

STATE OF TEXAS §
 §
 COUNTY OF FORT BEND §

**AMENDMENT TO AGREEMENT FOR
 PROFESSIONAL ENGINEERING SERVICES**

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

THAT, WHEREAS, the parties executed and accepted that certain Agreement for Professional Engineering Services on August 9, 2011 (hereinafter the "Agreement"), attached hereto as Exhibit "A" and incorporated by reference; and

WHEREAS, the parties desire to amend the Agreement to include additional professional engineering services.

NOW, THEREFORE, the parties do mutually agree as follows:

1. Contractor shall provide the additional professional engineering services described in the attached Exhibit B for a total additional cost of thirty-eight thousand eight hundred and twenty-four dollars and no/100 (\$38,824.00).
2. Prior to the execution of this Amendment, Contractor has been advised by County, and Contractor clearly understands and agrees, such understanding and agreement being of the absolute essence to this Amendment, that County shall have available the total maximum sum of thirty-eight thousand eight hundred and twenty-four dollars and no/100 (\$38,824.00), including reimbursable expenses, if any, specifically allocated to fully discharge any and all liabilities which may be incurred by County hereunder. Contractor does further understand and agree, said understanding and agreement also being of the absolute essence of this Amendment, that the total maximum compensation that Contractor may become entitled to hereunder and the total maximum sum that County shall become liable to pay to Contractor hereunder shall not under any conditions, circumstances or interpretations thereof exceed the sum of thirty-eight thousand eight hundred and twenty-four dollars and no/100 (\$38,824.00) for the additional professional engineering services described in the attached Exhibit B.

Except as provided herein, all terms and conditions of the Agreement shall remain unchanged.

FORT BEND COUNTY

Robert E. Hebert

Robert E. Hebert, County Judge

4-24-2012

FREESE & NICHOLS, INC.

Jeff Taylor

Authorized Agent- Signature

Jeff Taylor

Authorized Agent- Printed Name

Vice President

Title

4/5/12

Date

ATTEST:

Dianne Wilson

Dianne Wilson, County Clerk

AUDITOR'S CERTIFICATE

I hereby certify that funds in the amount of \$370,500.00 are available to pay the obligation of Fort Bend County within the foregoing Agreement.

Robert Ed Sturdivant

Robert Ed Sturdivant, County Auditor

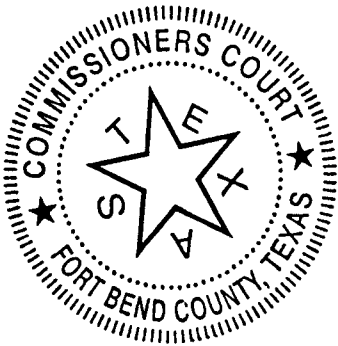


EXHIBIT A

STATE OF TEXAS
COUNTY OF FORT BEND

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§

KNOW ALL MEN BY THESE PRESENTS:

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES

THIS AGREEMENT is made and entered into by and between Fort Bend County Drainage District, a body corporate and politic under the laws of the State of Texas, hereinafter referred to as "District," and FREESE & NICHOLS, INC., hereinafter referred to as "Contractor," authorized to conduct business in the State of Texas.

WITNESSETH:

WHEREAS, District desires that Contractor provide professional engineering services for repair of the Big Creek Bypass Structure located in Fort Bend County, Texas, hereinafter referred to as the "Project;" and

WHEREAS, Contractor represents that it is qualified and desires to perform such services; and

WHEREAS, District has determined that this Agreement is for personal or professional services and therefore exempt from competitive bidding under Chapter 262, LOCAL GOVERNMENT CODE; and

NOW, THEREFORE, District and Contractor, in consideration of the mutual covenants and agreements herein contained, do mutually agree as follows:

SECTION I
SCOPE OF AGREEMENT

- 1.01 Contractor shall provide the services described in Exhibit A, Contractor's Proposal, attached hereto and incorporated by reference as if set forth herein verbatim for all purposes.
- 1.02 Contractor agrees to complete the services called for in Exhibit A within 360 days from the date of Notice to Proceed.

SECTION II
CONTRACTOR'S COMPENSATION

- 2.01 For and in consideration of the services rendered by the Contractor, and subject to the limit of appropriation under Section VI, District shall pay to Contractor an amount not to exceed \$370,500.00, including reimbursable expenses, if any.
- 2.02 Contractor shall submit invoices to District and District shall pay each invoice within thirty (30) days after the District Project Manager's written approval provided however, that the approval or payment of any invoice shall not be considered to be conclusive evidence of performance by Contractor to the point indicated by such invoice or of receipt or acceptance by District of the services covered by such invoice.
- 2.03 Contractor's rates shall not exceed those as provided in Exhibit A.

- 2.04 Reimbursable expenses shall be reimbursed to Contractor at-cost upon submission of properly submitted expense records to District. Service charges are not applicable and not subject to reimbursement.

SECTION III TERMINATION

- 3.01 District may terminate this Agreement at any time by providing ten (10) days written notice to Contractor.
- 3.02 Upon receipt of such notice, Contractor shall discontinue all services in connection with the performance of this Agreement and shall proceed to cancel promptly all existing orders and contracts insofar as such orders or contracts are chargeable to this Agreement.
- 3.03 Within thirty (30) days after receipt of notice of termination, Contractor shall submit a statement, showing in detail the services performed under this Agreement to the date of termination.
- 3.04 District shall then pay Contractor that proportion of the prescribed charges which the services actually performed under this Agreement bear to the total services called for under this Agreement, less such payments on account of charges as have been previously made.
- 3.05 Copies of all completed or partially completed designs, drawings, electronic data files and specifications prepared under this Agreement shall be delivered to District when and if this Agreement is terminated in the manner and for the purposes provided in this Agreement.

SECTION IV INSURANCE

- 4.01 During the period of this Agreement, Contractor shall maintain, at its expense, insurance with limits no less than those prescribed below with a carrier having a rating with A.M. Best & Co of A-VII or better:
- A. General Liability (including Contractual Liability):
 - Bodily Injury and Property Damage \$1,000,000.00
 - Aggregate \$2,000,000.00
 - B. Automobile Liability:
 - Bodily Injury and Property Damage \$1,000,000.00
 - Limit per Occurrence
 - C. Worker's Compensations Statutory \$1,000,000.00
Limit Employer's Liability
 - D. Professional Liability insurance with limits not less than \$1,000,000 each claim/annual aggregate.
- 4.02 With respect to the required insurances listed in Section 4.01, Contractor shall, if allowed by law and the insurance carrier:
- A. Name Fort Bend County as additional insured as their interests may appear, with the exception of worker's compensation insurance and professional liability insurance;

- B. Provide County a waiver of subrogation regarding Contractor's worker's compensation insurance;
 - C. Provide County with a thirty (30) day advance written notice of cancellation or material change to said insurance; and,
 - D. Provide County with Certificates of Insurance evidencing required coverages upon acceptance of this Agreement by Commissioners Court.
- 4.03 The policies specified in Section 4.01 shall name Fort Bend County as an additional insured. Furthermore, the Workers' Compensation and Liability Insurance carriers shall grant a waiver of subrogation in Fort Bend County's favor.
- 4.04 If required coverage is written on a claims-made basis, Contractor warrants that any retroactive date applicable to coverage under the policy precedes the effective date of this Agreement 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 the work under this Agreement is completed.
- 4.04 Contractor shall not commence any portion of the work under this Agreement until it has obtained the insurance required herein and certificates of such insurance have been filed with and approved by Fort Bend County.
- 4.05 Approval of the insurance by County shall not relieve or decrease the liability of the Contractor.

**SECTION V
NOTICE**

- 5.01 Any notice required to be given under the provisions of this Agreement shall be in writing and shall be duly served when it shall have been deposited, enclosed in a wrapper with the proper postage prepaid thereon, and duly registered or certified, return receipt requested, in a United States Post Office, addressed to District or Contractor at the addresses set forth below.
- 5.02 If mailed, any notice or communication shall be deemed to be received three days after the date of deposit in the United States Mail.
- 5.03 Unless otherwise provided in this Agreement, all notices shall be delivered to the following addresses:

- A. If to Contractor:
Project Manager:

Freese & Nichols, Inc.
Cody Cockroft
3100 Wilcrest Drive
Suite 200
Houston, Texas 77042

- B. If to District notice must be sent to both District's Purchasing Agent and District Project Manager:

Fort Bend County Purchasing Department
Gilbert D. Jalomo, Jr., CPPB
4520 Reading Road, Suite A

Rosenberg, Texas 77471

Mark Vogler, PE
Fort Bend County Drainage District
P.O. Box 1028
Rosenberg, Texas 77471

- 5.04 Either party may designate a different address by giving the other party ten (10) days written notice.

SECTION VI LIMIT OF APPROPRIATION

- 6.01 Prior to the execution of this Agreement, Contractor has been advised by District, and Contractor clearly understands and agrees, such understanding and agreement being of the absolute essence to this contract, that District shall have available the total maximum sum of \$370,500.00, specifically allocated to fully discharge any and all liabilities which may be incurred by District.
- 6.02 Contractor does further understand and agree, said understanding and agreement also being of the absolute essence of this contract, that the total maximum compensation that Contractor may become entitled to hereunder and the total maximum sum that District shall become liable to pay to Contractor hereunder shall not under any conditions, circumstances or interpretations thereof exceed the sum of \$370,500.00.

SECTION VII SUCCESSORS AND ASSIGNS

- 7.01 District and Contractor bind themselves and their successors, executors, administrators and assigns to the other party of this Agreement and to the successors, executors, administrators and assigns of such other party, in respect to all covenants of this Agreement.
- 7.02 Neither District nor Contractor shall assign, sublet or transfer its or his interest in this Agreement without the prior written consent of the other.
- 7.03 Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public and/or governmental body that may be a party hereto.

SECTION VIII PUBLIC CONTACT

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

SECTION IX COMPLIANCE AND STANDARDS

Contractor shall render the services hereunder in accordance with generally accepted standards of Contractors practicing in Fort Bend County, Texas applicable thereto and shall use that

customary degree of care and skill commensurate with the profession similar to the Project to comply with all applicable state, federal, and local laws, ordinances, rules and regulations relating to the services to be rendered hereunder, and Contractor's performance.

SECTION X OWNERSHIP OF DOCUMENTS

- 10.01 District shall be the absolute and unqualified owner of all drawings, preliminary layouts, record drawings, sketches and other documents prepared pursuant to this Agreement by the Contractor and his Contractors (deliverables).
- 10.02 No reuse fees or royalty payments will be paid to the Contractor in connection with future reuse or adaptation of designs derived under this contract.
- 10.03 Copies of all complete or partially completed mylar reproducible, preliminary layouts, record drawings, digital files, sketches and other documents prepared pursuant to this Agreement shall be delivered to District when and if this Agreement is terminated or upon completion of this Agreement, whichever occurs first, as provided in this Agreement.
- 10.04 Contractor is expressly prohibited from selling, licensing or otherwise marketing or donating such documents, or using such documents in the preparation of other work for any other client, or from duplicating the appearance of the Project depicted in the deliverables for any without the prior express written permission of District.
- 10.05 The documents referenced in this Section are not intended or presented by the Contractor to be suitable for reuse by District or others on extensions of this Project or on other unrelated projects.
- 10.06 Any adaptation or use by District of such documents on extension of this Project or other unrelated projects shall be at District's sole risk.

SECTION XI INDEMNIFICATION

- 11.01 CONTRACTOR SHALL SAVE HARMLESS DISTRICT FROM AND AGAINST ALL CLAIMS, LIABILITY, AND EXPENSES, INCLUDING REASONABLE ATTORNEYS FEES, BUT ONLY TO THE EXTENT OR DEGREE ON A COMPARATIVE BASIS OF FAULT ARISING FROM ACTIVITIES OF THE CONTRACTOR, ITS AGENTS, CONTRACTORS OR EMPLOYEES, PERFORMED UNDER THIS AGREEMENT THAT RESULT FROM THE NEGLIGENT ACT, ERROR, OR OMISSION OF CONTRACTOR OR ANY OF CONTRACTOR'S AGENTS, SERVANTS OR EMPLOYEES.
- 11.02 CONTRACTOR SHALL ALSO SAVE HARMLESS DISTRICT FROM AND AGAINST ANY AND ALL EXPENSES, INCLUDING REASONABLE ATTORNEY'S FEES WHICH MIGHT BE INCURRED BY DISTRICT, IN LITIGATION OR OTHERWISE RESISTING SAID CLAIMS OR LIABILITIES THAT MIGHT BE IMPOSED ON DISTRICT AS THE RESULT OF SUCH NEGLIGENT ACTIVITIES BY THE CONTRACTOR, ITS AGENTS, CONTRACTORS OR EMPLOYEES.

**SECTION XII
MODIFICATIONS**

This instrument contains the entire Agreement between the parties relating to the rights herein granted and obligations herein assumed. Any oral or written representations or modifications concerning this instrument shall be of no force and effect excepting a subsequent written modification signed by both parties hereto.

**SECTION XIII
MISCELLANEOUS**

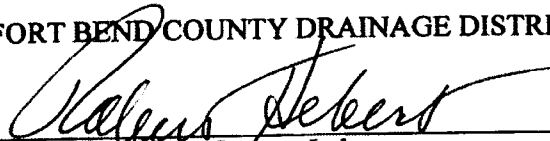
- 13.01 By entering into this Agreement, the parties do not intend to create any obligations, express or implied, other than those specifically set out in this Agreement.
- 13.02 Nothing in this Agreement shall create any rights or obligations in any party who is not a signatory to this Agreement.
- 13.03 Contractor agrees and understands that: by law, the Fort Bend County Attorney's Office may only advise or approve contracts or legal documents on behalf of its clients; the Fort Bend County Attorney's Office may not advise or approve a contract or other legal document on behalf of any other party not its client; the Fort Bend County Attorney's Office has reviewed this document solely from the legal perspective of its client; the approval of this document by the Fort Bend County Attorneys Office was offered solely to benefit its client; Contractor and other parties should not rely on this approval and should seek review and approval by their own respective legal counsel.
- 13.04 If there is a conflict between this Agreement and Exhibit A, the provisions of this Agreement shall prevail.

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SECTION XIV
EXECUTION

This Agreement shall become effective upon execution by District.

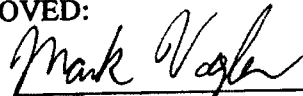
FORT BEND COUNTY DRAINAGE DISTRICT:



Robert E. Hebert, County Judge

August 9, 2011
Date


APPROVED:

By: 

Mark Vogler, PE
Fort Bend County Drainage District

7/29/11
Date

CONTRACTOR: FREESE & NICHOLS, INC.




Signature
Printed Name: Michael V. Reedy
Title: Vice President

7/29/11
Date

PJS:Freese & Nichols.Big Creek.PSA.Phase III.Drainage District.3523

AUDITOR'S CERTIFICATE

I hereby certify that funds are available in the amount of \$370,500.00 to accomplish and pay the obligation of the District under this contract.



Ed Sturdivant, Fort Bend County Auditor

Exhibit A: Contractor Proposal

Exhibit A

SCOPE OF SERVICES AND RESPONSIBILITIES OF OWNER

The scope of services which follows is focused on Phase III of a possibly multi-phased project meant to assist the Fort Bend County Drainage District in safeguarding the structure against additional movement that could negatively affect the structural, hydraulic, and operational effectiveness of the structure.

In the event that the District requests additional services, FNI will provide a scope and fee for professional services to accommodate the District's needs. These services (Phase IV) would include construction representation, construction inspections, and construction management.

The following services are exclusive to Phase III.

ARTICLE I

BASIC SERVICES: FNI shall render the following professional services in connection with the development of the Project:

Task 1: Project Management

Establish and manage the project schedule and budget and coordinate information between FNI and the Fort Bend County Drainage District. Coordinate Quality Control (QC) and Quality Assurance (QA) by Senior Management and Technical Staff consistent with FNI's established internal quality review processes. Coordinate conference calls and meetings for internal and external use. Provide Fort Bend County Drainage District monthly reports pertaining to the progress of the project. This will generally include scheduled milestones, project updates, action items, etc. Participate and manage FNI submittals to the Fort Bend County Drainage District and the District's comments and responses to the submittals to the FNI design team. Manage any and all subconsultants.

Task 2: Meetings and Site Visits

The following meetings are scheduled for this project:

- Meetings
 - FNI and the Fort Bend County Drainage District will meet in order to conduct a Project Kickoff Meeting.
 - FNI will meet and consult with a dewatering consultant soon after the Notice to Proceed. A subsequent meeting will be held with FNI, Fort Bend County Drainage District, and the dewatering consultant.
 - FNI will meet with the Fort Bend County Drainage District subsequent to the submittal of the 60%, 95%, and Final deliverables. The Final deliverable will consist of the bid drawings and specifications.
- Site Visits
 - FNI plans to participate in no more than 4 site visits during the course of the design with primary focus on how the proposed design elements may affect existing conditions. This would include site visits associated with the needs of FNI's subconsultants.
 - FNI plans to attend up to two pre-bid site visit during bid phase services.

Task 3: Sub-consultants

FNI plans to utilize the following sub-consultants during the design of the project:

- Griffin. Based on the complexities anticipated with the rehabilitation of the structure, FNI plans on consulting with Griffin during the design process in order to maximize the effectiveness of our approach. Additionally, FNI feels that Griffin can be a resource to the Fort Bend County Drainage District during this design process and intends to conduct a meeting between FNI, Fort Bend County Drainage District, and Griffin. FNI and Griffin will discuss various dewatering technologies and approaches that can be used at the project site during construction. Furthermore, discussion will include design feature approaches and how these approaches may be impacted by the groundwater.
- Helical Subconsultant. FNI will consult with RamJack in order to specify and recommend the proper helical system for the stilling basin slab. This will include the proper size of helical anchor, the spacing, depths for installment and connections to the slab.
- Surveyor. At the present time, FNI does not anticipate that additional surveying will be necessary. If additional surveying is necessary, FNI anticipates that this can be conducted by Fort Bend County staff.
- Geotechnical. At the present time, FNI does not anticipate that additional subsurface exploration or laboratory analyses will be necessary.

Task 4: Hydraulic Analysis:

This will include:

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Page 10 of 19

FNI 
OWNER _____

FNI will provide for a hydraulic analysis of the finished drop structure to assess the structure's hydraulic performance over a range of flow conditions (storm events) and Brazos River conditions. Modeling will tentatively include the following:

- Application of the unsteady flow programming in HEC-RAS.
- Application of up to 5 inflow storm events into the Big Creek Drop Structure (low, intermediate, and high peak events; rapid peak versus extended peak events, etc.).
- A range of boundary conditions based on Brazos River water elevations (low, medium, and high initial tailwater elevations; various Brazos River levels over the course of the storm, etc.)
- Existing and eroded downstream channel geometries.

FNI will coordinate with the Fort Bend County Drainage District during design to determine the most likely storm conditions that may safely pass through the structure. FNI will present the Fort Bend County Drainage District with the electronic files and develop a memorandum that discloses modeling assumptions and summarizes FNI's analysis of the modeling efforts.

Task 5: Preparation of Construction Drawings and Specifications

FNI will develop construction drawings and specification for the rehabilitation of the Big Creek Drop Inlet Structure which will be structured from the concept drawings contained within the Preliminary Engineering Report submitted to the Fort Bend County Drainage District on July 15, 2011 (Phase II).

This will include:

- **General Civil Sheets, Grading, and Demolition sheets**
 - Develop the surveying information provided by the Fort bend County Drainage District into a base file map which will be used in the design of the project.
 - Develop general notes, general plan, profiles, grading plans, drainage features, and cross sections for new geometry of structure.
 - Develop demolition sheets, notes, and details as necessary to instruct the contractor on the limits of the demolition which will be necessary to construct the rehabilitation design.
- **Dewatering**
 - Although dewatering of the project during construction is the responsibility of the contractor, FNI will utilize a subconsultant to assist us with considerations and methodologies to enhance construction sequencing and optimization.
- **Stilling Basin**
 - Training walls designed to an approximate finished elevation of 33-ft.
 - Blanket underdrain system which will be designed under the stilling basin (to an approximate elevation of 9-ft) and will be connected to the groundwater and seepage control system which will be located outside of the training walls (between the side slopes and outside face of the training walls). To be located on the downstream face of the training walls, FNI will provide sections and details for the installation of flap valves which will be used to drain the groundwater captured by the drainage system. These valves will remain in the closed position during high Brazos River backwater events.
 - New geometric profile for the stilling basin. This will also include the sections and details associated with the various energy dissipation structures located within the stilling basin.
 - Mechanical anchoring system (helical piles) which will further stabilize the slab from floating. These anchors may need to be utilized to help support the training walls.

- Handrails will be located along the inside peripheral of the stilling basin.
- **Headwall and Conduits**
 - Design additional cement stabilized sand, or equal, around the last two or three segments of each of the six 8-ft x 8-ft concrete culverts.
 - Provide additional reinforcement details and vertical extension to existing headwall to further stabilize it. Prepare details to seal the open joint currently existing along the upstream face of the headwall.
 - Provide details to rehabilitate, coat, or patch the existing joints associated with the six 8-ft x 8-ft concrete culverts.
- **Erosion control features downstream of the spillway**
 - Design improved erosion control features (engineered rock riprap) immediately downstream of the stilling basin to provide for a transitional zone between the stilling basin and the earthen channel leading to the Brazos River.
- **Slope protection and new operating platform above the flap gates**
 - Design a new concrete slope protection system on the downstream side of the berm and groin areas of the structure (concrete slope protection will terminate at the location of the existing sheet pile). The new slope protection will be mechanically tied to the training walls and new headwall extension. The slope protection will transition into the existing slope protection at approximately elevation 33-ft. Drainage features (piping and filter drains) will be incorporated in the design.
 - Design new reinforced concrete pedestal system to be used to support new gate operating structures (one platform for each flap gate).
 - Design new galvanized steel or stainless steel gate operating structures. It is assumed that these operators will be manually operated and FNI will provide the details which will be constructed so that the operators can manually fasten the gates in the open position during times of normal Brazos River flows.

Task 6: Bid Phase Services

Upon completion of the design services and approval of "Final" drawings and specifications by OWNER, FNI will proceed with the performance of services in this phase as follows:

1. Assist the Fort Bend County Drainage District in securing bids. Issue a Notice to Bidders to prospective contractors and vendors listed in FNI's database of prospective bidders, and to selected plan rooms. Provide a copy of the notice to bidders for the Fort Bend County Drainage District to use in notifying construction news publications and publishing appropriate legal notice. The cost for publications shall be paid by the Fort Bend County Drainage District.
2. Print 10 copies of Bid Documents and distribute to selected plan rooms. Utilize CivCAST as the primary tool to be used to provide bid documents to potential bidders. CivCAST will be the primary tool used to respond to RFI's, addendums, etc.
3. Maintain information on entities that have been issue a set of bid documents. Distribute information on plan holders to interested contractors and vendors on request.
4. Assist the Fort Bend County Drainage District by responding to questions and interpreting bid documents. Prepare and issue addenda to the bid documents to plan holders if necessary.
5. At the Fort Bend County Drainage District request, FNI will assist the Fort Bend County Drainage District in the opening, tabulating, and analyzing the bids received. Review the qualification information

provided by the apparent low bidder to determine if, based on the information available, they appear to be qualified to construct the project. Recommend award of contracts or other actions as appropriate to be taken by the Fort Bend County Drainage District. Pre-qualification of all prospective bidders and issuing a list of eligible bidders prior to the bid opening is an additional service.

6. Assist the Fort Bend County Drainage District in conducting a pre-bid conference for the construction projects and coordinate responses with the Fort Bend County Drainage District. Response to the pre-bid conference will be in the form of addenda issued after the conference. Attend the tour of the project site after the pre-bid conference.
7. Assist the Fort Bend County Drainage District in the preparation of Construction Contract Documents for construction contracts. Provide ten (10) sets of Construction Contract Documents which include information from the apparent low bidders bid documents, legal documents, and addenda bound in the documents for execution by the Fort Bend County Drainage District and construction contractor. Distribute five (5) copies of these documents to the contractor with a notice of award that includes directions for the execution of these documents by the construction contractor. Provide the Fort Bend County Drainage District with the remaining five (5) copies of these documents for use during construction. Additional sets of documents can be provided as an additional service.
8. Furnish contractor copies of the drawings and specifications for construction pursuant to the General Conditions of the Construction Contract.

Task 7: Constructability Review and Quality Control

Senior discipline leaders will review the design during each of the submittal phases of the project. This will include a constructability review by FNI's Construction Services department.

Task 8: Construction Phase Services

Not included in this scope; however, based on Fort Bend County Drainage District's review of the construction drawings, specifications, opinion of probable construction cost, and desired course of action, FNI will move forward with scoping out the professional services associated with the construction representation, inspection, and management for the improvements to the Big Creek Drop Inlet Structure.

ARTICLE II

ADDITIONAL SERVICES: Additional Services to be performed by FNI, if authorized by OWNER, which are not included in the above described basic services, are described as follows:

- A. Field surveying required for the preparation of designs and drawings.
- B. Field layouts or the furnishing of construction line and grade surveys.
- C. GIS mapping services or assistance with these services.
- D. Making property, boundary and right-of-way surveys, preparation of easement and deed descriptions, including title search and examination of deed records.
- E. Making revisions to drawings, specifications or other documents when such revisions are 1) not consistent with approvals or instructions previously given by the Fort Bend County Drainage District or 2) due to other causes not solely within the control of FNI.
- F. Investigations involving consideration of operation, maintenance and overhead expenses, and the preparation of rate schedules, earnings and expense statements, feasibility studies, appraisals, evaluations, assessment schedules, and material audits or inventories required for certification of force account construction performed by the Fort Bend County Drainage District.
- G. Preparing applications and supporting documents for government grants, loans, or planning advances and providing data for detailed applications.
- H. Preparing data and reports for assistance to the Fort Bend County Drainage District in preparation for hearings before regulatory agencies, courts, arbitration panels or any mediator, giving testimony, personally or by deposition, and preparations therefore before any regulatory agency, court, arbitration panel or mediator.
- I. Assisting the Fort Bend County Drainage District in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this AGREEMENT. Such services, if any, shall be furnished by FNI on a fee basis negotiated by the respective parties outside of and in addition to this AGREEMENT.
- J. Providing environmental support services including the design and implementation of ecological baseline studies, environmental monitoring, impact assessment and analyses, permitting assistance, and other assistance required to address environmental issues.
- K. Design, contract modifications, studies or analysis required to comply with local, State, Federal or other regulatory agencies that become effective after the date of this agreement.
- L. Visits to the site in excess of the number of trips included in Article I for periodic site visits, coordination meetings, or contract completion activities.
- M. Providing services made necessary because of unforeseen, concealed, or differing site conditions or due to the presence of hazardous substances in any form.
- N. Preparing statements for invoicing or other documentation for billing other than for the standard invoice for services attached to this professional services agreement.

- O. Additional Geotechnical field investigations, sampling, laboratory testing instrument installation not specified in Article I.

ARTICLE III

TIME OF COMPLETION: FNI is authorized to commence work on the Project upon execution of this AGREEMENT and agrees to complete the services in accordance with the following schedule:

Commence Phase III work on Official Notice to Proceed (NTP) by Fort Bend County Drainage District. FNI will complete the following deliverables in such a timeframe to ensure that construction can initiate as soon as May 2012.

- 60% Submittal will include:
 - "Not for Construction" Design Drawings: 6 hardcopies of half size drawings (11" x 17") and one electronic copy (.pdf)
 - Table of Contents of Technical Specifications: 1 electronic copy (.pdf)
 - Hydraulic Technical Memorandum: 6 hardcopies and one electronic copy (.pdf)
 - Opinion of Probable Construction Cost with no less than a 25% contingency: 1 electronic copy (.pdf)
- 95% Submittal will include:
 - "Not for Construction" Design Drawings: 6 hardcopies of half size drawings (11" x 17") and one electronic copy (.pdf) of drawings.
 - "Not for Construction" sets of Technical Specifications: 3 hardcopies and 1 electronic copy (.pdf)
 - Opinion of Probable Construction Cost with no less than a 20% contingency: 1 electronic copy (.pdf)
- Final Submittal will include:
 - "Release for Bidding" Design Drawings: 3 full size drawing sets and one electronic copy (.pdf)
 - "Release for Bidding" sets of Specifications: 3 hardcopy sets and one electronic copy (.pdf)
- Bid Phase Services will be scheduled to initiate subsequent to the submittal of the Final Deliverable. The Fort Bend County's recommendation to the County for the successful bidder will likely be April or May 2012 with construction to initiate in May or June 2012.

If FNI's services are delayed through no fault of FNI, FNI shall be entitled to adjust contract schedule consistent with the number of days of delay. These delays may include but are not limited to delays by the Fort Bend County Drainage District or regulatory reviews, delays on the flow of information to be provided to FNI, governmental approvals, etc. These delays may result in an adjustment to compensation as outlined on the face of this AGREEMENT and in Attachment CO.

ARTICLE IV

RESPONSIBILITIES OF FORT BEND COUNTY DRAINAGE DISTRICT: The Fort Bend County Drainage District shall perform the following in a timely manner so as not to delay the services of FNI:

- A. The Fort Bend County Drainage District recognizes and expects that certain Change Orders may be required. Unless noted otherwise, the Fort Bend County Drainage District shall budget a minimum of 5% for new construction and a minimum of 10% for construction that includes refurbishing existing structures.

Further, the Fort Bend County Drainage District recognizes and expects that certain Change Orders may be required to be issued as the result in whole or part of imprecision, incompleteness, errors, omission,

ambiguities, or inconsistencies in the Drawings, Specifications, and other design documentation furnished by Engineer or in the other professional services performed or furnished by Engineer under this Agreement ("Covered Change Orders"). Accordingly, Owner agrees to pay for Change Orders and otherwise to make no claim directly or indirectly against Engineer on the basis of professional negligence, breach of contract, or otherwise with respect to the costs of approved Covered Change Orders unless the aggregate costs of all such approved Covered Change Orders exceed 2% for new construction and 4% for reconstruction. Any responsibility of Engineer for the costs of Covered Change Orders in excess of such percentage will be determined on the basis of applicable contractual obligations and professional liability standards. For purposes of this paragraph, the cost of Covered Change Orders will not include:

- Any costs that the Fort Bend County Drainage District would have incurred if the Covered Change Order work had been included originally in the Contract Documents and without any other error or omission of Engineer related thereto,
- Any costs that are due to unforeseen site conditions, or
- Any costs that are due to changes made by the Fort Bend County Drainage District.
- Any costs that are due to the Contractor

Nothing in this provision creates a presumption that, or changes the professional liability standard for determining if, Engineer is liable for the cost of Covered Change Orders in excess of the percent of Construction Cost stated above or for any other Change Order. Wherever used in this document, the term Engineer includes Engineer's officers, directors, partners, employees, agents, and Engineers Consultants.

- B. Designate in writing a person to act as the Fort Bend County Drainage District's representative with respect to the services to be rendered under this AGREEMENT. Such person shall have contract authority to transmit instructions, receive information, interpret and define the Fort Bend County Drainage District's policies and decisions with respect to FNI's services for the Project.
- C. Provide all criteria and full information as to the Fort Bend County Drainage District's requirements for the Project, including design objectives and constraints, space, capacity and performance requirements, flexibility and expandability, and any budgetary limitations; and furnish copies of all design and construction standards which the Fort Bend County Drainage District will require to be included in the drawings and specifications.
- D. Assist FNI by placing at FNI's disposal all available information pertinent to the Project including previous reports and any other data relative to design or construction of the Project.
- E. Arrange for access to and make all provisions for FNI to enter upon public and private property as required for FNI to perform services under this AGREEMENT.
- F. Examine all studies, reports, sketches, drawings, specifications, proposals and other documents presented by FNI, obtain advice of an attorney, insurance counselor and other consultants as OWNER deems appropriate for such examination and render in writing decisions pertaining thereto within a reasonable time so as not to delay the services of FNI.
- G. Furnish approvals and permits from all governmental authorities having jurisdiction over the Project and such approvals and consents from others as may be necessary for completion of the Project.
- H. The Fort Bend County Drainage District shall make or arrange to have made all subsurface investigations, including but not limited to borings, test pits, soil resistivity surveys, and other subsurface explorations. the Fort Bend County Drainage District shall also make or arrange to have made the

interpretations of data and reports resulting from such investigations. All costs associated with such investigations shall be paid by the Fort Bend County Drainage District.

- I. Provide such accounting, independent cost estimating and insurance counseling services as may be required for the Project, such legal services as OWNER may require or FNI may reasonably request with regard to legal issues pertaining to the Project including any that may be raised by Contractor(s), such auditing service as the Fort Bend County Drainage District may require to ascertain how or for what purpose any Contractor has used the moneys paid under the construction contract, and such inspection services as the Fort Bend County Drainage District may require to ascertain that Contractor(s) are complying with any law, rule, regulation, ordinance, code or order applicable to their furnishing and performing the work.
- J. Furnish, or direct FNI to provide, Additional Services as stipulated in Attachment SC, Article II of this AGREEMENT or other services as required.
- K. Bear all costs incident to compliance with the requirements of this Article IV.

ARTICLE V

DESIGNATED REPRESENTATIVES: FNI and the Fort Bend County Drainage District designate the following representatives:

- Owner's Designated Representative - Mr. Mark Vogler, PE, CFM, Fort Bend County Drainage District, 1004 Blume Rd., Rosenberg, TX 77471, 281-342-2863 phone, 281-342-9130 fax, voglemar@co.fort-bend.tx.us.
- Owner's Accounting Representative - Mr. Mark Vogler, PE, CFM, Fort Bend County Drainage District, 1004 Blume Rd., Rosenberg, TX 77471, 281-342-2863 phone, 281-342-9130 fax, voglemar@co.fort-bend.tx.us.
- Freese and Nichols' Project Manager - Cody Cockroft, 3100 Wilcrest Drive, Suite 200, Houston, Texas 77042, 713-600-6832 phone, 713-600-6801 fax, cmc@freese.com.
- Freese and Nichols' Accounting Representative - Judy Blair, 11200 Broadway Street, Suite 2332, Pearland, Texas 77584, 832-456-4711 phone, 832-456-4701 fax, jfb@freese.com.

**COMPENSATION
LUMP SUM WITH ADDITIONAL WORK BASED ON COST TIMES MULTIPLIER**

A. **Basic Services:** Compensation to FNI for the Basic Services in Attachment SC shall be the lump sum of Three Hundred Seventy Thousand Five Hundred Dollars \$370,500. If FNI sees the Scope of Services changing so that additional services are needed, including but not limited to those services described as Additional Services in Attachment SC, FNI will notify the Fort Bend County Drainage District for the Fort Bend County Drainage District's approval before proceeding. Additional Services shall be computed based on the Schedule of Charges.

B. **Schedule of Charges for Additional Work:**

In the event that additional services are necessary, FNI and the Fort Bend County Drainage District will discuss these services and the associated fees necessary to fulfill these services.

Other Direct Expenses

Actual Cost Times Multiplier of 1.15

Other direct expenses shall include outside printing and reproduction expense, communication expense, travel, transportation and subsistence away from the FNI office and other miscellaneous expenses directly related to the work, including costs of laboratory analysis, test, and other work required to be done by independent persons other than staff members. For Resident Representative services performed by non-FNI employees and CAD services performed In-house by non-FNI employees where FNI provides workspace and equipment to perform such services, these services will be billed at cost times a multiplier of 2.0. This markup approximates the cost to FNI if an FNI employee was performing the same or similar services.

Rates for In-house Services

Computer

\$10.00 per hour

Printing

Black and White

\$0.10 per copy

Plotter

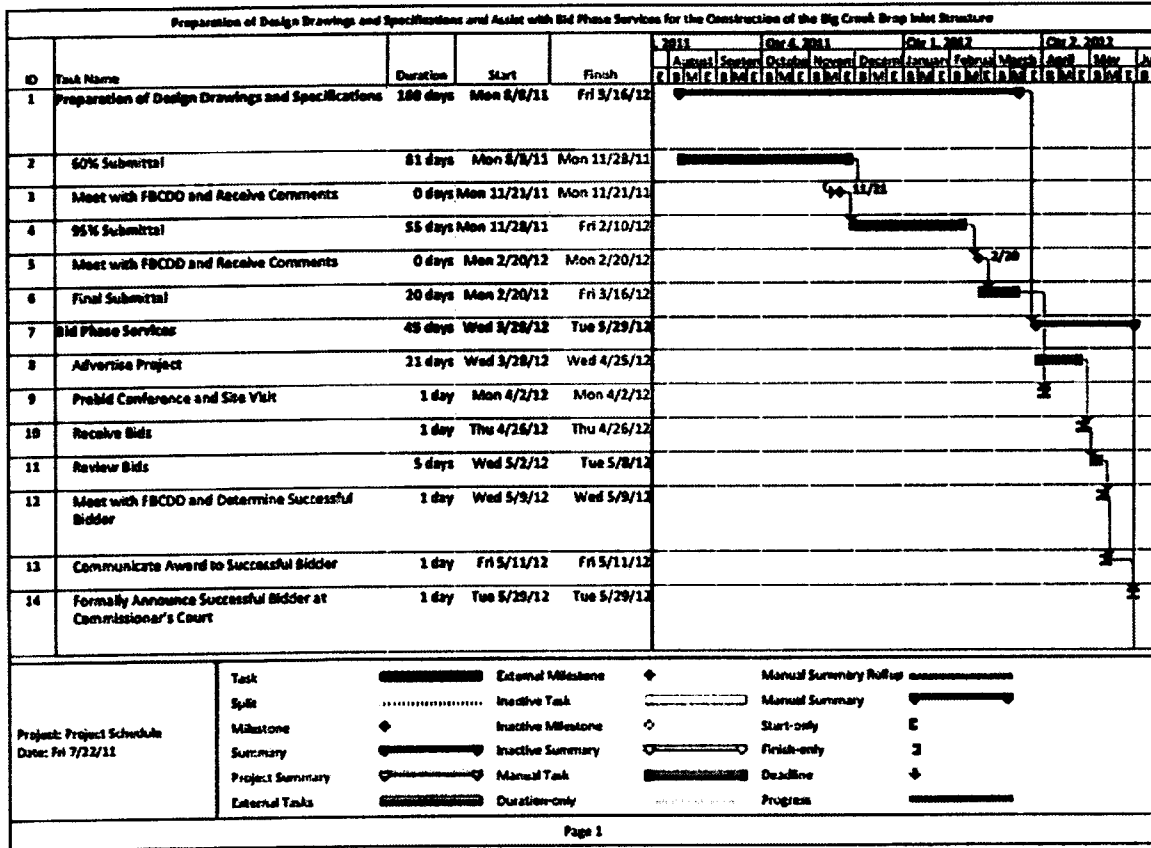
Bond \$ 2.50 per plot
Special \$ 5.00 per plot
Color \$ 5.75 per plot

Color

\$0.50 per copy

Binding

\$5.75 per book



ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
4/4/2011

PRODUCER Phone: 817-820-8144 Fax: 817-870-0310
HUB International Rigg
 777 Main St, C-50
 Fort Worth TX 76102

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED
Freese and Nichols, Inc.
 4055 International Plz #200
 Fort Worth TX 76109

INSURERS AFFORDING COVERAGE	NAIC #
INSURER A: Continental Casualty Company	20443
INSURER B:	
INSURER C:	
INSURER D:	
INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSUR ADDL LTR NEEDED	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR GENL AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC				EACH OCCURRENCE	\$
					DAMAGE TO RENTED PREMISES (Ea occurrence)	\$
					MED EXP (Any one person)	\$
					PERSONAL & ADV INJURY	\$
					GENERAL AGGREGATE	\$
					PRODUCTS - COMP/OP AGG	\$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS				COMBINED SINGLE LIMIT (Ea accident)	\$
					BODILY INJURY (Per person)	\$
					BODILY INJURY (Per accident)	\$
					PROPERTY DAMAGE (Per accident)	\$
	GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT	\$
					OTHER THAN AUTO ONLY: EA ACC	\$
					AGG	\$
	EXCESS/UMBRELLA LIABILITY <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input type="checkbox"/> RETENTION \$				EACH OCCURRENCE	\$
					AGGREGATE	\$
						\$
						\$
						\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below				WC STATUTORY LIMITS	OTH-ER
					E.L. EACH ACCIDENT	\$
					E.L. DISEASE - EA EMPLOYEE	\$
					E.L. DISEASE - POLICY LIMIT	\$
A	OTHER Professional Claims Made	AEH008214422	12/30/2010	12/30/2011	\$5,000,000 \$10,000,000 Retro Date	Per Claim Aggregate 11/1/1965

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS
 Repair of the Big Creek Bypass Structure

CERTIFICATE HOLDER

Fort Bend County Drainage District
 4520 Reading Road, Suite A
 Rosenberg TX 77471

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

IMPORTANT

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

DISCLAIMER

The Certificate of Insurance on the reverse side of this form does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)
4/4/2011

PRODUCER Phone: 817-820-8144 Fax: 817-870-0310
HUB International Rigg
 777 Main St, C-50
 Fort Worth TX 76102

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURED
Freese and Nichols, Inc.
 4055 International Plz #200
 Fort Worth TX 76109

INSURERS AFFORDING COVERAGE	NAIC#
INSURER A: HARTFORD CAS INS CO	29424
INSURER B: HARTFORD ACCID & IND CO	22357
INSURER C:	
INSURER D:	
INSURER E:	

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INR	ASBL	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS
A	X	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR GENL. AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/> LOC	46UUNNW0133	10/23/2010	10/23/2011	EACH OCCURRENCE \$1,000,000 DAMAGE TO RENTED PREMISES (EA OCCURRENCE) \$300,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$1,000,000 GENERAL AGGREGATE \$2,000,000 PRODUCTS-COMP/OP AGG \$2,000,000
A	X	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS GARAGE LIABILITY <input type="checkbox"/> ANY AUTO	46UUNNW0133	10/23/2010	10/23/2011	COMBINED SINGLE LIMIT (EA accident) \$1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ AUTO ONLY - EA ACCIDENT \$ OTHER THAN AUTO ONLY: EA ACC \$ AGG \$
A	X	EXCESS/UMBRELLA LIABILITY <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> DEDUCTIBLE <input checked="" type="checkbox"/> RETENTION \$10,000	46XHULO9889	10/23/2010	10/23/2011	EACH OCCURRENCE \$10,000,000 AGGREGATE \$10,000,000 \$ \$ \$
B		WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? If yes, describe under SPECIAL PROVISIONS below OTHER	46WBZH7407	10/23/2010	10/23/2011	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS
 Repair of the Big Creek Bypass Structure
 The District and its employees, officers, officials, agents, and volunteers are listed as additional insureds under the Blanket Additional Insured Endorsement for General Liability and Auto with a Blanket Waiver of Subrogation on the General Liability, Auto and Workers Compensation. Compensation per terms and conditions of policy and per written contract.

CERTIFICATE HOLDER	CANCELLATION
Fort Bend County Drainage District 4520 Reading Road, Suite A Rosenberg TX 77471	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES. AUTHORIZED REPRESENTATIVE

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Phase III - Preparation of Construction Drawings, Specifications, and Bid Phase Services
 Estimate of Engineering Services

Fort Bend County Drainage District

TASK	DESCRIPTION	APPROX. SHEET C.	Water Resources Design-1159										Water Resources Design-1110				Structural - 1125				Construction	
			Group Manager MVR	PM CMC	Engineer V BA	Engineer II TOH	Engineer I AC	CADD DBL	QA/QC JLR	Engr III Patrick Miles	Geotech Lead MMS	Engineer V DAB	Engineer IV MAM	Group Manager BSW	Engineer V ALR	Engineer II MAMT	CADD JAW	Engineer VI LL	En			
Task 1	Project Management	16	80																			
Task 2	Meetings																					
	Internal Kickoff Meeting		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	Monthly Internal (Design) Meetings		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
	Kickoff Meeting with FBCCD		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	FNI / Dewatering Subcontractor		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
	FNI / Dewatering Subcontractor / FBCCD		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
	60% Submittal		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
	95% Submittal		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
	Final Submittal		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
	Site Visits		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
Task 3	Griffin & Ramjack (included in subcontractor expense)																					
Task 4	Hydraulic Analysis																					
	Hydraulic Analysis		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
	Develop Memorandum of Findings		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
Task 5	Preparation of Construction Drawings and Specifications																					
	60% Submittal (Drawings and Specifications)																					
	Incorporate FBCCD's Survey into Base File		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
	Civil (Plan and Profiles), Grading, Drainage, Demolition Sheets		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	Dewatering/groundwater Control		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	Silling Basin		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
	Headwall & Conduits		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
	Erosion Control Features Downstream of Structure		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	Slope Protection and New Operations Platform and Gate Operators		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	OPCC		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	95% Submittal (Drawings and Specifications)		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	Civil (Plan and Profiles), Grading, Drainage, Demolition Sheets		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
	Dewatering/groundwater Control		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
	Silling Basin		16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		
	Headwall & Conduits		16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16		
	Erosion Control Features Downstream of Structure		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
	Slope Protection and New Operations Platform and Gate Operators		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
	OPCC		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
	Final Submittal (Drawings and Specifications)		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
Task 6	Bid Phase Services																					
	Coordinate Front End Documents		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
	Manage and Respond to RFI		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
	Attend Pre-bid Meeting and Site Visit		8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8		
	Additional Site Visit		4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4		
	Assess FBCCD with Review of Bids		6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6		
	Bid Opening Meeting and Prepare Letter of Award		2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
Task 7	Constructability Review / QA & QC																					
	Constructability Review / QA & QC		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24		
	TOTAL HOURS	16	228	187	208	250	474	45	15	40	33	38	72	53	212	244	5					
	TOTAL HOURS	\$3,985	\$42,759	\$34,861	\$25,180	\$26,939	\$49,770	\$12,896	\$1,913	\$9,282	\$6,404	\$4,282	\$16,384	\$7,950	\$25,440	\$28,690	\$1,280					
SUBCONSULTANTS																						
NO. SUBCONSULTANT																						
1 Griffin																						
2 Ram Jack																						
GENERAL OFFICE & EXPENSES																						
ITEM DESCRIPTION																						
1 Deliverable Copies																						
Color (Memos, etc)																						
Black and White (Specifications)																						
Full Size Drawings (27" x 34")																						
CHECKST																						
2 Mileage																						
3 Flights / Car Rental																						
4 Hotel																						
5 Per Diem																						
6 Computer Time																						

EXHIBIT B



**FREESE
AND
NICHOLS**

Innovative approaches
Practical results
Outstanding service

10497 Town and Country Way, Suite 600 • Houston, Texas 77024 • 713-600-6800 • fax 713-600-6801

www.fni.com

Date: 03/30/2012

Jeff Janecek
Fort Bend County Drainage District
P.O. Box 1028
Rosenberg, TX 77471

Dear Jeff :

Below is FNI's Proposed Scope of Work and Fee for additional services associated with the design phase service for the rehabilitation of the Big Creek structure. Our proposed Fee is \$38,800 (see the detailed spreadsheet for more information.)

Since the issuance of P.O. #78901 on August 9, 2011 (Professional Engineering Services associated with the Design for the Repairs of the Big Creek Bypass Structure), the Fort Bend County Drainage District (FBCDD) and Fort Bend Flood Control Water Supply Corporation (FBFC) has directed Freese and Nichols, Inc. (FNI) to provide for additional services not covered in the original scope of work. Specifically this includes redesigning the downstream headwall (conduit end treatment) and developing performance specifications for the replacement of the existing flap gates.

As originally tasked, FNI was contracted to provide for a helical testing program with RamJack in order to verify that the proposed helical anchors would satisfy the design assumptions used by FNI. In two attempts, RamJack has been unsuccessful in the testing of any of the anchors. Three helicals have been installed; however FNI finds no confidence in the installation due to equipment failures, equipment replacements, and observed means and methods by which the helical anchors were installed. Since the second failed attempt to test, FNI has conducted additional research and proceeded forward with discussions with another reputable helical installer company.

The scope of services below accounts for the items associated with FNI services that go beyond the scope of work exclusive to P.O. #78901.

Task 1: Develop Performance Specifications for New Hybrid Slide / Flap Gate Structure

To accommodate the increased tailwater elevation associated with the induced hydraulic jump, a hybrid gate design has been recommended by Rodney Hunt which will combine the functionality of a flap gate with the geometry of a sluice gate. Activities associated with the new gate design include:

- Coordinate with potential gate manufacturers
- Calculate load scenarios (upstream head pressure, backwater, static load on the wall, etc.)
- Specification of gates to operate manually (crank), with a mobile actuator, and to be opened by upstream head pressure

Task 2: Redesign of Downstream Headwall

Based on a site visit of the structure with members of FBCDD and FBFC during the original helical testing installation on January 24, 2012, a decision was made to redesign and re-construct the existing downstream headwall. Since the 2010 failure, the southern end of the wall has rotated downstream about the footing, separating from the structure by a maximum of 4" to 5". Originally FNI intended to utilize this wall by extending its height by approximately 5 feet; however, confidence in the wall's ability to resist static (new slide gates) and dynamic (hydraulic discharge) loading has now been considered low. Additionally, it is quite likely that the slide gates could be operationally jeopardized since the wall is not plumb. Redesign of this wall includes:

- Existing top of wall elevation = +29 ft; new top of wall elevation = 35 – 38.5 ft
- Redesign of last 3.6 ft long by six, each (cast in place) culvert structure(s)
 - Design reinforcement and geometry of culverts
 - Design reinforcement to house downstream headwall

Task 3: Helical Testing Program

FNI developed a working knowledge of helical anchor systems as they apply to the redesign of Big Creek Drop Structure, including but not limited to loading factors, geotechnical implications, and installation criteria.

Initial Testing Program

The initial test program was performed by RamJack on January 24th and February 16th, 2012 and supervised by FNI. This included:

- Mobilization, installation, and testing activities performed by Ramjack
 - Observation of site conditions and/or mobilization of equipment one (1) day prior to site activities
 - Mobilization of crew to site
 - Installation of three (3) helical anchors with 45 kip pullout capacity in various configurations of helicals and stems
 - Confirmation of helical capacity of previously installed anchors
 - Attempted testing of installed helical anchors
- Supervision by FNI
 - Mileage associated with transportation to and from site
 - Coordination with Client
 - Observation as well as photographic and written documentation of Ramjack activities by two (2) FNI engineers
- Note: FNI originally budgeted for one day for this effort (installation and testing of three anchors). Due to inefficiencies associated with RamJack's unsuccessful attempt to install all three anchors it was necessary that an additional day be used to complete the installation and initiate testing (this was not budgeted). Significant rain fell in the basin over the course of two weeks causing the Brazos River to rise and backwater over the three installed anchors. When the river receded, RamJACK re-mobilized to the site and was unsuccessful in testing a single anchor.

Revised Testing Program

- Communication with New Subcontractor(s): FNI will use the knowledge gained through research and the original failed testing program to consult subcontractor(s) with industry knowledge to collaborate on design criteria and a testing program. This will include possibly redesigning the helical layout, sizes of helical anchor, the spacing, depths for installation and connections to the

03/30/2012

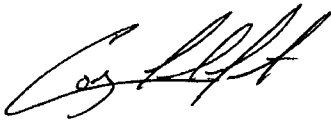
Page 3 of 3

slab. FNI will coordinate with the subcontractor(s) for field activities associated with a revised testing program.

- FNI will utilize the services of Helical Solutions. Services will include, but not be limited to:
 - Development of scope and industry accepted testing program for the Revised Testing Program
 - Reanalysis of anchor requirements including capacity, spacing, depth, and displacement
 - Observation of site conditions and/or mobilization of equipment one (1) day prior to site activities if necessary
 - Mobilization of crew to site
 - Installation of three (3) helical anchors of determined capacity to minimum depth
 - Testing of all installed helical anchors
 - Supervision by FNI
 - Mileage associated with transportation to and from site
 - Coordination with Client
 - Observation as well as photographic and written documentation of subcontractor activities by FNI

****Note**** the \$8,000 set aside for the original testing program will be applied to the contract and the difference of \$10.50 will be covered by this work authorization.

Sincerely,



Cody Cockroft
Project Manager



Mike Reedy
Vice President

**Fort Bend County Drainage District
Big Creek Bypass Structure
Detailed Cost Breakdown**

Total Basic	\$ 38,569
Total Special	\$ 255
Total Project	\$ 38,824

Project Fee Summary

Task	Labor Task Description	Hourly Bill Rate	Cody Cochran	Emily A. Schmeitz	Nick Kotasos	Abby Crockett	Willie Adams	Brad Watson	John Rutledge	Total Hours	Total Labor Effort	Total Subs / Exp Effort	Total Effort
N/A	Computer Expenses		\$195.49	\$125.25	\$144.56	\$109.50	\$111.38	\$238.39	\$286.25				
1	New Slide Gates		4	12			12			28	\$ 3,621	-	\$ 3,621
2	New Downstream Headwall		6	24			40			70	\$ 8,634	-	\$ 8,634
3	Helical Testing Program (RamJack - 2nd attempt)												
4	Coordination		2	4						6	\$ 892	-	\$ 892
5	Onsite Services (install and attempted testing)			11	11					22	\$ 2,968	-	\$ 2,968
6	Second Test Program (Helical Solutions)									5	\$ 696	-	\$ 696
7	Research		1	4						6	\$ 752	-	\$ 752
8	Coordination			6									
9	Onsite Services												
10	Install		2	12	12					26	\$ 3,629	-	\$ 3,629
11	Testing		2	16	16					34	\$ 4,708	-	\$ 4,708
12	Reconfiguration of Helical Layout		4	12			16			32	\$ 4,067	-	\$ 4,067
13	Project Management									33	\$ 6,451	-	\$ 6,451
14	QA/QC		33					4	4	8	\$ 2,139	-	\$ 2,139
15													
16													
17													
18													
19													
20													
Total Hours			54	101	39		68	4	4				
Labor Effort			\$ 10,556	\$ 12,650	\$ 5,638	\$ -	\$ 7,574	\$ 954	\$ 1,185	\$ -	\$ -	\$ -	\$ -
												Total Basic Services	
												270	
												\$ 38,557	
												\$ 12	
												\$ 38,569	

Task	Subs/consultants and Expenses	Computer Hrs	B&W copies	Color copies	Miles	Plotter-color	Plotter-other	Binding	Sub 1	Sub 2	Misc.	Total Subs / Exp Effort
N/A	Computer Expenses											
1	New Slide Gates											
2	New Downstream Headwall											
3	Helical Testing Program (RamJack - 2nd attempt)											
4	Coordination											
5	Onsite Services (install and attempted testing)											
6	Second Test Program (Helical Solutions)											
7	Research											
8	Coordination											
9	Onsite Services											
10	Install											
11	Testing											
12	Reconfiguration of Helical Layout											
13	Project Management											
14	QA/QC											
15	Helical Solutions (note: \$8,000 has been set aside previously)								10.5			
16												
17												
18												
19												
20												
Total Basic Services Subconsultants and Expenses												\$ -
Total Basic Services Subconsultants and Expenses Effort												\$ -

**Fort Bend County Drainage District
Big Creek Bypass Structure
Detailed Cost Breakdown**

Total Basic	\$ 38,569
Total Special	\$ 255
Total Project	\$ 38,824

Project Fee Summary

Task	Labor Task Description	Hourly Bill Rate	Personnel												Total Hours	Total Labor Effort	Total Subs / Exp Effort	Total Effort
			Cody Crockett	Emily A. Schwartz	Nick Kobasov	Aby Crockett	Willie Adams	Brad Watson	John Rutledge									
N/A	Computer Expenses																	
1		\$195.49	\$125.25	\$144.56	\$109.50	\$111.38	\$238.39	\$296.25										
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
Total Hours Labor Effort			\$ - - - - -													\$ - - - - -		\$ - - - - -

Task	Subcontractors and Expenses	Computer Hrs	B&W copies	Color copies	Miles	Plotter-color	Plotter-other	Binding	Sub 1	Sub 2	Misc.	Total Special Services	Total Subs / Exp Effort			
N/A	Computer Expenses															
1	Research															
2	Communication with Subcontractor(s)															
3	Initial Test Program			160									102			
4	Second Test Program			240									153			
5	Drawings															
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																
18																
19																
20																
Total Special Services Subcontractants and Expenses													\$ - - - - -			
Total Special Services Subcontractants and Expenses Effort													\$ - - - - -	\$ 400	\$ 255	\$ - - - - -

**Fort Bend County Drainage District
Big Creek Bypass Structure
Detailed Cost Breakdown**

Project Fee Summary	
Total Basic	\$ 38,569
Total Special	\$ 255
Total Project	\$ 38,824

	Basic		Special		Total
	Labor	Expense	Labor	Expense	
1110 Water Resources Design	\$ 1,165	\$ -	\$ -	\$ -	\$ 1,165
1112 Water Resources Transmission	\$ -	\$ -	\$ -	\$ -	\$ -
1113 Water Resources Planning	\$ -	\$ -	\$ -	\$ -	\$ -
1122 Electrical	\$ -	\$ -	\$ -	\$ -	\$ -
1125 Structural	\$ 954	\$ -	\$ -	\$ -	\$ 954
1127 Architectural	\$ -	\$ -	\$ -	\$ -	\$ -
1128 Mechanical and Plumbing	\$ -	\$ -	\$ -	\$ -	\$ -
1129 Construction Services - FW	\$ -	\$ -	\$ -	\$ -	\$ -
1130 Program Management	\$ -	\$ -	\$ -	\$ -	\$ -
1131 Construction Services - Central	\$ -	\$ -	\$ -	\$ -	\$ -
1132 Construction Services - Southeast	\$ -	\$ -	\$ -	\$ -	\$ -
1140 Infrastructure - FW	\$ -	\$ -	\$ -	\$ -	\$ -
1147 Treatment, Trans & Util - Central	\$ -	\$ -	\$ -	\$ -	\$ -
1148 Infrastructure - Coastal Bend	\$ -	\$ -	\$ -	\$ -	\$ -
1149 Infrastructure - Central	\$ -	\$ -	\$ -	\$ -	\$ -
1150 Utilities/Treatment - Southeast	\$ -	\$ -	\$ -	\$ -	\$ -
1151 Water Resources - Central	\$ -	\$ -	\$ -	\$ -	\$ -
1153 W/WW Transmission and Util	\$ -	\$ -	\$ -	\$ -	\$ -
1154 W/WW Treatment	\$ -	\$ -	\$ -	\$ -	\$ -
1155 Transportation and Urban Planning	\$ -	\$ -	\$ -	\$ -	\$ -
1156 Stormwater	\$ -	\$ -	\$ -	\$ -	\$ -
1157 Trans and Util - Pearland	\$ -	\$ -	\$ -	\$ -	\$ -
1158 Construction Services - Dallas	\$ -	\$ -	\$ -	\$ -	\$ -
1159 Water Resources - Houston	\$ 36,418	\$ -	\$ -	\$ -	\$ 36,418
1160 Energy	\$ -	\$ -	\$ -	\$ -	\$ -
1161 W/WW Master Planning & Denton	\$ -	\$ -	\$ -	\$ -	\$ -
1162 Denton	\$ -	\$ -	\$ -	\$ -	\$ -
1163 Oil & Gas	\$ -	\$ -	\$ -	\$ -	\$ -
1170 Environmental	\$ -	\$ -	\$ -	\$ -	\$ -
Other / Corporate	\$ -	\$ -	\$ 12	\$ -	\$ 12
Total	\$ 38,567	\$ 12	\$ -	\$ 255	\$ 38,824