78752  
lparisher@cobbhendley.com

The parties may designate alternative persons or addresses for receipt of notices by written notice.

Changes in Service. If a Party requires a change or amendment to this Agreement or its Exhibits, the Parties agree to use the Authorization on Change in Services Form in **Exhibit 2** to do so. The Authorization on Change in Services Form must be agreed to and signed by both Parties before any change to this Agreement is effective.

## **ARTICLE 8**

### **REIMBURSABLE EXPENSES**

Reimbursable Expenses are in addition to Compensation for Professional Firm's Services and include actual and reasonable expenses incurred by the Professional Firm, that are (i) outside the services listed in **Exhibit 1**; and (ii) solely and directly in connection with the performance of Professional Firm's Services. Such Reimbursable Expenses must be approved in writing by the Owner and may include the following:

Expense of transportation (coach class air travel only) and living expenses in connection with out-of-state travel as directed and approved in advance by the Owner. Transportation and living expenses incurred within the State of Texas are not reimbursable unless expressly approved by the Owner in advance.

Fees paid for securing approval of authorities having jurisdiction over the Project.

Professional models and renderings if requested by the Owner.

Reproductions, printing, binding, collating and handling of reports, and drawings and specifications or other project-related work product, other than that used solely in-house for Professional Firm.

Shipping or mailing of all reports, drawings, specifications, and other items in connection with the Project.

Expense of any additional insurance coverage or limits, excluding professional liability and errors and omissions insurance, required under this Agreement or requested by the Owner that is in excess of that normally carried by the Professional Firm.

## **ARTICLE 9**

### **ADDITIONAL SERVICES**

Additional Services are services not included in the Professional Firm's Services and not reasonably inferable from Professional Firm's Services. Additional Services shall be provided only if authorized or confirmed in writing by the Owner. Prior to commencing any Additional Service, Professional Firm shall prepare for acceptance by the Owner an Additional Services Proposal detailing the scope of the Additional Services and the proposed fee for those services. Professional Firm shall proceed to perform Additional Services only after written acceptance of the Additional Services Proposal by Owner.

Upon acceptance by Owner, each Additional Services Proposal and the services performed by Professional Firm pursuant to such Additional Services Proposal shall become part of this Agreement and shall be subject to all the terms and conditions of this Agreement.

## **ARTICLE 10**

### **PAYMENTS TO PROFESSIONAL FIRM**

Professional Firm shall present monthly Applications for Payment to the Owner detailing the Professional Firm's Services and approved Additional Services performed and the approved Reimbursable Expenses incurred for the Project in the previous month. With each application for payment, Professional Firm shall submit payroll information, receipts, invoices and any other evidence of payment which Owner or its designated representatives shall deem necessary to support the amount requested.

Owner shall promptly review the Application for Payment and notify Professional Firm whether the Application is approved or disapproved, in whole or in part. Owner shall promptly pay Professional Firm for all approved services and expenses. For purposes of Texas Government Code § 2251.021(a)(2), the date performance of services is completed is the date when the Owner's representative approves the Application for Payment.

Owner shall have the right to withhold from payments due Professional Firm such sums as are necessary to protect Owner against any loss or damage which may result from negligence by Professional Firm or failure of Professional Firm to perform its obligations under this Agreement.



## **ARTICLE 11** **PROFESSIONAL FIRM'S ACCOUNTING RECORDS**

Records of Professional Firm costs, reimbursable expenses pertaining to the Project and payments shall be available to Owner or its authorized representative during business hours and shall be retained for three years after final Payment or abandonment of the Project, unless Owner otherwise instructs Professional Firm in writing. Professional Firm's records shall be kept on the basis of generally accepted accounting principles.

## **ARTICLE 12** **INSURANCE**

For services performed on Owner's premises, Professional Firm shall furnish to Owner Certificates of Insurance as set forth below prior to the commencement of any work hereunder and shall maintain such coverage during the full term of the Agreement.

Worker's Compensation	Statutory Limits
Employer's Liability	\$1,000,000 each occurrence
	\$1,000,000 aggregate
Comprehensive General Liability	\$1,000,000 each occurrence
	\$1,000,000 aggregate
Comprehensive Auto Liability	\$1,000,000 each person
Bodily Injury	\$1,000,000 each occurrence
Property Damage	\$1,000,000 each occurrence
Professional Liability	\$1,000,000

Professional Firm shall include the Owner as an additional insured on the General Liability policy, and the Worker's Compensation policy shall include a waiver of subrogation in favor of the Owner.

Required insurance shall not be cancelable without thirty (30) days' prior written notice to Owner.

Upon request Professional Firm shall furnish complete sets of its insurance policies to Owner for review. If additional insurance or changes to this article are required, they shall be explicitly laid out in **Exhibit 1**.

## **ARTICLE 13** **INDEMNITY**

Professional Firm shall hold Owner, The City of San Marcos, and its City Council, officers, and employees harmless and free from any loss, damage or expense arising out of any occurrence relating to this Agreement or its performance and shall indemnify Owner, and its City Council, officers, employees and customers against any damage or claim of any type arising to the extent caused by the negligent acts or omission of Professional Firm, its employees, agents and/or assigns.

**ARTICLE 14**  
**PROFESSIONAL FIRM'S COMPENSATION**

The Professional Firm's compensation for Professional Firm's Services shall be as follows:

Service Fees: The maximum fee for Professional Firm's Services shall not exceed **Three Hundred Fifty Seven Thousand Two Hundred Nine Dollars and Fifty Cents (\$357,209.50).**

Reimbursable Expenses: For Reimbursable Expenses approved by the Owner (ref. Article 8 and **Exhibit 3**), Professional Firm shall be compensated for the actual expense incurred by Professional Firm. Notwithstanding the foregoing, Owner's payment to Professional Firm for Reimbursable Expenses will not exceed a maximum of amount agreed upon in this Agreement and Exhibits without the prior written approval of the Owner.

Additional Services: The Professional Firm's Compensation for any approved Additional Services shall be as described in the Additional Services Proposal accepted by the Owner.

The Owner and Professional Firm have entered into this Agreement as of the Effective Date.

**OWNER:**

**THE CITY OF SAN MARCOS**

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

Name: Bert Lumbreras

Title: City Manager

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

**PROFESSIONAL FIRM:**

**COBB, FENDLEY & ASSOCIATES, INC.**

By: 

Name: Dan Warth, P.E.

Title: Vice President

Date: 05/04/18

**Exhibits:**

**EXHIBIT 1 – Scope of Services and Deliverables**

**EXHIBIT 2 – Authorization of Change in Service Form**

**EXHIBIT 3 – Detailed Fee Schedule**

**EXHIBIT 4 – Project Schedule**

**EXHIBIT 1**  
**SCOPE OF SERVICES AND DELIVERABLES**

**EXHIBIT 1 – Scope of Services and Deliverables**  
**ATTACHMENT A**  
**CITY OF SAN MARCOS**  
**Bishop Street Improvements**  
**SCOPE OF SERVICES – PER & 30% Plans**

**Project Understanding**

The work to be performed by CobbFendley & Associates (CF) under this contract will consist of providing Preliminary Engineering Report & 30% Design Phase Services. Per direction by the City of San Marcos, 60%, 90%, & 100% Documents and Bid and Construction Phase Services will be negotiated after the PER submittal and during the 30% phase for the Bishop Street Project. The project consists of the following improvements:

- 2D Storm Analysis of the project area and drainage area
- Analysis and Design of approximately 2,700 linear feet of a storm drainage system.
- Preparation of Preliminary Engineering Report
- 1 Public Meeting
- Illumination Analysis of the Project Area
- Environmental Investigation, Survey, Geotechnical Borings and Report, and Utility Coordination
- Relocation and Design of approximately 2,700 linear feet of 8" & 12" water line, services, and appurtenance improvements at 30%
- Relocation and Design of approximately 2,700 linear feet of 8" wastewater line, services, and appurtenance improvements at 30%
- Streets and Sidewalk in the affected project area (at 30%):
  - ~350' South Bishop Street
  - ~200' San Antonio Street
  - ~900' North Bishop Street
  - ~1,250' Belvin Street

Refer to **Exhibit 1** of this Scope of Services for the Project area and Alternative Considerations.

**Basic Scope of Services**

**Preliminary Engineering Report**

1. Project Management and QA/QC: This task consists of effort associated with project administration, coordination with City staff, coordination and supervision of the project team, and quality management so that project milestones and deliverables meet schedule and budget constraints.
2. Meetings
  - a. Project Coordination Meetings. Four meetings have been budgeted for this Preliminary Phase with the client
  - b. Public Meeting: One project meeting has been budgeted for the Preliminary Engineering Phase.
3. Data Collection and Review
  - a. Review Reports, studies, and drawings
  - b. Site Visits
  - c. Staff Coordination
4. Survey
  - a. Topographic and Tree Survey: CF will prepare topographic and tree survey for the red boundary area, as shown in the attached exhibit (Exhibit A) provided by the City, for preparing Design Documents. CF will prepare an electronic map showing the following:
    - i. ROUTE 1 - Topographic Survey of Belvin Street, N Bishop Street, W San Antonio Street & South Bishop Street
      - Full topography will be within the ROW limits and 5 feet outside of the following corridors; a) Belvin Street between N. Johnson Avenue and North Bishop Street, b) North Bishop Street between Belvin Street and S San Antonio Street, c) West San Antonio Street Between North Bishop Street d)

## **EXHIBIT 1 – Scope of Services and Deliverables**

### **ATTACHMENT A**

#### **CITY OF SAN MARCOS**

#### **Bishop Street Improvements**

#### **SCOPE OF SERVICES – PER & 30% Plans**

South Bishop Street between West San Antonio Street and the south end of South Bishop Street and out fall into Purgatory Creek and e) Veramendi Street 100 feet northwest of Belvin Street. CFA will prepare topographic and tree survey for the area described above and as indicated provided by the City, for preparing Design Documents. CFA will prepare an electronic map showing the following:

- a. CFA will establish Survey Control that will be referenced to the Texas State Plane Coordinate System - Central Zone, North American Datum 1983, North American Vertical Datum 1988 (Geoid 12b).
  - b. CF will set survey control monumentation (4 minimum) for construction purposes within the project limits.
  - c. Existing trees, size and type (at minimum caliper inches required by City CIP) – 6” and above caliper for native Oaks, Elms, Madrone, and Pecan, *Celtis Occidentalis* (Hackberry), *Juniperus Virginiana*, *Juniperus Ashei* (Common Cedar), Chinaberry, mesquite and *Ligustrum* trees per San Marcos City Ordinances, Section 5.5.2.2-C.4.
  - d. Shot at top of nut of water and gas valves. Water, Sewer, and Drainage maps will be required to be provided by City prior to survey.
  - e. Identify all visible and above grade utilities, and manholes with invert elevations and tied to existing control points/ City bench marks (if any). Underground site utilities will be located by ONE CALL only.
- ii. Purgatory Creek Ditch Cross-Sections:
    - Approximately 650 linear feet of ditch will be cross-sections, centered on the south end of South Bishop Street.
    - A total of 4 cross-sections will be collected, at approximately 200 feet spacing or as indicated by Engineer, prior to mobilization to site. CFA will record Natural ground, top of ditch, toe of ditch, flowline of ditch and other pertinent grade break features across the ditch.
    - The area to be surveyed is between approximately 50 feet upstream of Route 3 outfall and 50 feet downstream of Route 4 outfall.
  - iii. Locate and survey borings, channel material and geometry, and extra cross-sections at the request of the City. Locations of cross-sections will require pre-staking by the City or City's Engineer prior to survey.
5. Geotechnical Engineering – See attached Arias Scope of Services dated February 8, 2018.
  6. Environmental Services – See attached Cox Mclain Scope of Services. The PER/30% phase includes the Preliminary section of their scope and hazardous materials search.
  7. Offsite – 2D Drainage Modeling – this assumes that CF will perform 4 Route Alternatives for Cost/Benefit Comparison in the PER using XPSWMM 2D modeling. See attached Exhibit 1 for the routes based off current CoSM criteria: 25-year in the pipe and 100-year in the ROW. This task will be to perform the drainage impact analysis to determine the effects of improving the conveyance of the existing drainage channel northwest of Belvin Street. The impact analysis will determine existing condition flow rates, increased flows based upon change in conveyance, and verify no increase in water surface elevation will occur as a result of the improvements. The modeling efforts are defined as follows (these may overlap other scope items, but they are specific to the 2D modeling efforts):
    - a. Project Startup
      - i. Collection, Review and Analysis of Existing Plans, H&H Data, Maps and Reports
      - ii. Perform field visit
      - iii. Meetings/Coordination with City of San Marcos and affiliated entities
    - b. Existing Condition Analysis

## **EXHIBIT 1 – Scope of Services and Deliverables**

### **ATTACHMENT A**

#### **CITY OF SAN MARCOS**

#### **Bishop Street Improvements**

#### **SCOPE OF SERVICES – PER & 30% Plans**

- i. Analyze LiDAR Data to determine existing condition overland sheet flow patterns
  - ii. Identify and locate existing condition outfall locations and drainage systems
  - iii. Analyze existing terrain for overland flowpaths
  - iv. Determine Existing Condition drainage areas and create drainage area map
  - v. Perform existing condition hydrologic calculations (2, 5, 10, 25, 50, and 100-year rainfall events)
  - vi. Create existing condition 25- and 100-year XPSWMM 2D models utilizing recent obtained data
  - vii. Analyze conveyance capacity of existing condition channel and intersecting drainage infrastructure to determine existing HGL
- c. Proposed Condition Analysis
  - i. Revise Existing Condition drainage areas where necessary to create proposed drainage area map
  - ii. Perform proposed condition hydrologic calculations (2, 5, 10, 25, 50, and 100-year rainfall events)
  - iii. Perform comparison between existing and proposed condition hydrology to determine mitigation storage volume required
  - iv. Revise existing condition models to create four (4) alternative proposed condition drainage systems to convey the 25yr storm and check 100 year for impacts
  - v. Create dynamic models to verify flows and computed water surface elevations for complex drainage system alternatives and mitigation analysis
  - vi. Determine/Locate potential areas for detention facilities (if necessary)
  - vii. Compare results from recommended alternative to provided 2D regional models and update if necessary
- d. Project Management
  - i. Preliminary Drainage Study Report
  - ii. Prepare Maps and Exhibits
- e. QA/QC – Related to 2D Modeling:
  - i. QA/QC Submittal
  - ii. Address Comments
- 8. Onsite Hydrology and Hydraulics and LID – Assumes specific hydrology and hydraulic input can come from 2D modeling efforts to be used in the storm sewer design
  - a. On-Site Hydrology Pre- & Post – Delineate street and local drainage areas, time of concentration, runoff coefficients, rainfall intensity, and runoff used in hydraulic analysis.
  - b. On-Site Hydraulics Pre- & Post – Model Existing and Proposed storm sewer and infrastructure in the project area using XPSWMM.
  - c. Update existing HEC-RAS with revised surveyed sections and revised flows for comparison between existing and proposed outflows. It is CobbFendley's understanding that LAN is doing the Purgatory Creek modeling of this project.
  - d. LID/Water Quality Analysis – See attached Crespo Scope of Services, dated February 7, 2018.
  - e. Drainage Report – Assimilate findings into a technical report
- 9. Illumination Study. See attached scope of services from American Structure Point, dated April 6, 2018.
- 10. Determine Easement and Land Acquisition Requirements
  - a. Prepare Exhibits for Potential Easement and ROW Requirements to be included in the PER. This does not include metes and bounds descriptions. These will be for discussion only.
- 11. Determine Project Permitting/Design Requirements – to Accompany PER
  - a. TxDOT, County ROW, Floodplain, TCEQ Transition Zone, TPWD, UPRR (if necessary), USACE, and USF&W

## **EXHIBIT 1 – Scope of Services and Deliverables**

### **ATTACHMENT A**

### **CITY OF SAN MARCOS**

### **Bishop Street Improvements**

### **SCOPE OF SERVICES – PER & 30% Plans**

12. Construction Cost Estimates: shall include estimates based on linear feet of water, wastewater, storm sewer, streets, sidewalk, illumination, and other identified construction activities. 25% contingency will be applied.
13. Deliverables
  - a. Monthly Status Update- Assumes 6 months duration for draft PER
  - b. One Public Meeting – CF will send two Engineers to assist the City of San Marcos with questions.
  - c. Public Meeting Roll Plots & Exhibits
  - d. Design Summary Report (DSR)
  - e. Preliminary Engineering Report - Draft
  - f. Preliminary Engineering Report – Final

### **30% Plans**

Based on the recommended design and approval from San Marcos, CF will develop 30% Plans for the clients use and comment.

1. Project Management and QA/QC: This task consists of effort associated with project administration, coordination with City staff, coordination and supervision of the project team, and quality management so that project milestones and deliverables meet schedule and budget constraints.
2. Meetings
  - a. Project Coordination Meetings. Two meetings have been budgeted for this 30% Phase.
3. Development of Design Summary Report
4. 30% Plans – Anticipated Sheets and Numbers – The design sheets at 30% level are only plan view and existing ground profile that shows known existing utility crossings. the existing utilities will be schematic until further verified in the field. Profiles of proposed infrastructure will be shown at 60% and beyond. The Plan sheets shall be on 11x17 sheets at 1" = 40' H and 1" = 10' Vertical.
  - a. Cover Sheet – 1 Sheet
  - b. General Notes – 2 Sheets
  - c. Survey – 2 Sheets
  - d. General Layout – 1 Sheet
  - e. Water – 9 sheets
  - f. Wastewater – 9 Sheets
  - g. Drainage Area Maps, Offsite – 2 Sheets
  - h. Drainage Area Maps, Onsite – 2 Sheets
  - i. Storm Drainage Calcs – 1 Sheet
  - j. Storm Drainage Plans – 9 Sheets
  - k. Street Plans – 9 sheets
5. Utility Coordination
  - g. The following tasks are included in the Utility Coordination budget:
    - i. Project Management.
    - ii. Develop Utility Contact List. CF establish contact with existing Utility Companies within and adjacent to the Project and create a utility contact list. This list will be maintained throughout the project.
    - iii. Initial Project Notification Letters. CF will prepare and mail written notification letters to all known Utility Owners within and adjacent to the project site. A CD will be included with the letter containing milestone design plan sheets (\*.pdf and \*.dgn format).
    - iv. 30% Conflict Assessment. CF will determine which utilities will conflict with roadway construction, City guidelines, or the TxDOT "Utility Accommodation Rules" (UAR) based on the 30% design plans and make the utility company aware of

**EXHIBIT 1 – Scope of Services and Deliverables**  
**ATTACHMENT A**  
**CITY OF SAN MARCOS**  
**Bishop Street Improvements**  
**SCOPE OF SERVICES – PER & 30% Plans**

these conflicts. We will be reviewing for direct conflicts with proposed roadway improvements, constructability conflicts, and conflicts with current rules/guidelines. A detailed list will be prepared at each of the design milestones and will be communicated with the Utility Owners and design team.

- v. As-builts/Records Research. CF shall make contact with all known utility providers in and adjacent to the project area and request maps and/or as-builts of their existing facilities. We will make a site visit for additional field verification.
  - vi. Existing Utility Layout. CF shall create an existing utility layout in the latest version of AutoCAD. This layout shall include all existing utilities which are to remain in place or be abandoned. This layout will be utilized to assist in conflict assessment, monitor necessity of relocations and evaluate alternatives.
6. Construction Cost Estimate – with 25% Contingency
7. Deliverables
- a. Monthly Status Update- Assumes 2 months duration for 30% Plans
  - b. 30% Plans
  - c. Design Checklist – Per COSM Requirements

**Supplemental Scope of Services (Survey).**

- a. Boundary Survey: At the request of the City, CF will prepare legal description and exhibits for up to 21 parcels determined by the City.
- b. Research rights-of-way, gather maps and data relevant to Belvin Street, North Bishop Street, West San Antonio Street and South Bishop Street. Abstracting and deed research will be performed to obtain any additional subdivision plat, adjoiners and right-of-way deeds pertinent to the subject ROWs.
- c. Perform on-the-ground field surveys to recover any additional property corners relevant to said Streets right-of-way and properties along Belvin Street.
- d. A boundary field survey will be performed, in accordance with the **Texas Society of Professional Surveyors (TSPS), Manual of Practice for Land Surveying in the State of Texas - Category 6, Condition II**, to confirm the existing right-of-way information for Belvin Street, North Bishop Street, West San Antonio Street and South Bishop Street, along with all parcels affects along Belvin Street (Expected 21 total tracts).
- e. Project Datum - this project will utilize the existing datum established specifically for this area, which is referenced to the Texas State Plane Coordinate System - South Central Zone, North American Datum 1983, North American Vertical Datum 1988, and the Hayes County Control Network, if applicable.
- f. CF will prepare one Metes and Bounds Description and accompanying sketch for each parcel take along said Belvin Street. CF anticipates there will be a total of 21 parcel take descriptions and sketches.
- g. A plat of survey will be prepared reflecting the results of the boundary survey information and will be available in hard copy and electronic form. This Plat will be the Sketch that accompanies each description.
- h. Since this type of survey represents a title transfer, CF is required by law to monuments the parcel take limits. The fee for this portion of the project is included in the BASIC COMPENSATION.
- i. The following surveyor's certificate will be used on the survey drawing:

THIS IS TO CERTIFY THAT THIS SURVEY WAS MADE ON THE GROUND [FILL IN DATES OF ALL FIELD WORK], BY ME OR UNDER MY SUPERVISION, THAT THIS SURVEY PLAT REPRESENTS THE FACTS FOUND AT THE TIME OF THE SURVEY, AND THAT THIS SURVEY SUBSTANTIALLY COMPLIES WITH THE CURRENT TEXAS SOCIETY OF PROFESSIONAL LAND SURVEYORS STANDARDS AND SPECIFICATIONS FOR A CATEGORY 1B, CONDITION IV, STANDARD LAND SURVEY.

**Schedule**

The following project milestones are estimated and may require modification pending preliminary engineering results and construction timeframe constraints:



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- Preliminary Engineering Report & 30% Plans – 6 Months from NTP

The estimated timeframes identified do not include time for City review of submittals.

**City Responsibilities**

1. The City will provide to CF all data in the City's possession relating to CF's services on the Project. CF will reasonably rely upon the accuracy, timeliness, and completeness of the information provided by the City.
2. The City will give prompt notice to CF whenever the City observes or becomes aware of any development that affects the scope or timing of CF's services.
3. The City will examine information submitted by CF and render in writing or otherwise provide comments and decisions in a timely manner.
4. The City will obtain all necessary right-of-entries from required landowners. Parcel access expected to be all landowners along Belvin Street, North Bishop Street, West San Antonio Street, South Bishop Street, the ditch running north and south between Belvin and West San Antonio, Parcel R43610, Parcel R111254, Parcel R136050 and Purgatory Creek.
5. The City will provide Title Reports for properties with proposed easements.
6. The City will obtain all permanent sanitary sewer line, access, and temporary construction easements, including services such as appraisal of properties, negotiations with the property owners, and actual purchase of the easements.

**Additional Services**

Additional Services to be performed, if authorized in writing by the City, but which are not included in the above-described Basic and Supplemental Scope of Services, and once a mutually agreed upon fee is negotiated are as follows:

1. During the PER phase, only the four drainage alternatives will be analyzed. Water, Wastewater, Streets, and other identified construction activities will be addressed in the 30% plans. Estimated construction costs will be included for these items during the PER, but no design will be submitted until 30% per direction from the City of San Marcos.
2. Performing Subsurface Utility Engineering.
3. Performing title searches for easement or joint-use agreement preparation.
4. Preparation of additional easement/ boundary exhibits.
5. Acting as an agent of the City in the acquisition of permanent or temporary easements.
6. Preparation of platting documents and/or real property survey for site acquisition.
7. Accompanying the City when meeting with the TCEQ, U.S. Environmental Protection Agency, or other regulatory agencies during the course of the Project, beyond those meetings identified above.

**EXHIBIT 1 – Scope of Services and Deliverables**

**ATTACHMENT A**

**CITY OF SAN MARCOS**

**Bishop Street Improvements**

**SCOPE OF SERVICES – PER & 30% Plans**

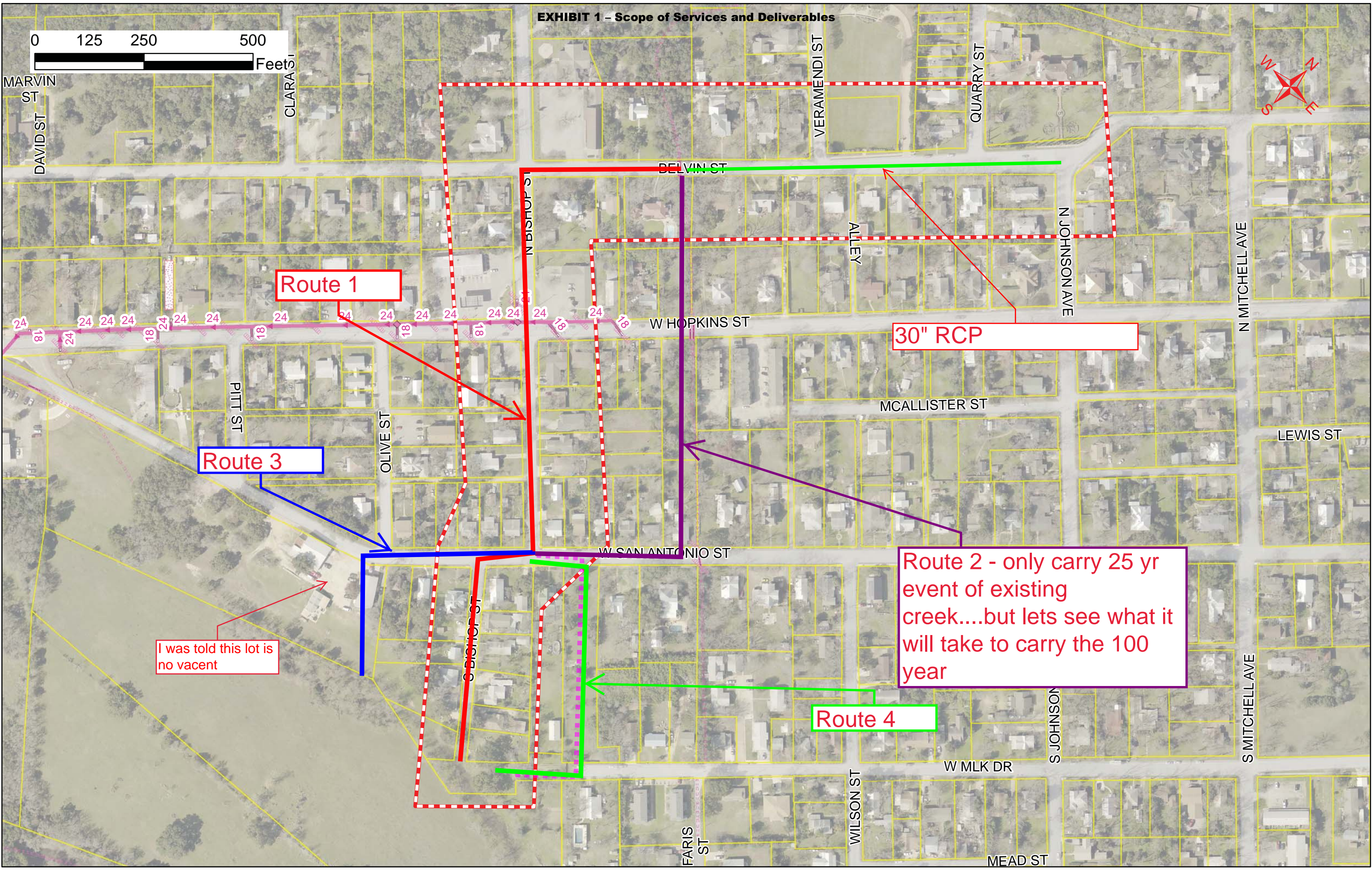
8. Preparing applications and supporting documents for government grants, loans, or planning advances.
9. Appearing before regulatory agencies or courts as an expert witness in any litigation with third parties or condemnation proceedings arising from the development or construction of the Project, including the preparation of engineering data and reports for assistance to the City.
10. The scope of services doesn't include meetings or attendance at City Council.
11. Providing professional services associated with the discovery of any hazardous waste or materials in the project site.
12. Logistics associated with hosting the public meetings. CF's involvement is defined in the sections above. Mailers, website development, public signage placement, and other outreach efforts are not included in this scope.
13. Traffic counts are not included in this scope of services.
14. Traffic signal design is not included in this scope of services.
15. Dry utility design is not included in this contract other than those specified in the illumination/photometric analysis section.
16. ROW and Easement acquisitions are to be handled by the City of San Marcos. Additional services are required if CF is to provide services in this area.
17. It is assumed that TCEQ permitting is not required for this project. Due to the project limits being located within the Transition Zone of the Edwards Aquifer, and the runoff draining away from the Edwards Aquifer Recharge Zone, based on the TCEQ flowchart, WPAP and SCS permitting is not required by the TCEQ.
18. It is assumed the CLOMR and LOMR applications are not required on this project.
19. It is assumed that detention pond or regional storm water management is not required in this project.
20. Water Quality and LID services are only listed in the PER phase. They are not included in anything beyond the PER.
21. Final design plans beyond Preliminary and 30% level are not included in this scope of services and will be handled after this submittal.
22. This assumes that CobbFendley will share design information with LAN and Freese and Nichols for their input into their 2D models.
23. This proposal does not include any design of consulting services for structural engineering. If it is determined during the PER or 30% plans that structural engineering services are needed then it will be negotiated during the final design phase.

**EXHIBIT 1 – Scope of Services and Deliverables**  
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SCOPE OF SERVICES – PER & 30% Plans

**Exhibit 1 – Project Area of Study with Alternatives**



EXHIBIT 1 - Scope of Services and Deliverables





**EXHIBIT 1 – Scope of Services and Deliverables****Survey Scope Breakdown**

City of San Marcos - Bishop Street Improvements			
Summary			
<b>Route 1- Main Topo</b>			
Budget Summary		Hours	Cost
	Labor	334	\$ 12,800.00
	Direct Expense	0	\$ -
	Reimbursable Expense	118	\$ 16,520.00
	Contingency	0	\$ -
Total			\$ 29,320.00
<b>Ditch Cross-Sections</b>			
Budget Summary		Hours	Cost
	Labor	83	\$ 3,240.00
	Direct Expense	0	\$ -
	Reimbursable Expense	20	\$ 2,800.00
	Contingency	0	\$ -
Total			\$ 6,040.00
<b>Construction As-Built</b>		Hours	Cost
Budget Summary	Labor	231	\$ 8,800.00
	Direct Expense	0	\$ -
	Reimbursable Expense	54	\$ 7,560.00
	Contingency	0	\$ -
			\$ 16,360.00
Total			
<b>Boundary ROW-Takes</b>		Hours	Cost
Budget Summary	Labor	9791	\$ 50,440.00
	Direct Expense	0	\$ -
	Reimbursable Expense	84	\$ 11,760.00
	Contingency	0	\$ 6,220.00
Total			\$ 68,420.00
			<b>\$ 120,140.00</b>
<b>GRAND TOTAL</b>			

Survey scope in this proposal includes Route 1 - Main Topo and Ditch Cross Sections as boxed in.

Utility Coordination Scope  
for 30% only

[illegible]

**EXHIBIT 1 – Scope of Services and Deliverables**

**ATTACHMENT A  
CITY OF SAN MARCOS  
Bishop Street Improvements  
SCOPE OF SERVICES**

**Subconsultant Scopes:**

**Geotechnical/CMT - Arias**

**Environmental – Cox McClain**

**LID/Water Quality – Crespo**

**Photometric/Illumination – American StructurePoint**

**EXHIBIT 1 – Scope of Services and Deliverables**

ATTACHMENT A  
CITY OF SAN MARCOS  
Bishop Street Improvements  
SCOPE OF SERVICES

**Subconsultant Scopes:**

**Geotechnical – Arias**

**Supplemental: CMT Services**





13581 Pond Springs Road, Suite 210, Austin, Texas 78729 • Phone: (512) 428-5550 • Fax: (512) 428-5525

February 8, 2018

Arias Project No. 2018-110

VIA Email: [lparisher@cobb fendley.com](mailto:lparisher@cobb fendley.com)

Mr. Lance Parisher, P.E.  
Cobb Fendley & Associates, Inc.  
505 E. Huntland Drive, Suite 100  
Austin, Texas 78752

**RE: Proposal for Geotechnical Engineering Services**  
Bishop Street Improvements  
San Marcos, Texas

Dear Mr. Parisher,

Arias & Associates, Inc. (Arias) is pleased to provide this proposal for Geotechnical Engineering Services for the above-referenced project. Our understanding of the project is based on the information provided by you. The following sections present our understanding of the project, proposed scope of services, fee compensation requirements and proposed schedule.

### **Project Information**

The project will consist of installation of approximately 2,700 linear feet of water line replacement, wastewater line replacement, drainage pipe installation, new box culvert installations, and full depth road reconstruction along Belvin Street and N Bishop Street in San Marcos, Texas. We anticipate that the utilities will be installed using open cut installation techniques. It is understood that the proposed utility installations will be on the order of 10 to 15 feet deep.

The alignment will extend along Belvin Street from N Johnson Ave to N Bishop St, then along N Bishop street to W San Antonio St. The alignment then continues southwest along W San Antonio St for 120 ft before continuing along S Bishop St for approximately 330 ft.

### **Proposed Investigation**

Based on published geologic mapping and nearby experience, the site is likely underlain by Quaternary aged alluvial deposits consisting of clay, silt sand, and gravel. Due to nearby faulting, beneath the mapped alluvial deposits there may be chalks and limestone of the Austin Group or Edwards Formations and/or clays of the Del Rio and Eagle Ford Formations, which are also mapped

## **EXHIBIT 1 – Scope of Services and Deliverables**

in the vicinity of the project site. Based on our understanding of the project, we propose the following drilling scope.

<b>Borings</b>	<b>Boring depth, ft</b>	<b>No. of Borings</b>	<b>Drilling Footage</b>
Alignment	10	3	30
	20	2	40
Alternate Storm Drain Outfall	10	1	10
		<b>Total</b>	<b>80</b>

Alignment borings will be drilled in the existing roadway in areas clear of underground and overhead obstructions, and accessible to our truck mounted drilling equipment. Traffic control is planned.

The borings will be advanced using augering and sampling techniques, using either push-tube sampling (ASTM D1587) or split barrel sampler while performing the Standard Penetration Test (ASTM D1586). Arias personnel will locate the borings, notify one-call, direct the sampling efforts, visually classify recovered samples, and be present during drilling.

If groundwater is encountered, the groundwater levels within the open borehole will be recorded at the time of drilling and immediately following drilling. The boreholes will be backfilled with cuttings generated by drilling operations after completion of drilling, and capped with 2 feet of sackcrete and cold patch asphalt at the surface.

Laboratory testing will be performed on recovered samples selected by the geotechnical engineer to aid in soil classification and to measure engineering properties. Laboratory testing is expected to include moisture content, Atterberg limits, fines content (percent passing the No. 200 sieve), swell tests, sulfate contents, and corrosion testing. The actual laboratory program will depend upon the type of soils and rock encountered.

### **Reporting**

We will issue an electronic copy of our formal engineering report prepared by a licensed professional engineer in the State of Texas that will include:

- Description of the field exploration program;
- Description of the laboratory testing program;
- Soil boring plan that depicts borehole locations on a base map provided by Client;
- Soil boring logs with soil classifications based on the Unified Soil Classification System (ASTM D 2487);

## EXHIBIT 1 – Scope of Services and Deliverables

- Generalized site stratigraphy and engineering properties developed from field and laboratory data at the explored locations;
- Depth to groundwater, if encountered, and potential impact on construction;
- Utility bedding and backfill recommendations;
- Recommendations for culvert foundation design and construction including allowable bearing pressure, equivalent fluid pressures, and provisions for backfilling;
- Recommendations for design and construction of flexible pavements. Flexible pavement thickness design recommendations will include 2 to 3 pavement structure options, including a hot-mix base option, and will be based on agreed-upon traffic load information. We will use the TxDOT FPS-21 design procedure and check results using the 1993 AASHTO design methodology. We will perform a mechanistic (fatigue) check using FPS-21;
- Existing pavement sections, to the nearest tenth of an inch, where borings are drilled through pavement; and
- General comments regarding excavation conditions.

It should be noted that this investigation is not intended to serve as a Geotechnical Baseline Report.

### **Proposed Fee**

We propose that the fee for the performance of the scope of work for this project as described in this proposal be **\$10,365**. The work will be performed as outlined in the General Conditions included with this proposal. A Geotechnical Cost Breakdown is summarized in the following table.

Scope Item	Cost
Mobilization and Drilling (70 feet total drilling footage)	\$3,225
Traffic Control (1.5-days) (Moving Lane Closure, Flag-man Operation)	\$3,500
Laboratory Testing (soil classification, swell, corrosion)	\$2,180
Engineering and Reporting	\$1,460
<b>TOTAL</b>	<b>\$10,365</b>

## **EXHIBIT 1 – Scope of Services and Deliverables**

We will invoice on a monthly basis. We have assumed that the borings can be drilled during normal business hours (9 am to 4 pm), and that no site clearing or grading will be required to access the boring locations. Planned traffic control will include a lane closure with flag-man operation, signs and delimiters. An attenuator truck is not included.

### **Schedule**

Upon receiving written authorization, and weather and site conditions permitting, we can perform our field investigation within 2 weeks. Drilling of the boreholes will take 1 day. Laboratory testing and reporting will take another 2 to 3 weeks. We will keep you verbally informed of our findings as they become available.

Delays sometime occur due to adverse weather, utility clearance requirements, site clearing requirements for drill rig access, obtaining drilling permits, obtaining Right of Entries and other factors outside of our control. In this event, we will communicate the nature of the delay with you and provide a revised schedule at the earliest possible date.

### **Proposal Acceptance**

Please let us know if this proposal meets your expectations. If acceptable, the authorization table at the end of this proposal should be completed as applicable. We will begin work upon receipt of a signed copy of the proposal by an authorized representative. Please return the entire signed proposal to us by fax, mail or email to [mfucinari@ariasinc.com](mailto:mfucinari@ariasinc.com). If the billing address is different, include that information as well.

Should you have any questions, please do not hesitate to contact us. The undersigned will manage and perform the work. Thank you for this opportunity.

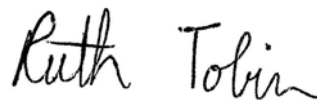
Sincerely,

**ARIAS & ASSOCIATES, INC.**

TBPE Registration No: F-32



Michael C. Fucinari, P.E.  
Geotechnical Project Engineer



Ruth E. Tobin, E.I.T.  
Staff Geotechnical Engineer

Attachment

Exhibit A – Geotechnical Cost Estimate  
General Conditions (20140214R1)

**Exhibit A - Geotechnical Cost Estimate  
Bishop Street Improvements  
San Marcos, Tx**

Task	Item Description	Est. Qty.	Unit	Unit Price	Est. Total Price
<b>1 Field Exploration</b>					
<b>1.1 Planning and Coordination</b>					
	Field Coordination (Staking of Borings, One-Call, Drilling Plan)	4	hr	\$ 65.00	\$ 260.00
	Trip Charge (Site Recon)	100	mi	\$ 0.55	\$ 55.00
	Project Management (Senior Geotechnical Engineer)	1	hr	\$ 95.00	\$ 95.00
	<b>1.1 Subtotal</b>				<b>\$ 410.00</b>
<b>1.2 Drilling and Sampling</b>					
	Mobilization (drill rig, support equipment, air compressor)	1	ea	\$ 425.00	\$ 425.00
	Rock coring setup charge	0	ea	\$ 150.00	\$ -
	Drilling and Sampling (Soil Borings)	80	ft	\$ 14.00	\$ 1,120.00
	Drill Rig Stand-by (difficult moving)	0	hr	\$ 175.00	\$ -
	Backfill boreholes	80	ft	\$ 4.50	\$ 360.00
	Field Logger, coordination	14	hr	\$ 65.00	\$ 910.00
	Traffic Control (1.5 days, single lane closure)	1.5	day	\$ 2,334.00	\$ 3,500.00
	<b>1.2 Subtotal</b>				<b>\$ 6,315.00</b>
	<b>Field Exploration TOTAL:</b>				<b>\$ 6,725.00</b>
<b>2 Laboratory Soil Testing</b>					
	Moisture Content	10	ea	\$ 10.00	\$ 100.00
	Atterberg Limits	7	ea	\$ 75.00	\$ 525.00
	Grain Size Analysis (Includes Percent Passing #200 Sieve)	9	ea	\$ 75.00	\$ 675.00
	Grain Size Analysis (with hydrometer)	0	ea	\$ 125.00	\$ -
	Unconfined Compressive Strength (rock)	0	ea	\$ 55.00	\$ -
	Pressure Swell	2	ea	\$ 150.00	\$ 300.00
	Corrosion Testing (pH, sulfates, chlorides, box resistivity)	1	ea	\$ 400.00	\$ 400.00
	Soluble Sulfate Test	2	ea	\$ 45.00	\$ 90.00
	Lab Manager/Graduate Engineer	1	ea	\$ 90.00	\$ 90.00
	<b>Laboratory Testing TOTAL:</b>				<b>\$ 2,180.00</b>
<b>3 Engineering and Reporting</b>					
	Senior Geotechnical Engineer	2	hr	\$ 135.00	\$ 270.00
	Project Engineer	10	hr	\$ 95.00	\$ 950.00
	Drafting	2	hr	\$ 65.00	\$ 130.00
	Administrative (Job set-up, billing)	2	hr	\$ 55.00	\$ 110.00
	<b>Engineering TOTAL:</b>				<b>\$ 1,460.00</b>
<b>Project Total</b>					<b>\$ 10,365.00</b>

**EXHIBIT 1 – Scope of Services and Deliverables**

ATTACHMENT A  
CITY OF SAN MARCOS  
Bishop Street Improvements  
SCOPE OF SERVICES

**Subconsultant Scopes:**

**Environmental – Cox McClain**

## EXHIBIT 1 – Scope of Services and Deliverables



COX | McLAIN  
Environmental Consulting

### ENVIRONMENTAL INVESTIGATIONS – SCOPE OF SERVICES Bishop Street Drainage Improvements For Cobb Fendley and Associates & the City of San Marcos

#### **Project Understanding**

Cox|McLain Environmental Consulting, Inc. (CMEC) understands that the City of San Marcos (City) is developing plans for drainage improvements primarily along Bishop Street. A preliminary Project Area is shown in the attached exhibit. CMEC understands that the improvements would ultimately discharge to Purgatory Creek, but that the outfall location is yet to be determined. The alignment may differ from the attached exhibit by following San Antonio Street northeast from Bishop Street and turning southeast across existing privately-held parcels toward Purgatory Creek. CMEC assumes that the ultimate alignment and outfall would lie in the general vicinity (+/- 0.10 miles) of the preliminary Project Area.

CMEC understands that the project would include the installation of new stormwater infrastructure, which would use Department of Housing and Urban Development (HUD) Community Development Block Grant – Disaster Relief (CDBG-DR) funds, and that additional infrastructure improvements (e.g., street reconstruction, sidewalk, water infrastructure relocation) would use City funds. CMEC understands that most of the proposed improvements would take place in existing street rights-of-way, but that property acquisition may be required. Potential acquisitions include a proposed 10-foot expansion of the existing right-of-way along Belvin Street.

#### **Environmental Services**

CMEC will provide a Preliminary Environmental Constraints Review to inform the decision-making process with regard to the proposed outfall locations. Desktop resource review will be paired with a Regulatory Database Search for known hazardous materials sites in the vicinity of the Project Area. Findings will be presented in an Environmental Constraints Map and described in a brief Memorandum. The Memorandum will include categorizations of risk associated with each alternative. The Preliminary Environmental Constraints Review will not include field verification of desktop data.

CMEC assumes that the appropriate level of effort associated with the ultimate project's environmental review would be an Environmental Assessment (EA) in accordance with *24 CFR Part 58 Environmental Review Procedures for Entities Assuming HUD Environmental Responsibilities* – Subpart E (Environmental Review Process: Environmental Assessments). Excluded services are listed below under **Additional Clarifications and Exclusions**. CMEC will provide the documentation necessary to complete the EA along with supporting mapping and documentation where necessary.

It is assumed that the No Build option will not meet the project's purpose and need, and one Build Alternative will be assessed. CMEC will investigate the following primary topics with research and analysis:

- Cultural Resources
  - Archeologic and Historic Resources Coordination Letter to the THC
  - Archeological Resources Desktop Study
  - Historical Resource Survey and Report (adjacent to acquisitions/permanent easements)
- Water Resources, Wetlands, and Floodplains (no hydrologic analysis or modelling included)
- Threatened and Endangered Species Habitat Assessment
- Hazardous Materials Database Search and Analysis
- Socioeconomic/Environmental Justice
- HUD Noise Analysis (hand model to be completed according to HUD requirements)
- Airport Clear Zones/CZMA Proximity
- Draft language for EA Finding and RROF to support the City's submittal

The EA will be prepared to comply with *24 CFR Part 50.4, 58.5, and 58.6 Laws and Authorities* including statements with regard to these categories mentioned in the guidance:

- the National Historic Preservation Act of 1966 and other cultural resources regulations
- Floodplain Management
- Wetlands Protection
- Coastal Zone Management
- Sole Source Aquifers
- Endangered Species
- Wild and Scenic Rivers

## EXHIBIT 1 – Scope of Services and Deliverables



COX | McLAIN  
Environmental Consulting

- Air Quality
- Farmland Protection
- Noise Control and Abatement
- Explosive and Flammable Operations
- Airport Hazards (Runway Clear Zones)
- Contamination and Toxic Substances (a Hazardous Materials Database Search will be conducted)
- Environmental Justice (Executive Order 12898)

### Additional Clarifications and Exclusions

The National Historic Preservation Act of 1966 and other cultural resources regulations: A search of the Texas Archaeological Resources Laboratory (TARL) and Texas Historical Commission (THC) databases will be conducted to identify known resources in the project area. A THC coordination letter will be prepared to determine whether or not an archeological survey and/or construction-phase monitoring is recommended (no survey or monitoring is included in the current scope). The letter(s) will also be used to establish the APE for historic resource investigations; it is assumed that a Historic Resource Survey and report will be required for properties on Belvin Street, where land acquisition is proposed. Archeological field investigations such as survey, monitoring, testing, and data recovery excavations are not included in this scope but can be provided under additional scope and fee.

Endangered Species Act: A vegetation/habitat assessment would be conducted to determine whether or not proposed project activities would affect threatened/endangered species habitat. Coordination with the U.S. Fish and Wildlife Service would be required for any potential impacts to endangered species in accordance with the Endangered Species Act. The scope does *not* include Endangered Species Presence/Absence Surveys; Endangered Species Section 7 or Section 10(a) Formal Consultation and/or the preparation of a Biological Assessment, Habitat Conservation Plan, or assistance with a Biological Opinion.

Noise: According to HUD regulations (24 CFR Part 51 Subpart B, Noise Abatement and Control), HUD's *goal* is that exterior noise levels not exceed 55 dB. For the purposes of meeting this goal, noise levels not exceeding a day-night average of 65 dB are considered acceptable. Noise levels over 65 dB may require special approvals, environmental review, and attenuation; noise levels below 65 dB do not require these. HUD's manual determination of noise levels will be conducted (*no* on-site noise monitoring will be conducted).

Public Involvement: It is assumed that the City of San Marcos staff will handle any public notice of document availability for review or any public meeting requirements.

### Other services not included, though available for additional scope and fee:

- Clean Water Act Section 404 permitting or direct coordination with USACE
- Noise barrier analysis
- Air quality modeling
- Geologic Assessment or other Aquifer Protection Plan development per TCEQ requirements
- Expert witness services
- Mitigation planning
- Construction phase monitoring or services
- Phase 1, Phase 2, or Phase 3 Environmental Site Assessment for Hazardous Materials
- Environmental Documentation per TxDOT requirements.

### Deliverables

CMEC will provide a Preliminary Environmental Constraints Map and Memo that provides a comparison of alignment alternatives for a cost not to exceed \$6,486.00, as detailed in **Exhibit A**.

CMEC will provide the information necessary to complete the EA for a HUD project along with supporting mapping and documentation for a cost, not to exceed \$37,171.00, as detailed in **Exhibit A**.

All environmental services will be provided for a fee, not to exceed \$43,657.00.

L. Ashley McLain, AICP, Principal  
Cox|McLain Environmental Consulting, Inc.



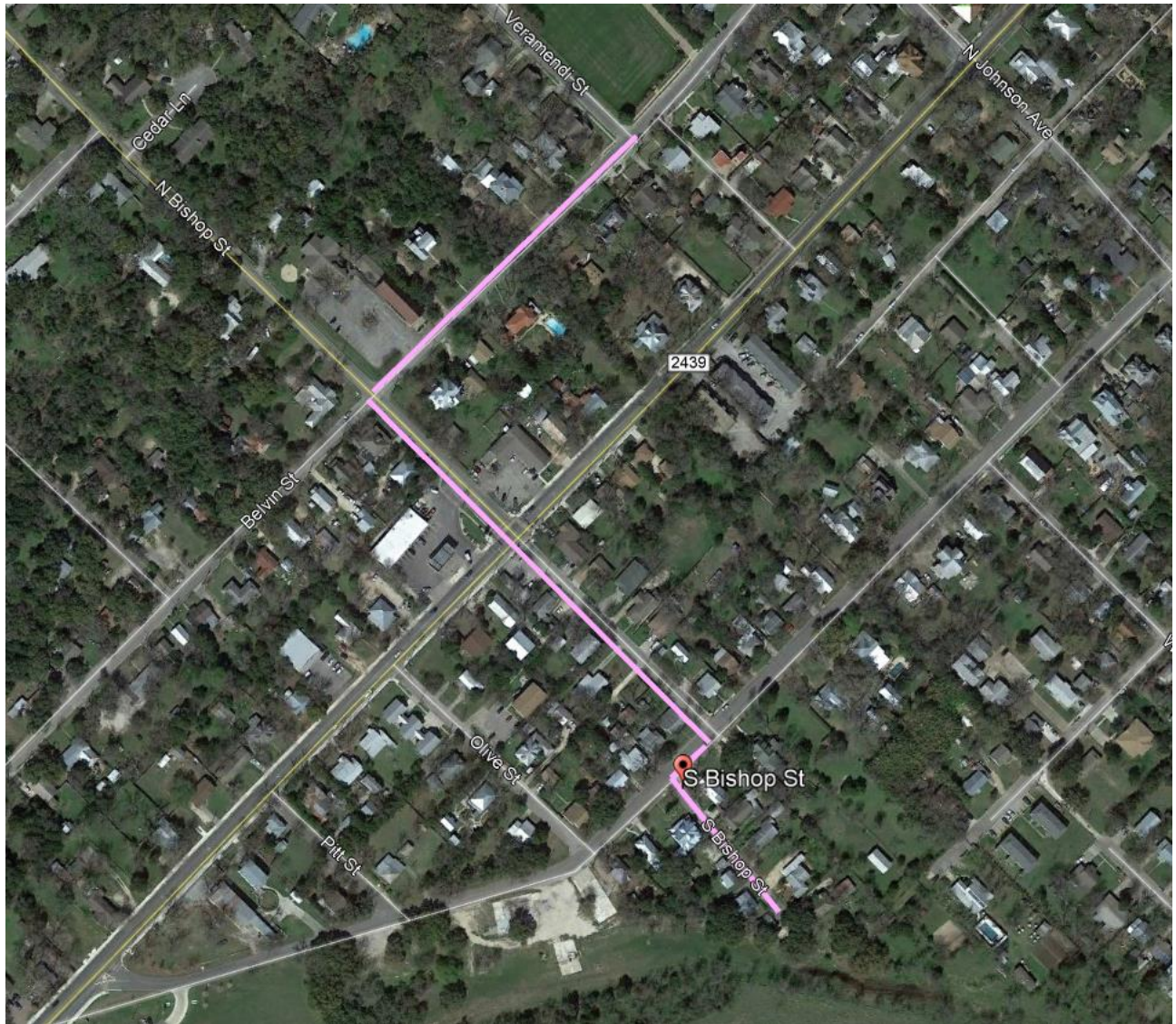
EXHIBIT 1 – Scope of Services and Deliverables

PROVIDER NAME: Cox McLain Environmental Consulting, Inc.											CobbFendley - Bishop Street Drainage Improvements			
TASK DESCRIPTION	PROJECT MANAGER	QA/QC REVIEWER	SR ENVL SCIENTIST II	SR ENVL SCIENTIST I	ENVL PROF II	ENVL PROF I	ENVL STAFF II	ENVL STAFF I	ENVL TECH II	ENVL TECH I	ADMIN/CLERICAL		LABOR HOURS & COSTS	
PRELIMINARY ENVIRONMENTAL CONSTRAINTS REVIEW														
Technical Memorandum and Constraints Map														
Historic Resources Desktop Research			2			4	4						10	
Archeological Resources Desktop Research				2		2	2		2				8	
Water Resources Desktop Research						4		4	2				10	
Ecological Resources Desktop Research			2			8		4	2				16	
Community Impacts Comparrison					4				4				8	
Draft and Final Constraints Map & Memo	4	4	2	2	6	2	4		8		4		36	
HOURS SUB-TOTALS	4	4	6	4	10	20	10	8	18	0	4		88	
CONTRACT RATE PER HOUR	\$138.00	\$138.00	\$113.00	\$95.00	\$83.00	\$73.00	\$60.00	\$53.00	\$45.00	\$39.00	\$50.00			
TOTAL LABOR COSTS	\$552.00	\$552.00	\$678.00	\$380.00	\$830.00	\$1,460.00	\$600.00	\$424.00	\$810.00	\$0.00	\$200.00		\$6,486.00	
% DISTRIBUTION OF STAFFING	4.5%	4.5%	6.8%	4.5%	11.4%	22.7%	11.4%	9.1%	20.5%	0.0%	4.5%			
HUD EA and Supporting Documentation														
Informal Meetings and Project Communications														
Project Management, meetings, communications	6		12		8						30		56	
Agency Coordination - in person meetings (not included)													0	
Public Involvement; distribution of documents for public review (not included)													0	
HUD EA and Supporting Documentation													0	
Environmental Review Record documentation													0	
Archeology Background Study - THC Coordination Letter	1	2	2		8		6						19	
Archeology Pedestrian Survey (not included)													0	
Historic Resources - THC Coordination Letter	1	1	2		6		4						14	
Historic Resources Reconaissance Survey (Draft and Final)		4	24			48	14						90	
Water Resources and Wetlands; Floodplains	2	1		12	8		18		18				59	
Geologic Assessment (not included)													0	
Threatened/Endangered Species Habitat Assess. (state- and federal-listed)	2	1		12			18		10				43	
Biological Evaluation for Section 7 ESA Consultation with USFWS (not													0	
Hazardous Materials Database Search and Analysis	2	1	4			16			8				31	
Socioeconomics/Environmental Justice	2	2	8		8		8	8	8	4			48	
HUD Noise Analysis	1	1				20			8				30	
Air Quality (not included)													0	
Airport Clear Zones, CZMA Proximity	1	1			4				4				10	
Comments and responses, coordination for Environmental Document	6	6		6	6		8	4	8	8			52	
EA Finding - draft language; Request for Release of Funds support	3		4				4						11	
HOURS SUB-TOTALS	27	20	56	30	48	84	80	12	64	12	30		463	
CONTRACT RATE PER HOUR	\$138.00	\$138.00	\$113.00	\$95.00	\$83.00	\$73.00	\$60.00	\$53.00	\$45.00	\$39.00	\$50.00			
TOTAL LABOR COSTS	\$3,726.00	\$2,760.00	\$6,328.00	\$2,850.00	\$3,984.00	\$6,132.00	\$4,800.00	\$636.00	\$2,880.00	\$468.00	\$1,500.00		\$36,064.00	
% DISTRIBUTION OF STAFFING	6%	4%	12%	6%	10%	18%	17%	3%	14%	3%	6%			
OTHER DIRECT EXPENSES (PHASE 1 ONLY)	UNIT	# OF UNITS	COST/UNIT											
Lodging/Hotel	day/person		\$80.00										\$0.00	
Lodging/Hotel Taxes/fees	day/person		\$20.00										\$0.00	
Meals	day/person		\$41.00										\$0.00	
Mileage	mile	600	\$0.545										\$327.00	
Standard Postage	letter		\$0.49										\$0.00	
Overnight Mail - letter size	each	1	\$25.00										\$25.00	
Overnight Mail - oversized box	each	1	\$30.00										\$30.00	
Courier Services	each	1	\$25.00										\$25.00	
Photocopies B/W (8 1/2" X 11")	each		\$0.10										\$0.00	
Photocopies B/W (11" X 17")	each		\$0.20										\$0.00	
Photocopies Color (8 1/2" X 11")	each		\$0.50										\$0.00	
Plots (B/W on Bond)	square foot		\$0.50										\$0.00	
Plots (Color on Bond)	square foot		\$1.00										\$0.00	
Hazardous Materials Database Search	search	2	\$350.00										\$700.00	
Geologic Assessment (not included)	report		\$3,000.00										\$0.00	
Archeology Equipment - Backhoe Operator (not included)	day/person		\$1,500.00										\$0.00	
CDs	each		\$1.50										\$0.00	
SUBTOTAL DIRECT EXPENSES													\$1,107.00	
									SUMMARY					
									EA LABOR					\$36,064.00
									EA NON-LABOR					\$1,107.00
									SUBTOTAL EA					\$37,171.00
									SUBTOTAL CONSTRAINTS REVIEW					\$6,486.00
									TOTAL PHASE 1 & 2					\$43,657.00

Areas boxed in are for 30% for Environmental

## EXHIBIT 1 – Scope of Services and Deliverables

### EXHIBIT B - PRELIMINARY PROJECT AREA



**EXHIBIT 1 – Scope of Services and Deliverables**

ATTACHMENT A  
CITY OF SAN MARCOS  
Bishop Street Improvements  
SCOPE OF SERVICES

**Subconsultant Scopes:**

**LID/Water Quality – Crespo**

February 7, 2018

Cobb Fendley  
505 E. Huntland Drive, Suite 100  
Austin, Texas 78752

Attention: Lance Parish, PE

Project: City of San Marcos – Bishop Street Project  
PER Phase

Re: Subconsultant Proposal

Dear Lance,

Crespo Consulting Services, Inc. (Crespo) is pleased to provide this proposal to Cobb Fendley for performing environmental engineering services for the above-mentioned project.

Crespo will provide technical and engineering services to Cobb Fendley associated with the Bishop Street Project. The overall project consists of storm drain improvements, water and wastewater upsizing, and full depth pavement reconstruction, as well as sidewalks. The aim of the project is to provide improved flow patterns and local flooding relief in the area. Crespo will aid to incorporating green infrastructure and low-impact design as part of the overall drainage system where feasible for the PER phase of this project.

## **SCOPE OF WORK**

Crespo proposes to perform engineering services for several tasks. The proposed tasks include:

- Task 1 – Preliminary Engineering
- Task 2 – PER Report Sections
- Task 3 – Project Management

Crespo's work on these tasks is only related to the green infrastructure and low-impact drainage features.

### **Task 1 – Preliminary Engineering**

Crespo will work with Cobb Fendley to identify Low Impact Development (LID)/green solutions that can be implemented in the project area. Crespo will coordinate with Cobb Fendley in order to gather proposed design elements needed to access potential locations of these green solutions. These includes proposed pipe alignments, surface and pipe elevations, sidewalk and bike lane locations, etc. Two (2) site walks will be necessary with at least one of them conducted with a Cobb Fendley representative.



## **EXHIBIT 1 – Scope of Services and Deliverables**

*City of San Marcos – Bishop Street Drainage Improvements  
Scope of Services – Crespo Consulting Services, Inc.*

*Page 2 of 3  
February 7, 2018*

### **Task 2 – PER Report Sections**

Crespo will provide a write up that is to be included in the PER report for the project. It will describe the LID/green solutions that would be feasible within the project area for the proposed changes. A project map will also be included that depicts the proposed locations.

### **Task 3 – Project Management & Meetings**

Crespo will perform project management activities associated with the project, including project meetings, invoicing, progress reports, team coordination, and quality control.

### **TO BE PROVIDED BY COBB FENDLEY**

1. Preliminary alignments in CAD and GIS format during the PER
2. Any existing studies in the project area related to the project or environmental conditions

### **DELIVERABLES**

1. PER report sections that summarizes the LID/green solutions analysis that was conducted on the project area
2. Project map with proposed locations of green solutions

### **SCHEDULE**

Crespo will begin work on the project upon receiving the notice to proceed from Cobb Fendley. Cobb Fendley shall provide Crespo with an overall schedule of the project. For any partial deliverable from Crespo to Cobb Fendley, you should expect that at least 16 days will be needed by Crespo to perform the work once Crespo is provided the final information and/or direction.

### **EXCLUDED SERVICES**

Work not related to the specific tasks or work outside the identified project area will be considered out-of-scope and should be contracted as additional services.

Coordination with Texas Parks and Wildlife, FEMA, Union Pacific, US Fish and Wildlife, USACE, and Federal Aviation Administration is not anticipated; therefore, this coordination is not included in this scope and budget.

This scope and budget does not include detailed investigations, field studies or monitoring for: air quality, noise, historic preservation, hazardous waste and wetland delineation.

A list of excluded services include: Construction plans, Erosion and Sedimentation Control Plans, Tree Protection Plans, Storm Water Pollution Prevention Plan (SW3P), professional geoscientist services, arborist services, any construction plan sheets, streambank stabilization designs and plans, preparation of a CLOMR or LOMR for FEMA, or public meetings/ hearings.



**EXHIBIT 1 – Scope of Services and Deliverables**

*City of San Marcos – Bishop Street Drainage Improvements  
Scope of Services – Crespo Consulting Services, Inc.*

*Page 3 of 3  
February 7, 2018*

**COST ESTIMATE**

Crespo will perform this project on a time and materials basis for a total not-to-exceed-amount of \$21,940.

Thank you for requesting these services and we look forward to working with you and the City of San Marcos again. Please call me if you have any questions or need additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "L. Stephen Stecher".

L. Stephen Stecher, P.E.  
President, Crespo Consulting Services, Inc.

Attachment



**EXHIBIT 1 – Scope of Services and Deliverables****Cobb Fendley - Bishop Street Project  
Crespo Subconsultant Budget**

Description	Professional Engineer VI	EIT I	Professional Scientist IV	Scientist Associate I	Total Labor	Copy Repro.	Large Scale Plots	Total Expenses	Total Cost
	\$186.23	\$103.02	\$114.41	\$80.08	\$	\$	\$	\$	\$
Task 1 - Preliminary Engineering	18	42	0	40	\$10,882	5	40	\$45	\$10,927
Task 2 - PER Report Sections	14	28	0	28	\$7,734	5	40	\$45	\$7,779
Task 4 - Project Management & Meetings	8	8	8	0	\$3,229	5	0	\$5	\$3,234
<b>TOTAL HOURS</b>	40	78	8	68	194				
<b>TOTAL COST</b>	\$7,449	\$8,036	\$915	\$5,445	\$21,845	\$15	\$80	\$95	\$21,940

2/7/2018

**EXHIBIT 1 – Scope of Services and Deliverables**

**ATTACHMENT A  
CITY OF SAN MARCOS  
Bishop Street Improvements  
SCOPE OF SERVICES**

**Subconsultant Scopes:**

**Photometric/Illumination – American StructurePoint**

**For reviewing and management purposes, the American StructurePoint scope of services was not detailed and separated out in the overall scope of services and fee, but was listed as an item to reference the following scope.**



## EXHIBIT 1 – Scope of Services and Deliverables



AMERICAN  
**STRUCTUREPOINT**  
INC.

April 6, 2018

Ms. Julie Hastings, P.E. MBA  
CobbFendley  
505E. Huntland Drive, Suite 100  
Austin, TX, 78752

Re: San Marcos Bishop Street

Dear Ms. Hastings,

American Structurepoint, Inc., is pleased to provide CobbFendley this proposed scope of services and fee estimate for professional Illumination plans in connection with the San Marcos Bishop Street Project. This proposal is based on information provided to us on January 31, 2018 and updated based on comments received on April 3, 2018.

After you have reviewed the attached proposed Scope of Services and Fee Estimate, please do not hesitate to call if you have any questions or comments. Thank you for the opportunity to be of service. We are looking forward to working with you on this project. This project will be completed under a sub-consultant agreement between CobbFendley and American Structurepoint.

Sincerely,  
American Structurepoint, Inc.

A handwritten signature in black ink, appearing to read 'Ricardo Zamarripa', is placed below the typed name.

Ricardo Zamarripa, P.E.  
Vice President

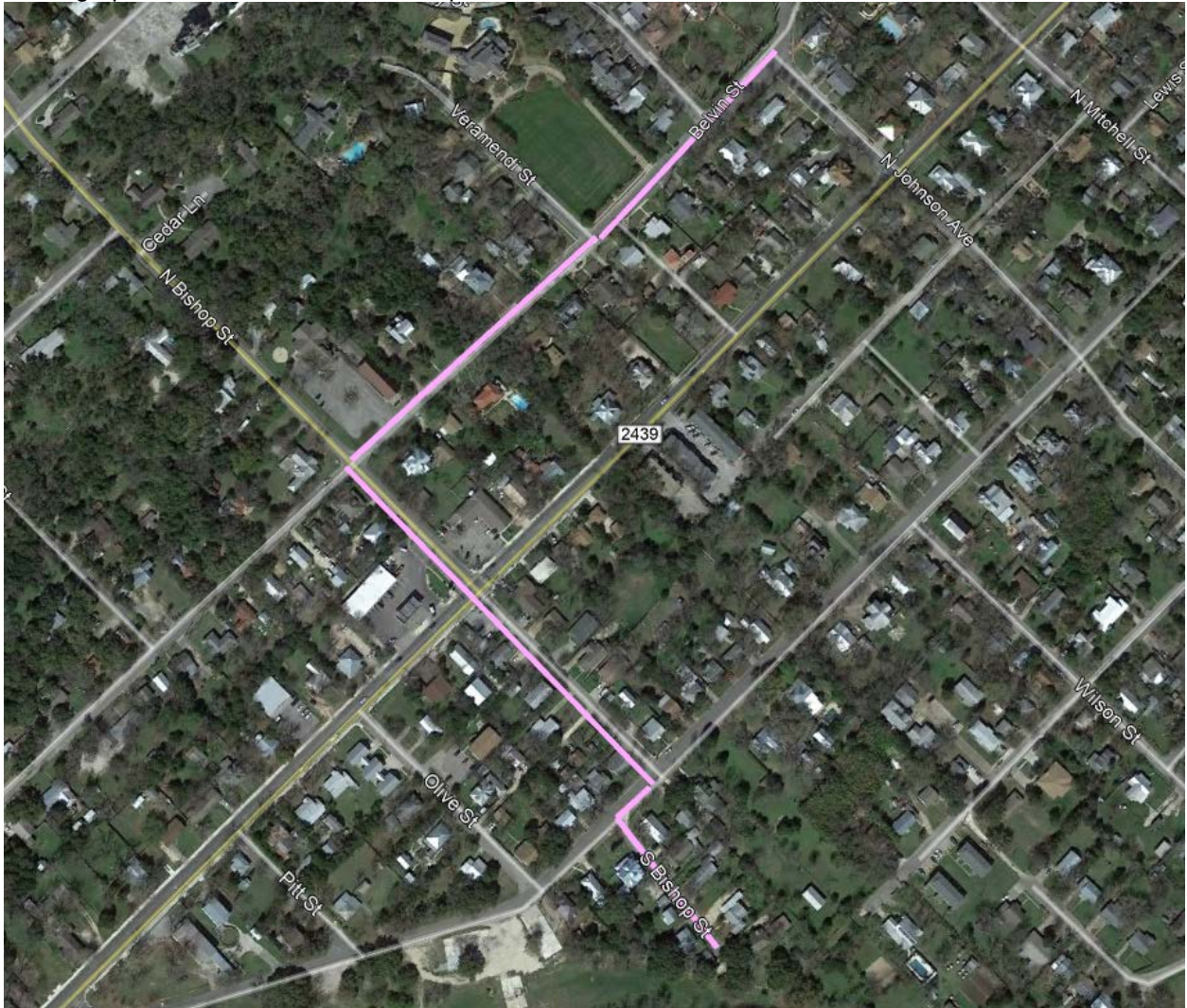
## **EXHIBIT 1 – Scope of Services and Deliverables**

### **ATTACHMENT A CITY OF SAN MARCOS BISHOP STREET PROJECT SCOPE OF SERVICES**

#### **Project Understanding**

The work to be performed by American Structurepoint. American Structurepoint under this contract will provide of providing Preliminary Engineering (30%) for the Bishop Street Project. The project consists of the following improvements:

- General Description – storm drain improvements, water, wastewater upsizing, full depth pavement reconstruction, sidewalks, and lighting for approximately 2,600 linear feet of roadway construction along S Bishop Street, San Antonio Street, Bishop Street, and Belvin Drive. Pink line in graphic below shows limits of scoped items.



#### **Basic Scope of Services**

##### Preliminary Phase (30%)

1. Project Management and QA/QC: This task consists of effort associated with project administration, coordination with the Prime consultant, City staff, coordination and supervision of internal project

## **EXHIBIT 1 – Scope of Services and Deliverables**

### **ATTACHMENT A CITY OF SAN MARCOS BISHOP STREET PROJECT SCOPE OF SERVICES**

team, and quality management so that project milestones and deliverables meet schedule and budget constraints.

#### **2. Meetings**

- a. Project Coordination Meetings: One (1) kickoff meeting with Prime Consultant and one internal kickoff meeting.
- b. Project Meetings: One (1) project meeting has been budgeted for the Preliminary Phase milestone submittal (30%).

#### **3. Tasks**

##### **a. Illumination**

- a. Photometric Analysis – Prepare 2D Photometric Analysis with Visual Lighting 2017 software or equivalent to meet AASHTO Roadway Lighting Design Guide Illuminance Method for continuous lighting within the project limits.

- 4. Develop Opinion of Probable Cost for Construction: The opinion of probable cost will be prepared according to the current practices for the City of San Marcos and will include all items of work required for the complete construction of the work.

#### **5. Deliverables:**

- a. 30%: American Structurepoint will provide one (1) pdf electronic copy containing the following:
  - i. Photometric analysis output exhibit.
  - ii. Engineer's Opinion of Probable Construction Costs (OPCC).
  - iii. Preliminary Engineering Report Illumination Section Draft (1-PDF, 1-DOC)
  - iv. Preliminary Engineering Report Illumination Section Final (1-PDF, 1-DOC).

### **Additional Services**

Additional Services to be performed, if authorized in writing by the City, but which are not included in the above-described Basic and Supplemental Scope of Services, and once a mutually agreed upon fee is negotiated are as follows:

- 1. Performing 3D Photometric Analysis.
- 2. 60% through Final PS&E Design
- 3. Bid Phase Services
- 4. Construction Phase Services

**EXHIBIT 1 – Scope of Services and Deliverables**

EXHIBIT 3 - FEE ESTIMATE												
City of San Marcos, Texas												
BISHOP STREET												
American Structurepoint												
		Professional Service Description	Total Task Hours	Total Task Cost	American Structurepoint Staff						Direct Expenses	
					Project Manager	QA/QC	Senior Project Engineer	Project Engineer	Sr Tech	Tech	EIT	Mileage @ \$0.58/mile
					\$190.00	\$240.00	\$180.00	\$140.00	\$135.00	\$95.00	\$110.00	Fee
		<b>Preliminary Phase (30%)</b>	<b>43</b>	<b>\$ 6,080</b>								
1		Project Management	1	\$ 190	1							
		QC Review and Address QC Comments - 30%	2	\$ 480		2						
		Project Accounting and Administration	3	\$ 470	1			2				
2		Project Meetings (includes site visit)	6	\$ 990	3			3				\$46.00
3		Photometric Analysis (2D)	24	\$ 3,120				16			8	
4		Develop OPCC	3	\$ 290				0.5			2	
5		Preliminary Engineering Report Draft (Illumination write-up)	3	\$ 360				1			2	
		Preliminary Engineering Report Final (Illumination write-up)	2	\$ 180				0.5			1	
<b>END BASIC SERVICES LABOR</b>												
		<b>Total Basic Service Hours:</b>	<b>43</b>		<b>5</b>	<b>2</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>13</b>	
		<b>Total Basic Services LABOR</b>		<b>\$ 6,080</b>								
		<b>Direct Expenses</b>		<b>\$ 46</b>								
		Mileage (\$0.58/mile)	0	\$ 46								\$46.00
			0	-								
<b>END</b>												
		<b>Total Direct Expenses</b>	<b>\$ 46</b>									
		<b>Total Fee Basic + Direct Expenses</b>		<b>\$ 6,126</b>								

The hours listed above are an estimate. The hours assigned to the Phase are not exclusive to the Phase which they are assigned. The total fee will not exceed the total contract amount as discussed in Article 2. The hourly rates of this contract shall apply throughout the remainder of this contract and to all change in services.

**Payment to the ENGINEER will be made as follows:**

1. Basic Services - The amounts of these invoices will be based upon the extent of work completed by the Engineer on an hourly basis.
2. Supplemental Services - The Engineer will receive approval in writing before performing supplemental services. The amounts of these invoices will be based upon the extent of work completed by the Engineer on a lump sum basis.
3. Reimbursable Expense - Reimbursable expenses including such things as expenses for plotting, reproduction of documents, auto travel mileage (current IRS approved mileage rate), delivery charges, long distance communications, freight, and state accessibility will be invoiced with appropriate backup documentation.

**Invoice and Time of Payment**

Invoices will be prepared in a format approved by the City prior to submission of the first monthly invoice. Invoices shall be submitted monthly and paid within 30 days.

**EXHIBIT 2**

**AUTHORIZATION OF CHANGE IN SERVICES  
CITY OF SAN MARCOS, TEXAS**

**AGREEMENT/ SERVICES:  
CITY REPRESENTATIVE:  
CONTRACTOR:  
AUTHORIZATION NO.:  
CONTRACT EFFECTIVE DATE:  
THIS AUTHORIZATION DATE:**

**WORK TO BE ADDED TO OR DELETED FROM SCOPE OF SERVICES**

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Previous contract amount: \$ \_\_\_\_\_ (NTE annual fee)  
Net increase/decrease in contract amount: \$ -0-  
Revised annual Agreement amount: \$ \_\_\_\_\_ (NTE annual fee)

Contractor Name

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

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

\_\_\_\_\_  
Printed Name, Title

Approved by:

City of San Marcos:

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

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

\_\_\_\_\_  
Printed Name, Title

***City Department (PM, etc.) only below this line.***

Account Number(s): \_\_\_\_\_, \_\_\_\_\_

Previous Changes in Service:

# \_\_\_\_\_; date; amount

# \_\_\_\_\_; date; amount

# \_\_\_\_\_; date; amount

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**EXHIBIT 3**  
**DETAILED FEE SCHEDULE**

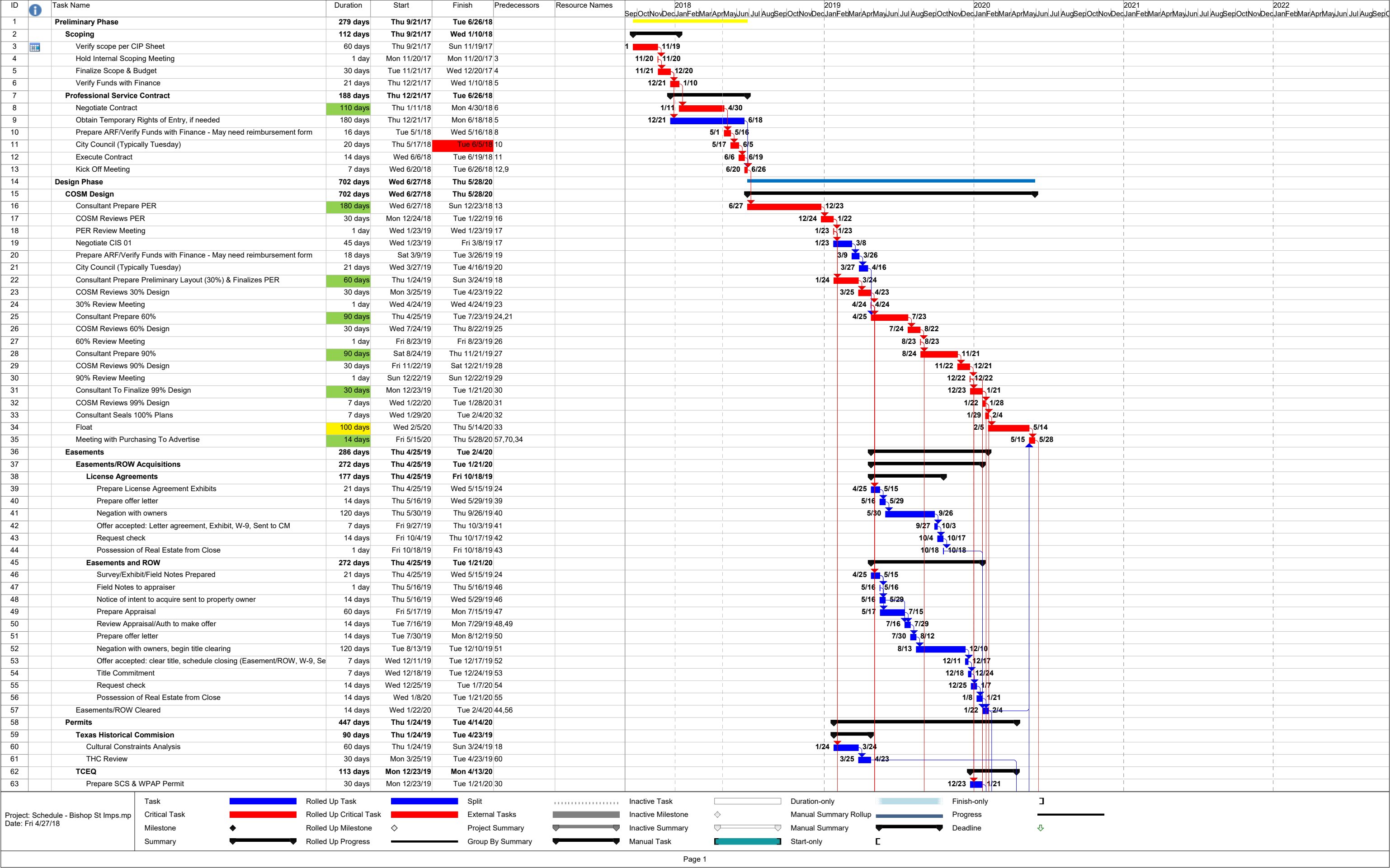
EXHIBIT 3 - FEE ESTIMATE																		
City of San Marcos, Texas																		
Bishop Street Improvements																		
							Staff						Civil Subconsultants	Total Expense	Mileage	Printing 8.5x11	Printing Full Size	
			Total Task Hours	Total Task Cost	Principal	Project Manager	Senior Hydrologist	Senior Project Engineer	Project Engineer II	Project Engineer I	Senior Technician	Clerical	Sub 1		per mile	per each	per sf	
		Professional Service Description											Fee					
		Preliminary Engineering	2301.00	\$ 261,377.00	\$225.00	\$210.00	\$210.00	\$185.00	\$160.00	\$115.00	\$135.00	\$75.00						
1		Project Management	12.00	\$ 1,940.00	4.00			4.00				4.00		\$ 1,361.20				
		QA/QC - PER	40.00	\$ 8,680.00	32.00			8.00						\$ -				
2		Meetings	0.00	\$ -										\$ -				
a		Project Coordination Meetings - 4	12.00	\$ 2,380.00	4.00			8.00						\$ 455.60	280	100	96	
b		Public Meeting - Preparation	26.00	\$ 3,770.00	2.00			8.00		16.00				\$ -				
3		Data Collection and Review	0.00	\$ -										\$ -				
a		Review Reports, Studies, and Drawings	34.00	\$ 5,250.00	2.00			16.00		16.00				\$ -				
b		Site Visits	8.00	\$ 1,200.00				4.00		4.00				\$ 41.15	70	20		
c		Staff Coordination	20.00	\$ 2,700.00				8.00		8.00		4.00		\$ -				
4		Survey	8.00	\$ 36,560.00				4.00		4.00			\$35,360.00	\$ -				
5		Geotechnical	4.00	\$ 10,965.00				2.00		2.00			\$10,365.00	\$ -				
6		Environmental	8.00	\$ 8,386.00				4.00		4.00			\$7,186.00	\$ -				
7		Offsite - 2D Drainage	0.00	\$ -										\$ -				
a		Project Startup	44.00	\$ 7,480.00		16.00			20.00	8.00				\$ -				
b		Existing Conditions Analysis	159.00	\$ 21,890.00		7.00	12.00		40.00	100.00				\$ -				
c		Proposed Conditions Analysis	108.00	\$ 14,950.00		4.00	7.00		33.00	64.00				\$ -				
d		Project Management	88.00	\$ 11,540.00	2.00	4.00			20.00	60.00		2.00		\$ -				
e		QA/QC	39.00	\$ 6,055.00	5.00	6.00			10.00	18.00				\$ -				
8		On-site Hydrology and Hydraulics	0.00	\$ -										\$ -				
a		On-Site Hydrology	160.00	\$ 22,000.00				40.00		80.00	40.00			\$ -				
b		On-Site Hydraulics	184.00	\$ 24,440.00				40.00		120.00	24.00			\$ -				
c		Update Existing HEC-RAS Sections	32.00	\$ 4,240.00				8.00		24.00				\$ -				
e		LID/Water Quality - Crespo	12.00	\$ 23,880.00				8.00		4.00			\$21,940.00	\$ -				
f		Drainage Report	82.00	\$ 11,250.00	2.00			16.00		40.00	24.00			\$ -				
9		Photometric Analysis	8.00	\$ 7,326.00				4.00		4.00			\$6,126.00	\$ -				
10		Determine Easement and Land Acquisition	0.00	\$ -										\$ -				
a		Prepare Exhibits	20.00	\$ 2,740.00				4.00		8.00	8.00			\$ -				
11		Determining Project Permitting/Design Requirements	0.00	\$ -										\$ -				
a		TxDOT, County ROW, Floodplain, TCEQ Transition Zone, TPWD, UPRR (if necessary), USACE, and USF&W	12.00	\$ 1,500.00				4.00		4.00		4.00		\$ -				
14		Construction Cost Estimates	24.00	\$ 3,320.00				8.00		16.00				\$ -				
15		Deliverables	0.00	\$ -										\$ -				
a		Monthly Status update	12.00	\$ 1,560.00				6.00				6.00		\$ -				
b		Public Meeting - 1	8.00	\$ 1,640.00	4.00			4.00						\$ 38.15	70			
c		Public Meeting Roll Plots	5.00	\$ 825.00	1.00			2.00		2.00				\$ 600.00			200	
d		Design Summary Report	20.00	\$ 3,420.00				16.00		4.00				\$ -				
e		PER Report - Draft	25.00	\$ 3,545.00	1.00			8.00		16.00				\$ 113.15	70	500		
f		PER Report - Final	41.00	\$ 5,945.00	1.00			16.00		24.00				\$ 113.15	70	500		
		30% Plans	523.00	\$ 93,105.00										\$ 1,366.30				
1 a		Project Management	8.00	\$ 1,640.00	4.00			4.00						\$ -				
b		QA/QC	8.00	\$ 1,800.00	8.00									\$ -				
2		Meetings	0.00	\$ -										\$ -				
a		Project Coordination Meetings - 2	12.00	\$ 2,100.00	4.00			4.00		4.00				\$ 76.30	140			
3		Develop Design Summary Report	14.00	\$ 2,110.00	2.00			4.00		8.00				\$ -				
4		30% Plans	0.00	\$ -										\$ 615.00		100	200	
a		Cover Sheet - 1 Sheet	10.00	\$ 1,370.00				2.00		4.00	4.00			\$ -				
b		General Notes - 2 Sheets	9.00	\$ 1,185.00				1.00		4.00	4.00			\$ -				
c		Survey - 2 Sheets	8.00	\$ 1,000.00						4.00	4.00			\$ -				
d		General Layout - 1 Sheet	9.00	\$ 1,185.00				1.00		4.00	4.00			\$ -				
e		Water - 9 Sheets	72.00	\$ 9,320.00				8.00		40.00	24.00			\$ -				
f		Wastewater - 9 Sheets	72.00	\$ 9,320.00				8.00		40.00	24.00			\$ -				
g		Drainage Area Maps, Offsite - 2 Sheets	20.00	\$ 2,740.00				4.00		8.00	8.00			\$ -				
h		Drainage Area Maps, Onsite - 2 Sheets	36.00	\$ 4,740.00				4.00		16.00	16.00			\$ -				
i		Storm Drainage Calcs - 1 Sheet	12.00	\$ 1,740.00				4.00		4.00	4.00			\$ -				
j		Storm Plans - 9 Sheets	72.00	\$ 9,320.00				8.00		40.00	24.00			\$ -				
k		Street Plans - 9 Sheets	72.00	\$ 9,320.00				8.00		40.00	24.00			\$ -				
5		Utility Coordination	8.00	\$ 22,890.00				4.00		4.00			\$21,690.00	\$ -				
6		Construction Cost Estimates	41.00	\$ 5,545.00	1.00			8.00		24.00	8.00			\$ -				
7		Deliverables	0.00	\$ -										\$ -				
a		Monthly Status update - Assumes 2 months for 30%	4.00	\$ 640.00				2.00			2.00			\$ -				
b		30% Plans	24.00	\$ 3,480.00				8.00		8.00	8.00			\$ 675.00		500	200	
c		Design Checklist - Per COSM Requirements	12.00	\$ 1,660.00				4.00		8.00								








**EXHIBIT 4**  
**PROJECT SCHEDULE**

EXHIBIT 4 – Project Schedule



## EXHIBIT 4 – Project Schedule

[illegible]

Project: Schedule - Bishop St Imps.mp Date: Fri 4/27/18	Task		Rolled Up Task		Split		Inactive Task		Duration-only		Finish-only	
	Critical Task		Rolled Up Critical Task		External Tasks		Inactive Milestone		Manual Summary Rollup		Progress	
	Milestone		Rolled Up Milestone		Project Summary		Inactive Summary		Manual Summary		Deadline	
	Summary		Rolled Up Progress		Group By Summary		Manual Task		Start-only			