

STATE OF TEXAS §
 §
 COUNTY OF FORT BEND §

**AGREEMENT FOR PROFESSIONAL WATERSHED STUDY FOR FORT BEND COUNTY
 SECTIONS 2, 4, 5 AND 6 OF RFQ 18-071**

THIS AGREEMENT is made and entered into by and between Fort Bend County Drainage District, (hereinafter "District"), a body corporate and politic under the laws of the State of Texas, and Freese and Nichols, Inc. (hereinafter "Consultant"), a company authorized to conduct business in the State of Texas.

WITNESSETH

WHEREAS, District desires that Consultant participate in certain phases of the preparation of a watershed study to review various aspects of flood-related issues, and if necessary, revise and/or update the flood information for the various watersheds within Fort Bend County, Texas, pursuant to RFQ 18-071, (hereinafter "Services"); and

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

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

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

AGREEMENT

Section 1. Scope of Services

Consultant shall render Services to District as defined in Consultant's Scope of Work for Professional Services attached hereto as Attachment A and incorporated herein.

Section 2. Personnel

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

Agreement for Professional Watershed Study for Fort Bend County
 Section 2, 4, 5 and 6 of RFQ 18-071

Page 1 of 13

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

Section 3. Compensation and Payment

3.1 The Maximum Compensation for the performance of Services within the Proposal described in Attachment A is a lump sum fee in the amount of three million one hundred thirty-eight thousand two hundred eighty-five dollars and No/100 (\$3,138,285.00). In no case shall the amount paid by District under this Agreement exceed the Maximum Compensation without written amendment executed by the parties.

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

3.3 Consultant shall submit to District staff designated by the Chief Engineer, one (1) electronic (pdf) and/or one (1) original invoice showing the amounts due for services performed in a form acceptable to District on a monthly basis on or before the tenth (10th) day of each calendar month during the performance of the Services. Each invoice shall reflect an amount payable as installment of the Maximum Compensation representing the proportionate part of the Services performed during the previous month. District shall review such invoices and approve them within thirty (30) calendar days with such modifications as are consistent with this Agreement and forward same to the Fort Bend County Auditor for processing. District shall pay each such approved invoice within thirty (30) calendar days. District reserves the right to withhold payment pending verification of satisfactory work performed.

Section 4. Limit of Appropriation

4.1 Consultant clearly understands and agrees, such understanding and agreement being of the absolute essence of this Agreement, that District shall have available the total maximum sum of three million one hundred thirty-eight thousand two hundred eighty-five dollars and No/100 (\$3,138,285.00), specifically allocated to fully discharge any and all liabilities District may incur.

4.2 Consultant does further understand and agree, said understanding and agreement also being of the absolute essence of this Agreement, that the total maximum compensation that Consultant may become entitled to and the total maximum sum that District may become liable to pay to Consultant shall not under any conditions, circumstances, or interpretations thereof exceed three million one hundred thirty-eight thousand two hundred eighty-five dollars and No/100 (\$3,138,285.00).

Section 5. Time of Performance

The time for performance of the Scope of Services by Consultant shall begin with receipt of the Notice to Proceed from District and shall continue as necessary to complete the tasks described in the Scope of Services within the time provided therein, or within such additional time as may be extended by the District.

Section 6. Modifications and Waivers

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

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

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

Section 7. Termination

7.1 Termination for Convenience – District may terminate this Agreement at any time upon thirty (30) days written notice.

7.2 Termination for Default

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

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

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

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

7.3 Upon termination of this Agreement, District shall compensate Consultant in accordance with Section 3, above, for those services which were provided under this Agreement prior to its termination and which have not been previously invoiced to

District. Consultant's final invoice for said services will be presented to and paid by District in the same manner set forth in Section 3 above.

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

Section 8. Ownership and Reuse of Documents

All documents, data, reports, research, graphic presentation materials, etc., developed by Consultant as a part of its work under this Agreement, shall become the property of District upon completion of this Agreement, or in the event of termination or cancellation thereof, at the time of payment under Section 3 for work performed. Consultant shall promptly furnish all such data and material to District on request. If the District modifies and/or uses the documents for any reason other than their intended use, without Consultant's authorization, the Consultant shall be released from any liability as a result of such action.

Section 9. Inspection of Books and Records

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

Section 10. Insurance

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

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

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

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

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

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

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

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

Section 11. Indemnity

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

11.2 Consultant shall timely report all such matters to District and shall, upon the receipt of any such claim, demand, suit, action, proceeding, lien or judgment, not later than the fifteenth day of each month; provide District with a written report on each such matter, setting forth the status of each matter, the schedule or planned proceedings with respect to each matter and the cooperation or assistance, if any, of District required by Contractor in the defense of each matter.

11.3 Consultant's duty to defend indemnify and hold District harmless shall not abate or end by reason of the expiration or termination of the Agreement unless otherwise agreed by District in writing. The provisions of this section shall survive the termination of the Agreement and shall remain in full force and effect with respect to all such matters no matter when they arise.

11.4 In the event of any dispute between the parties as to whether a claim, demand, suit, action, proceeding, lien or judgment appears to have been caused by or appears to have arisen out of or in connection with acts or omissions of Contractor, Contractor shall never-the-less fully defend such claim, demand, suit, action, proceeding, lien or judgment until and unless there is a determination by a court of competent jurisdiction that the acts and omissions of Contractor are not at issue in the matter.

11.5 Consultant's indemnification shall cover, and Consultant agrees to indemnify District, in the event District is found to have been negligent for having selected District to perform the work described in this request.

11.6 The provision by Consultant of insurance shall limit the liability of Consultant to District.

11.7 Consultant shall cause all trade contractors and any other contractor who may have a contract to perform construction or installation work in the area where work will be performed under this request, to agree to indemnify District and to hold it harmless from all claims for bodily injury and property damage that may arise from said Consultant's operations. Such provisions shall be in form satisfactory to District.

11.8 Loss Deduction Clause - District shall be exempt from, and in no way liable for, any sums of money which may represent a deductible in any insurance policy. The payment of deductibles shall be the sole responsibility of Consultant and/or trade contractor providing such insurance.

Section 12. Confidential and Proprietary Information

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

12.2 Consultant agrees to hold Confidential Information in strict confidence, using at least the same degree of care that Consultant uses in maintaining the confidentiality of its own confidential information, and not to copy, reproduce, sell, assign, license, market, transfer or otherwise dispose of, give, or disclose Confidential Information to third parties or use Confidential Information for any purposes

whatsoever other than the provision of Services to District hereunder, unless disclosure is required by law or court order, and to advise each of its employees and agents of their obligations to keep Confidential Information confidential. Consultant shall use its best efforts to assist District in identifying and preventing any unauthorized use or disclosure of any Confidential Information. Without limitation of the foregoing, Consultant shall advise District immediately in the event Consultant learns or has reason to believe that any person who has had access to Confidential Information has violated or intends to violate the terms of this Agreement and Consultant will at its expense cooperate with District in seeking injunctive or other equitable relief in the name of District or Consultant against any such person. Consultant agrees that, except as directed by District, Consultant will not at any time during or after the term of this Agreement disclose, directly or indirectly, any Confidential Information to any person, and that upon termination of this Agreement or at District's request, Consultant will promptly turn over to District all documents, papers, and other matter in Consultant's possession which embody Confidential Information; provided however, that Consultant may retain one (1) copy of all work produced which incorporates Confidential Information for internal record-keeping purposes, subject to the terms of this Agreement.

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

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

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

Section 13. Independent Consultant

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

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

Section 14. Notices

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

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

District:	Fort Bend Drainage District Attn: Chief Engineer 301 Jackson Street Richmond, Texas 77469
With a copy to:	Fort Bend County Attn: County Judge 401 Jackson Street Richmond, Texas 77469
Consultant:	Freese and Nichols, Inc. 10497 Town and Country Way, Suite 600 Houston, Texas 77024

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

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

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

Section 15. Compliance with Laws

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

Section 16. Standard of Care

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

Section 17. Assignment

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

17.2 Neither party may delegate any performance under this Agreement.

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

Section 18. Applicable Law

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

Section 19. Successors and Assigns

District and Consultant bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors,

executors, administrators and assigns of the other party, in respect to all covenants of this Agreement.

Section 20. Third Party Beneficiaries

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

Section 21. Severability

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

Section 22. Publicity

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

Section 23. Captions

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

Section 24. Conflict

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

Section 25. Certain State Law Requirements for Contracts

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

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

Section 26. Federal Funding Requirements

26.1 Debarment: The Consultant hereby certifies that neither it nor its principals are presently debarred, suspended, proposed for debarment, declared

ineligible, or voluntarily excluded from participation in this contract by any governmental department or agency.

26.2 Small, Minority Firms, Women's Business Enterprises and Labor Surplus Area Firms: Consultant will take all necessary affirmative steps to assure that qualified small, minority firms, women's business enterprises, and labor surplus area firms are used when possible by:

26.2.1 Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

26.2.2 Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

26.2.3 Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;

26.2.4 Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;

26.2.5 Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and

26.2.6 Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in subsections 26.2.1 through 26.2.5.

26.3 Contract work hours and safety standards: Construction must comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous.

26.4 Clean Air Act and Federal Water Pollution Control Act: Consultant agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387), and will report violations to FEMA and the Regional Office of the Environmental Protection Agency (EPA).

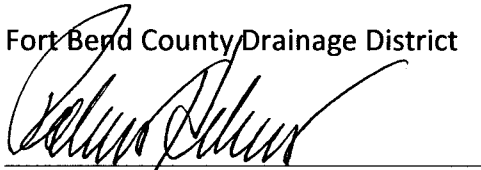
26.5 Energy Policy and Conservation Act: Consultant agrees to comply with Energy Policy and Conservation Act (42 U.S.C. § 6201).

26.6 Anti-Lobbying: Byrd Anti-Lobbying Amendment, 31 U.S.C. § 1352 (as amended). Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant, or any other award covered by 31 U.S.C. § 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the recipient.

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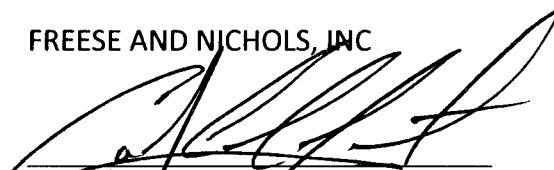
IN WITNESS WHEREOF, the parties hereto have signed or have caused their respective names to be signed to multiple counterparts to be effective on the date signed by the last party hereto.

Fort Bend County Drainage District



Robert E. Hebert, County Judge

FREESE AND NICHOLS, INC



Authorized Agent - Signature

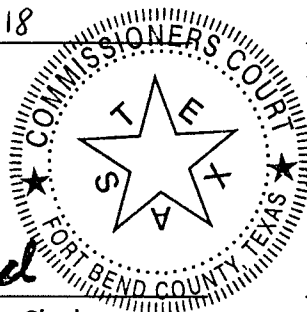
10-2-2018

Date



Authorized Agent - Printed Name

ATTEST:




Laura Richard, County Clerk

VICE PRESIDENT
Title

9/25/2018
Date

APPROVED:



Mark Vogler, Chief Engineer

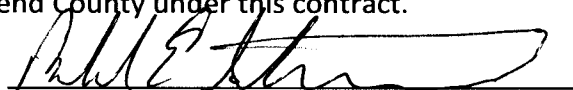
APPROVED AS TO LEGAL FORM:



Marcus D. Spencer, First Assistant County Attorney

AUDITOR'S CERTIFICATE

I hereby certify that funds are available in the amount of \$ 3,138,285 to accomplish and pay the obligation of Fort Bend County under this contract.



Robert Ed Sturdivant, County Auditor

ATTACHMENT A

Attachment A
Scope of Work
Fort Bend County Watershed Study
Basic Services

Freese and Nichols (FNI) will complete the following tasks for a lump sum fee of \$3,138,285.

1. Project Management and Coordination (\$298,293)

1.1. Project Management and Administration: Based on an estimated schedule of 24 months, the Project Manager will be responsible for project management and coordination services consisting of internal team management and subconsultant management, as well as regular communication with Fort Bend County Drainage District (FBCDD). Tasks include:

- 1.1.1. Internal project management
- 1.1.2. Subconsultant management and coordination including contracting, invoicing, review of deliverables, and communication
- 1.1.3. Administration of the contract, including preparation of invoices, and monthly progress reports.
- 1.1.4. Develop and maintain a schedule indicating tasks, milestones and deliverables.

1.2. Kickoff Meeting: Attend the initial planning kickoff meeting to discuss planning goals and objectives, review the project schedule, and discuss deliverables and other relevant items. Meeting will be attended by the Project Manager and representatives of all subconsultants on the team.

1.3. Bi-Monthly Project Coordination Meetings: Bi-monthly (every other month) progress meetings will be held at FBCDD's offices. Meeting agendas and necessary meeting materials will be prepared by the Project Manager. Meeting minutes will be prepared to document key discussions and action items. The Project Manager will attend these meetings, representatives of subconsultants will attend as needed. Separate meetings to present results on specific tasks will be held as described in each phase of the project.

1.4. Meetings with Stakeholders: Attend up to 5 meetings with project stakeholders (FBC, FBCDD, LIDs, Municipalities, Engineering Community) to present preliminary and final results. Meetings will focus on individual phases of the project and will be coordinated with FBCDD.

2. Fort Bend County Drainage Criteria Manual Review/Update (\$465,136)

The goal of this phase is to review and update the current Drainage Criteria Manual (DCM) for Fort Bend County, to take into consideration recent studies (e.g. Atlas 14), current technologies and methodologies for the design of drainage infrastructure, how developed areas performed during recent floods, and current trends in development. Anticipated duration for this phase is 8 months to develop a final draft.

2.1. Data Collection and Review:

- 2.1.1. Conduct an overall review of the current DCM, as well as existing criteria related to hydrology, open channel flow, bridges/culverts, storm sewers/overland flow, storage/detention basins, levees/pumps, and rural subdivisions. DCMs for other surrounding communities will also be reviewed for comparison.
- 2.1.2. Review of the specific design criteria related to channels, detention basins, and hydraulic structures (including erosion control structures). Collect and investigate information (High water marks, flood claims) on recent flooding problems throughout the county (Tax Day flood of 2016, and Harvey flood in 2017) to identify flooding issues within the county that would require revisions to the existing drainage criteria for new developments. Project team will hold two (2) coordination meetings.
- 2.1.3. Consultant will identify the portions of the current Criteria Manual that will be subject to change. The deliverable for this task will be a markup of the 2011 DCM in Microsoft Word format.

2.2. Update Policies:

- 2.2.1. Consultant will make recommendations to update various policies contained in the DCM for Fort Bend County. Policies which will be revisited will include but not be limited to general overall policies, "No Adverse Impact" floodplain management policies, development within the Brazos River Floodplain, and design storm/flood events related to channels, bridges/culverts, detention basins, storm sewers, and levees/pumps systems. Current trends in development, and findings from reviews of recent developments in Fort Bend County will be taken into consideration. Project team will hold one (1) workshop for coordination, and there will be two (2) workshops with FBCDD to present results.
- 2.2.2. The deliverable for this task will be a memorandum of recommendations for updates to the DCM policies.

2.3. Analysis:

- 2.3.1. The effort required for this task will be dependent on the findings of Tasks 2.1 and 2.2 above. At a minimum, it is anticipated that Consultant will adopt rainfall totals based on NOAA Atlas 14 (when available). In addition, analysis is expected to involve evaluation of methods and procedures related to loss rates, unit hydrograph parameters, ponding adjustments, stream routing, detention routing (based on drainage area sizes), erosion analysis, pumped systems, and hydraulic analysis (including review of the latest technology). Where possible, Consultant will rely on research done by other nearby entities (such as Harris County and the City of Houston) to reduce the required effort involved in the analysis.
- 2.3.2. Project Team will hold four (4) workshops to find consensus on criteria and recommend changes that protect the public. Project Team will hold three (3) workshops with FBCDD to present results and reach agreement on changes.

- 2.3.3. Based on the results of the various analyses, update the design criteria for channels, detention basins, and hydraulic structures (including erosion control structures), as well as adopting the guidance document for 2D modeling that HCFCD is developing. The deliverable(s) for this task will be a technical memorandum (or series of memoranda) providing recommendations for updates to DCM methods and design criteria.

2.4. Documentation and Implementation:

- 2.4.1. Update the DCM text along with any tables, figures, and exhibits necessary to provide additional support to the text.
- 2.4.2. Develop guidelines for evaluation of drainage impact analyses for new developments. The purpose of this document will be to ensure consistency of permit submittals for site development.
- 2.4.3. The deliverable for this task will be a draft of the updated DCM in Microsoft Word format provided to the Fort Bend County Drainage District for review and comment.
- 2.4.4. Once a final draft has been developed, it will be submitted for comment to the American Council of Engineering Companies (ACEC) of Houston. Up to two (2) rounds of comments will be addressed before arriving at a final format that can be presented to Commissioners Court.
- 2.4.5. Prepare up to two (2) workshops with the FBC technical committee and stakeholders (LIDs, municipalities) to present the changes proposed in the updated DCM.
- 2.4.6. Assist FBCDD in the implementation of the revised DCM.

3. Brazos River Floodplain Master Plan (\$963,228)

The Brazos River has been affected by at least 4 major floods since 2015 including Hurricane Harvey, which broke previous records of water levels across the county. The frequency and severity of floods on the Brazos has highlighted the importance of updating the analyses and tools available to Fort Bend County to ensure proper development practices are followed and to protect public safety during floods. The goal of this phase is to develop new hydrologic and hydraulic models that can be used to understand how the Brazos River behaves during floods and can be used in decision making during future floods. The extents of the hydraulic model will be from the Hempstead gage (US-290) to the Brazoria County line. Anticipated duration for this phase is 12 months.

3.1. Data collection and model review:

- 3.1.1. Collect previous studies and models for the Brazos River, including the current effective models, the 2015 RAMPP study, and 2018 BRA models.
- 3.1.2. Compile high water marks and flow measurements available for recent floods on the Brazos River.
- 3.1.3. Review 2015 RAMPP study and 2018 BRA model of the Brazos River.
- 3.1.4. Prepare a memorandum documenting the findings of the review.

3.2. Update Hydrologic Model:

- 3.2.1. Using the hydrologic model developed for the 2018 BRA study as a baseline, update hydrologic parameters - for subbasins located within the study area - to match the methodologies recommended for the updated DCM (Phase 2 of scope of work). Parameters to be updated include hydrologic losses, times of concentration and storage within subbasins. An updated HEC-HMS model in version 4.2.1 (or later) will be created.
- 3.2.2. Update design rainfall to reflect rainfall depths from Atlas 14 (once released), as well as depth/area reduction factors for the design storm to be consistent with recommendations from Atlas 14.
- 3.2.3. Execute model for a range of storms including the 2-, 5-, 10-, 25-, 50-, 100-, and 500-year storm and review/compare the data to the effective model, and 2018 BRA model.
- 3.2.4. The deliverable for this task is combined with task 3.5.
- 3.2.5. Meet with FBCDD to present the results of this analysis.

3.3. Development of new Hydraulic Model:

- 3.3.1. Develop a new two-dimensional (2D) hydraulic model using HEC-RAS version 5.0.5 (or later) to represent the Brazos River floodplain from Hempstead (US-290) to the Brazoria County line. Model will be based on the latest topography and land use available for the study area. The extents of the model will be enough to capture diversions into nearby streams (e.g. Oyster Creek, Bullhead Bayou, Bessie's Creek).
- 3.3.2. Investigate if there is available survey near the Richmond gage that reflect recent changes within the channel banks and modifications at the railroad crossing. If survey is not available, survey will be collected for this area. If bathymetric data or recent LiDAR is available from other studies or sources, this information will be incorporated into the model.
- 3.3.3. Combine the new hydraulic model with the recently completed model representing Oyster Creek, Bullhead Bayou, and Ditch H. This expanded hydraulic model will better represent the interaction between the Brazos River and these streams during large floods.

- 3.3.4. Define flow data and apply inflow hydrographs from the hydrologic model. Consideration for flow change locations will include (at a minimum) roadway crossings where there are currently gages or future potential gage locations, confluences of tributaries, or other locations where there are significant changes in stormwater discharge when inflow hydrographs are applied.
- 3.3.5. The deliverable for this task is combined with task 3.5.

3.4. 2-D Model Calibration to Historical Storms: Calibrate hydrologic and hydraulic models to 4 storm events (2007 flood, Tax Day 2016, Memorial Day 2016, and Harvey 2017). Calibration will be done by adjusting parameters in the hydrologic and hydraulic models, with the goal of obtaining consistent parameters for all 4 storm events. Stages recorded at USGS gages (San Felipe, Richmond, Rosharon), along with High Water Marks (HWM) along the river will be used to calibrate the hydraulic model (water surface elevations). Flow measurements will be used for documentation and comparison purposes, but the calibration will be largely based on matching water surface elevations along the Brazos River.

- 3.4.1. Acquire Gage Adjusted Radar Rainfall (GARR) from Vieux Inc. for the 4 storm events and incorporate into the hydrologic model. Execute hydrologic model for each historical storm and review results compared to available discharge gages. Evaluate shape of hydrographs, timing of peak discharges, and magnitude of the flows. Adjust hydrologic parameters until discharges from hydrologic model, when routed through the hydraulic model result in calculated water surface elevations that match observed data (HWM, stages at gages). This will be a process requiring multiple iterations of the hydrologic and hydraulic models.
- 3.4.2. Flows from the hydrologic model for each storm event will be entered into the hydraulic model. Roughness coefficients in the hydraulic model will be adjusted until the calculated water surface elevations result in a close match to the observed HWM along the Brazos River. The river stages recorded at streamflow gages will be used to evaluate how closely the model is matching the response of the river and make adjustments to roughness coefficients and hydrologic parameters.
- 3.4.3. The calibrated parameters for the hydrologic and hydraulic models for the 4 storm events will be documented. The average values will be used in the final calibrated hydrologic and hydraulic models for the Brazos River.
- 3.4.4. The deliverable for this task is combined with task 3.5.

3.5. 1-D Model Calibration to Historical Storms: Using the 2018 BRA hydraulic model (1-D unsteady flow) as a starting point, adjust hydraulic parameters to match the results of the calibrated 2-D model for the 4 historical events. The calibrated 1-D unsteady flow model will be used to evaluate frequency storms and produce water surface profiles and inundation maps.

- 3.5.1. Adjust parameters (roughness coefficients, ineffective flow areas, reach lengths) in the 2018 BRA hydraulic model to match the results obtained from the 2-D hydraulic model developed in 3.4. This may require modification to cross sectional geometry at select locations; available LiDAR and bathymetry will be used where needed.
- 3.5.2. Using the same flows from 3.4.2, execute the 1-D hydraulic model for a range of storms including the 2-, 5-, 10-, 25-, 50-, 100-, and 500-year storms and review/compare the data to the effective model, and 2018 BRA model.
- 3.5.3. Using the results of the 1D hydraulic model, prepare inundation mapping for the 2-, 5-, 10-, 25-, 50-, 100- and 500-year events along the Brazos River.
- 3.5.4. Using the results of the 1D hydraulic model, prepare water surface profiles for the 2-, 5-, 10-, 25-, 50-, 100-, and 500-year storms.

- 3.5.5. Provide comparison tables of the calculated flows and water surface elevations at key locations, to show differences against the effective, and 2018 BRA models. Provide a discussion of any significant changes.
- 3.5.6. Develop tables relating water surface elevations at key locations (e.g. stream confluences, outfalls from levees, road crossings, etc.) to stages at the Richmond Gage.
- 3.5.7. Deliverables include preparing a detailed report documenting the development of the hydrologic and hydraulic models, historical storm events used for calibration, calibrated parameters and findings of the analysis. Report will include final hydrologic and hydraulic models (1-D, and 2-D), inundation mapping for 100- and 500-yr storm events, GIS data collected and developed, water surface profiles, and flow tables.
- 3.5.8. Perform a thorough quality control (QC) of the hydrologic, hydraulic models and report developed in this phase. This includes review of the backup calculations for parameters, calibration to historical events, and evaluation of frequency storms.
- 3.5.9. Hold up to 3 meetings with FBCDD to present the results of this analysis.

3.6. USGS streamflow gage at Richmond:

- 3.6.1. Using the new hydraulic model for the Brazos River, develop a discharge rating curve at the location of the Richmond gage.
- 3.6.2. Compare new discharge rating curve with the collection of rating curves developed by the USGS.
- 3.6.3. Evaluate historical/chronological records of the area to identify changes in channel geometry, vegetation, development, location of flow measurements, flow measurement methods. Document findings in a technical memorandum.
- 3.6.4. Develop recommendations to improve reliability of streamflow measurements at the Richmond gage. Possible recommendations include identifying a secondary location to conduct flow measurements during floods, conduct flow measurements using current and preceding methods.
- 3.6.5. Meet with FBCDD and USGS to present findings of analysis and provide recommendations.

3.7. Evaluation of conveyance within the Brazos River Floodplain:

- 3.7.1. Using the new hydraulic 1-D model of the Brazos River, evaluate the potential impacts from future development within the floodplain of the Brazos River by using levees or placing fill in the floodplain. FBCDD will provide guidance for location of future levees or areas likely to develop in the future. This task will be coordinated with consultant doing the erosion study of the Brazos River.
- 3.7.2. Update the effective flow boundary within the Brazos River 100-year floodplain.
- 3.7.3. Compare new effective flow boundary against criteria currently used to guide development within the Brazos River floodplain. Prepare a technical memorandum documenting findings and recommendations for regulation of future development in the Brazos River floodplain.

3.8. Coordination with National Weather Service (NWS): Once the hydrologic and hydraulic models have been finalized, meet with the NWS to incorporate the findings of the updated hydrologic and hydraulic models of the Brazos River into their forecasting models. The objective is to provide NWS with additional information (diversion tables, rating curves, routing parameters) that can improve the accuracy of the forecasted flows and stages at the San Felipe, Richmond, and Rosharon locations. Up to three (3) meetings will be held with NWS to coordinate this effort.

4. Develop and Update Master Drainage Plans (\$1,411,628)

The goal of this phase is to develop, or update existing, master drainage plans for streams within Fort Bend County that have outdated hydrologic and hydraulic models. Exhibit 1 shows the location of the streams to be studied, and Table 1 lists the tasks to be completed for each stream. Anticipated duration for this phase is 18 months.

4.1. Data Collection and Review: In coordination with FBCDD, collect all available studies and H&H models for the streams to be studied. This includes past Master Drainage Plans, Drainage Impact Analyses, watershed studies, FEMA studies, as-builts, LiDAR, etc. Review the information collected and document findings. Coordinate field survey efforts with FBCDD.

4.2. Existing Conditions Analysis: Define/Update current conditions for each studied stream watershed.

- 4.2.1. Hydrologic Analysis: Create a new hydrologic model, if an existing hydrologic model is available it will be updated to use HEC-HMS 4.2.1 (or later) and to follow the methodologies of the updated Drainage Criteria Manual (Phase 2). Models will reflect existing land cover (2017) and use subbasins with drainage areas generally greater than 2 square miles. Model will include simulations for the 2-, 5-, 10-, 25-, 50-, 100-, and 500-year storms as reported by Atlas 14. Routing reaches in model will assume minimal attenuation of flows, and will only represent travel time; routing of flows will be done using the hydraulic model.
- 4.2.2. Hydraulic Analysis: Create a new hydraulic model, if an existing hydraulic model is available it will be updated to use HEC-RAS 5.0.5 (or later) and use unsteady-flow 1D elements. 2D components will only be used as a last resort. Flows from the HEC-HMS model will be routed through the hydraulic model. New models will be built using 2014 LiDAR and reference the NAVD88, 2001 adjustment datum; existing models will maintain current geometry. Field survey will be limited to road crossings, railroad crossings, or other key structures such as diversions weirs or spillways on dams; all field survey will be performed by FBCDD. Model will include simulations for the 2-, 5-, 10-, 25-, 50-, 100-, and 500-year storms.
- 4.2.3. Prepare inundation mapping for the 2-, 5-, 10-, 25-, 50-, 100-, and 500-year storm.
- 4.2.4. Prepare water surface profiles for the 2-, 5-, 10-, 25-, 50-, 100-, and 500-year storms.
- 4.2.5. Meet with FBCDD to present the results of the existing conditions analysis.

4.3. Alternative analysis for existing levels of development: Size a drainage system that provides a 100-year level of service along the selected channels (See Table 1) assuming current levels of development.

- 4.3.1. Subdivide the studied stream (See Table 1) into major reaches, e.g. between road crossings or confluences with other streams. Using the unsteady-flow hydraulic models developed in 4.2.2, size the channel section required to provide a 100-year level of service. In addition to channel widening, evaluate the potential for deepening the channel section. Only grass-lined, trapezoidal sections will be evaluated; each reach will have a constant channel width. It is to be noted that for Jones Creek specifically, the channel widening will only be evaluated for the last 20,000 LF (downstream of the GCWA control structure).
- 4.3.2. In addition to determining ROW required for existing conditions as described in 4.3.1, the evaluation of adding a diversion channel will be completed for the following streams: Bessie's Creek/ Brazos River, Jones Creek/ Brazos River. The evaluation of widening the existing diversion channel will be completed for the following streams: Big Creek/ Brazos River (north side only)

- 4.3.3. Evaluate regional detention for selected streams (See Table 1). The purpose of this analysis will be to identify parcels of land for potential detention locations and quantify maximum detention volume potential for each parcel. Benefits of detention pond will be evaluated using an unsteady-flow simulation, with the goal of mitigating increases in flow from increased conveyance in channels.
- 4.3.4. Conduct a high-level environmental assessment for proposed infrastructure and document findings.
- 4.3.5. Develop planning-level cost estimate that includes ROW acquisition, excavation, control structures. Develop exhibits depicting the configuration of the drainage system.
- 4.3.6. Meet with FBCDD to present the results of this analysis.

4.4. Quality Assurance, Quality Control: Perform a thorough quality control (QC) of the hydrologic, hydraulic models and report developed in this phase. This includes review of the backup calculations for parameters, and evaluation of frequency storms.

4.5. Deliverables: Deliverables include a report documenting the development of the hydrologic and hydraulic models, evaluation of channel section (for selected streams), regional detention (for selected streams), recommendations, inundation maps for the 100-yr storm event for existing conditions, water surface profiles for the 2-, 5-, 10-, 25-, 50-, 100-, and 500-year existing condition storms, flow summary tables, and GIS data developed in the study.

4.6. Prioritization of improvements: Develop a ranking criteria and associated weights to score all the alternatives identified as part of the study. Potential variables include construction cost of each alternative, property value, public safety, risk of loss of life.

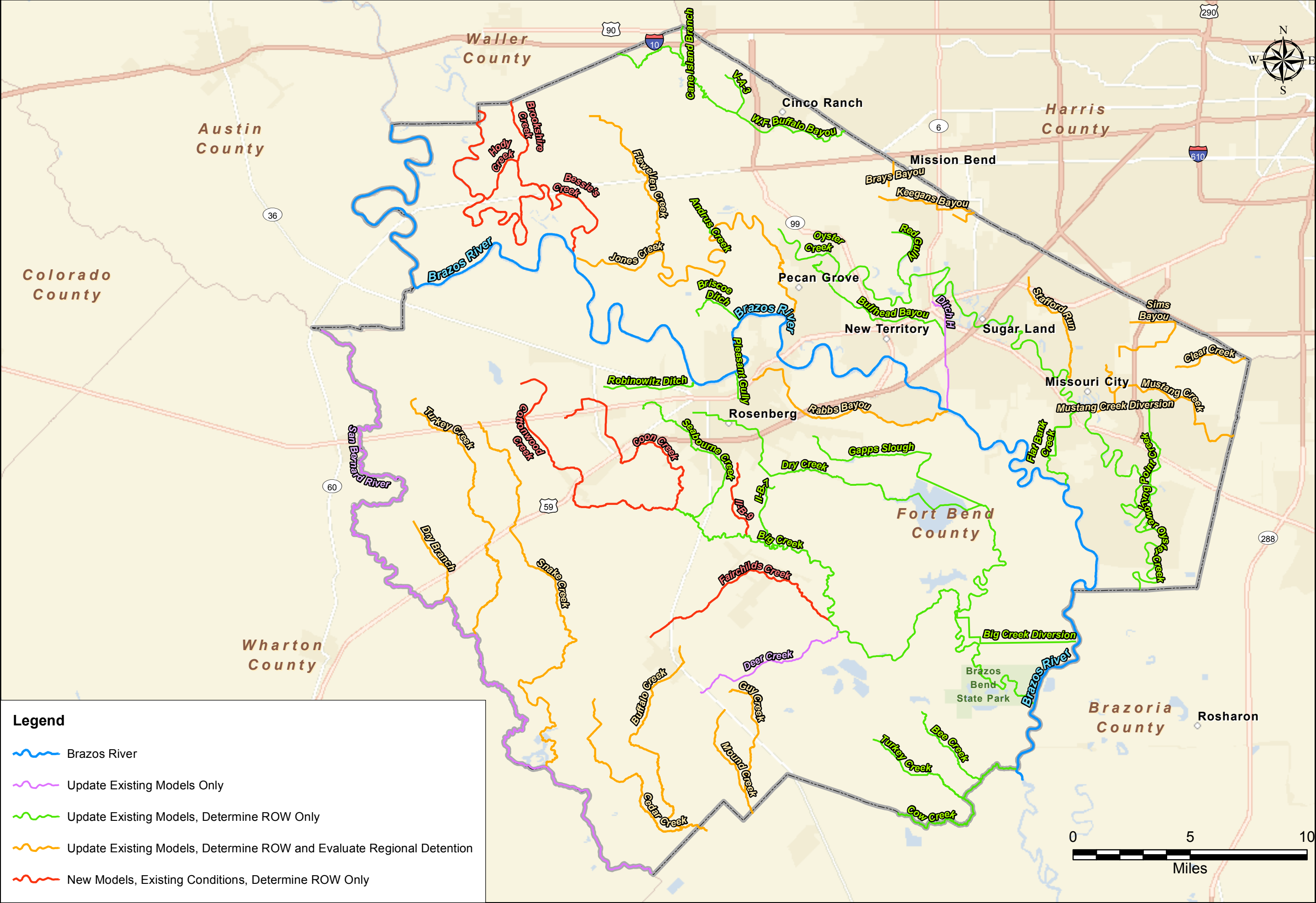
- 4.6.1. A workshop will be held with FBCDD to evaluate different variables to be incorporated into the ranking criteria. FNI will document the process followed to develop the ranking criteria.
- 4.6.2. Using the results of the hydraulic models previously developed, available parcel data, and other available information, populate the values for each criteria and prioritize all the alternatives developed in task 4.3.
- 4.6.3. FNI will meet with FBCDD to present the project rankings.
- 4.6.4. Deliverable includes a separate report documenting the analysis, supporting documentation for each project, and a table with the ranked projects.

Fort Bend County Drainage District Fort Bend County Watershed Study 9/14/2018 Detailed Cost Breakdown	Project Fee Summary	
	Basic Services	3,138,285
	Special Services	-
	Total Project	3,138,285

Basic Services					
Phase	Task	Tasks ↓	Total Labor Effort	Total Effort	
1		Project Management	\$ -	\$ -	\$ 298,293
1	1.1	PM and admin	\$ 139,024	\$ 139,024	
1	1.2	Kickoff Meeting	\$ 10,466	\$ 10,466	
1	1.3	Bi-Monthly PM meetings (1 every other month)	\$ 88,952	\$ 88,952	
1	1.4	Meetings with stakeholders (5)	\$ 59,851	\$ 59,851	
			\$ -	\$ -	
2		Drainage Criteria Manual	\$ -	\$ -	\$ 465,136
2	2.1	Data Collection and review	\$ 57,962	\$ 57,962	
2	2.2	Update Policies	\$ 77,959	\$ 77,959	
2	2.3	Analysis	\$ 158,479	\$ 158,479	
2	2.4	Documentation and implementation	\$ 170,736	\$ 170,736	
			\$ -	\$ -	
3		Brazos River Floodplain Master Plan	\$ -	\$ -	\$ 963,228
3	3.1	Data Collection and review	\$ 28,096	\$ 28,096	
3	3.2	Update hydrologic model	\$ 63,464	\$ 63,464	
3	3.3	2D hydraulic Model	\$ 176,304	\$ 176,304	
3	3.4	2D calibration	\$ 167,496	\$ 167,496	
3	3.5	1D calibration	\$ 342,450	\$ 342,450	
3	3.6	USGS streamflow gage at Richmond	\$ 98,718	\$ 98,718	
3	3.7	Evaluation of conveyance within Brazos River Floodplain	\$ 78,894	\$ 78,894	
3	3.8	Coordination with NWS, 2 meetings	\$ 7,806	\$ 7,806	
			\$ -	\$ -	
4		Master Drainage Plans	\$ -	\$ -	\$ 1,411,628
4	4.1	Oyster Creek (U,M,L) B.S. R.G. H, Flat	\$ 143,713	\$ 143,713	
4	4.2	Bessie's Creek, Brookshire, Hody	\$ 125,468	\$ 125,468	
4	4.3	Big Creek and Diversion Channel to Brazos	\$ 116,187	\$ 116,187	
4	4.4	Dutch John	\$ 19,345	\$ 19,345	
4	4.5	Dry Creek	\$ 61,913	\$ 61,913	
4	4.6	Cottonwood Creek	\$ 32,925	\$ 32,925	
4	4.7	Gapps	\$ 19,024	\$ 19,024	
4	4.8	Coon Creek	\$ 32,946	\$ 32,946	
4	4.9	Seabourne	\$ 20,609	\$ 20,609	
4	4.10	Deer Creek	\$ 17,704	\$ 17,704	
4	4.11	Lateral II-B-7	\$ 12,833	\$ 12,833	
4	4.12	Lateral II-B-9	\$ 13,229	\$ 13,229	
4	4.13	Fairchilds Creek	\$ 30,688	\$ 30,688	
4	4.14	Willow Fork	\$ 27,681	\$ 27,681	
4	4.15	Cane Island	\$ 9,325	\$ 9,325	
4	4.16	Stream - V-A-3	\$ 17,653	\$ 17,653	
4	4.17	Cedar Creek	\$ 41,936	\$ 41,936	
4	4.18	Buffalo Creek	\$ 42,058	\$ 42,058	
4	4.19	San Bernard River	\$ 29,006	\$ 29,006	
4	4.20	Snake Creek	\$ 44,674	\$ 44,674	
4	4.21	Turkey Creek	\$ 43,234	\$ 43,234	
4	4.22	Dry Branch - Kendleton	\$ 28,970	\$ 28,970	
4	4.23	Mound Creek	\$ 28,300	\$ 28,300	
4	4.24	Guy Creek	\$ 28,300	\$ 28,300	
4	4.25	Bee Creek	\$ 24,940	\$ 24,940	
4	4.26	Turkey Creek	\$ 24,940	\$ 24,940	
4	4.27	Cow Creek	\$ 37,786	\$ 37,786	
4	4.28	Jones Creek, Andrus, Flewellen	\$ 36,058	\$ 36,058	
4	4.29	Stafford Run	\$ 21,729	\$ 21,729	
4	4.30	Rabbs Bayou	\$ 23,064	\$ 23,064	
4	4.31	Robinowitz Ditch	\$ 16,401	\$ 16,401	
4	4.32	Pleasant Gully	\$ 12,327	\$ 12,327	
4	4.33	Briscoe Ditch	\$ 11,787	\$ 11,787	
4	4.34	Long Point Creek	\$ 11,995	\$ 11,995	
4	4.35	Sims Bayou	\$ 14,797	\$ 14,797	
4	4.36	Brays Bayou	\$ 10,267	\$ 10,267	
4	4.37	Keegans Bayou	\$ 17,321	\$ 17,321	
4	4.38	Clear Creek	\$ 17,381	\$ 17,381	
4	4.39	Mustang Bayou and Diversion Channel	\$ 35,770	\$ 35,770	
4	4.40	Prioritization of improvements	\$ 107,344	\$ 107,344	
Total Basic Services Labor Effort			\$ 3,138,285	\$ 3,138,285	

Table 1. Streams to be studied as part of Phase 4

Watershed	Stream Name	Code	Tasks to be completed for each stream								
			Model Availability		4.2. Existing Conditions Analysis					4.3 Alternatives for Existing Development	
			Existing Models	New Models	Update Rainfall	Update Hydrology	Update to unsteady Flow	Inundation maps	Flood Profiles	Determine ROW	Evaluate Regional Detention
Oyster Creek	Upper Oyster	II-K	X		X	X	X	X	X	X	
	Middle Oyster	II-K	X		X	X		X	X	X	
	Lower Oyster	III	X		X	X	X	X	X	X	
	Flat Bank Creek	II-K	X		X	X		X	X	X	
	Red Gulley	II-K-9	X		X	X	X	X	X	X	
	Ditch H	II-H	X		X	X		X	X		
Bessies Creek	Bullhead Slough	II-L	X		X	X		X	X	X	
	Bessie's Creek	II-F		X	X	X		X	X	X	
	Brookshire Creek	II-F-1		X	X	X		X	X	X	
Big Creek	Hody Creek	II-F-2		X	X	X		X	X	X	
	Big Creek	II-B	X		X	X	X	X	X	X	
	Diversion Channel		X		X	X	X	X	X	X	
	Dutch John	II-B-1	X		X	X	X	X	X	X	
	Dry Creek	II-B-2	X		X	X		X	X	X	
	Cottonwood Creek	II-B-24		X	X	X		X	X	X	
	Gapps Slough	II-B-2-A	X		X	X	X	X	X	X	
	Coon Creek	II-B-3		X	X	X		X	X	X	
	Seabourne Creek	II-B-4	X		X	X	X	X	X	X	
	Deer Creek	II-B-5	X		X	X	X	X	X		
Willow Fork	Lateral II-B-7	II-B-7	X		X	X	X	X	X	X	
	Lateral II-B-9	II-B-9		X	X	X		X	X	X	
	Fairchilds Creek	II-B-10		X	X	X		X	X	X	
	Willow Fork	V-A	X		X	X	X	X	X	X	
San Bernard River	Cane Island	V-A-7	X		X	X	X	X	X	X	
	V-A-3	V-A-3	X		X	X	X	X	X	X	
	Cedar Creek	I-B	X		X	X	X	X	X	X	X
	Buffalo Creek	I-B-3	X		X	X	X	X	X	X	X
	San Bernard River	I	X		X	X	X	X	X		
	Snake Creek	I-C	X		X	X	X	X	X	X	X
	Turkey Creek	I-D	X		X	X	X	X	X	X	X
	Dry Branch - Kendleton	I-E	X		X	X	X	X	X	X	X
Cow Creek	Mound Creek	I-A	X		X	X	X	X	X	X	X
	Guy Creek	I-A-1	X		X	X	X	X	X	X	X
	Cow Creek	II-A	X		X	X	X	X	X	X	
Jones	Bee Creek	II-A-1	X		X	X	X	X	X	X	
	Turkey Creek	II-A-2	X		X	X	X	X	X	X	
	Jones Creek	II-E	X		X	X		X	X	X	X
Various	Andrus Creek	II-E-5	X		X	X		X	X	X	
	Flewellen Creek	II-E-10	X		X	X		X	X	X	X
	Stafford Run	II-K-1	X		X	X	X	X	X	X	X
	Rabbs Bayou	II-D	X		X	X	X	X	X	X	X
	Robinowitz Ditch	II-M	X		X	X	X	X	X	X	
	Pleasant Gulley	N/A	X		X	X	X	X	X	X	
	Briscoe Ditch	II-GG	X		X	X	X	X	X	X	
	Long Point Creek	III-B	X		X	X	X	X	X	X	
	Sims Bayou	VIII-B, VIII-B-1	X		X	X	X	X	X	X	X
	Brays Bayou	IX	X		X	X	X	X	X	X	X
	Keegans Bayou	VII, VII-A	X		X	X	X	X	X	X	X
	Clear Creek	VI	X		X	X	X	X	X	X	X
	Mustang Creek	IV	X		X	X		X	X	X	X
	Mustang Creek Diversion	IV-D	X		X	X		X	X	X	X



Legend

Brazos River

Update Existing Models Only

Update Existing Models, Determine ROW Only

Update Existing Models, Determine ROW and Evaluate Regional Detention

New Models, Existing Conditions, Determine ROW Only

Fort Bend County		Fort Bend County Watershed Study
		EXHIBIT 1
FRESE AND NICHOLS, INC. 10437 TOWN AND COUNTRY WAY, SUITE 600 HOUSTON, TEXAS 77024 P: (713) 600-6800 F: (713) 600-6801		
PROJECT NO.	DATE CREATED	DATE CREATED
901000	06/2018	06/2018
DRAINAGE & COORDINATE SYSTEM		FILE NAME
NAD83 State Plane (feet) Texas South Central		waterhedworkmap
PREPARED BY		DRAWN BY

CERTIFICATE OF INTERESTED PARTIES

FORM 1295

1 of 1

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

**OFFICE USE ONLY
CERTIFICATION OF FILING****1 Name of business entity filing form, and the city, state and country of the business entity's place of business.**

Freese and Nichols, Inc.
Fort Worth, TX United States

Certificate Number:
2018-349288

Date Filed:
05/07/2018

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

Fort Bend County

Date Acknowledged:
10/02/2018

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

RFQ 18-071
Watershed Study for the Fort Bend County

4	Name of Interested Party	City, State, Country (place of business)	Nature of interest (check applicable)	
			Controlling	Intermediary
	Coltharp, Brian	Fort Worth, TX United States	X	
	Pence, Robert	Fort Worth, TX United States	X	
	Gooch, Tom	Fort Worth, TX United States	X	
	Milrany, Cindy	Fort Worth, TX United States	X	
	Nichols, Mike	Fort Worth, TX United States	X	
	New, John	San Antonio, TX United States	X	
	Cole, Scott	Fort Worth, TX United States	X	
	Hatley, Tricia	Oklahoma City, OK United States	X	
	Taylor, Jeff	Houston, TX United States	X	

5 Check only if there is NO Interested Party.☐**6 UNSWORN DECLARATION**

My name is _____, and my date of birth is _____.

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

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

Executed in _____ County, State of _____, on the _____ day of _____, 20____.
(month) (year)

Signature of authorized agent of contracting business entity
(Declarant)