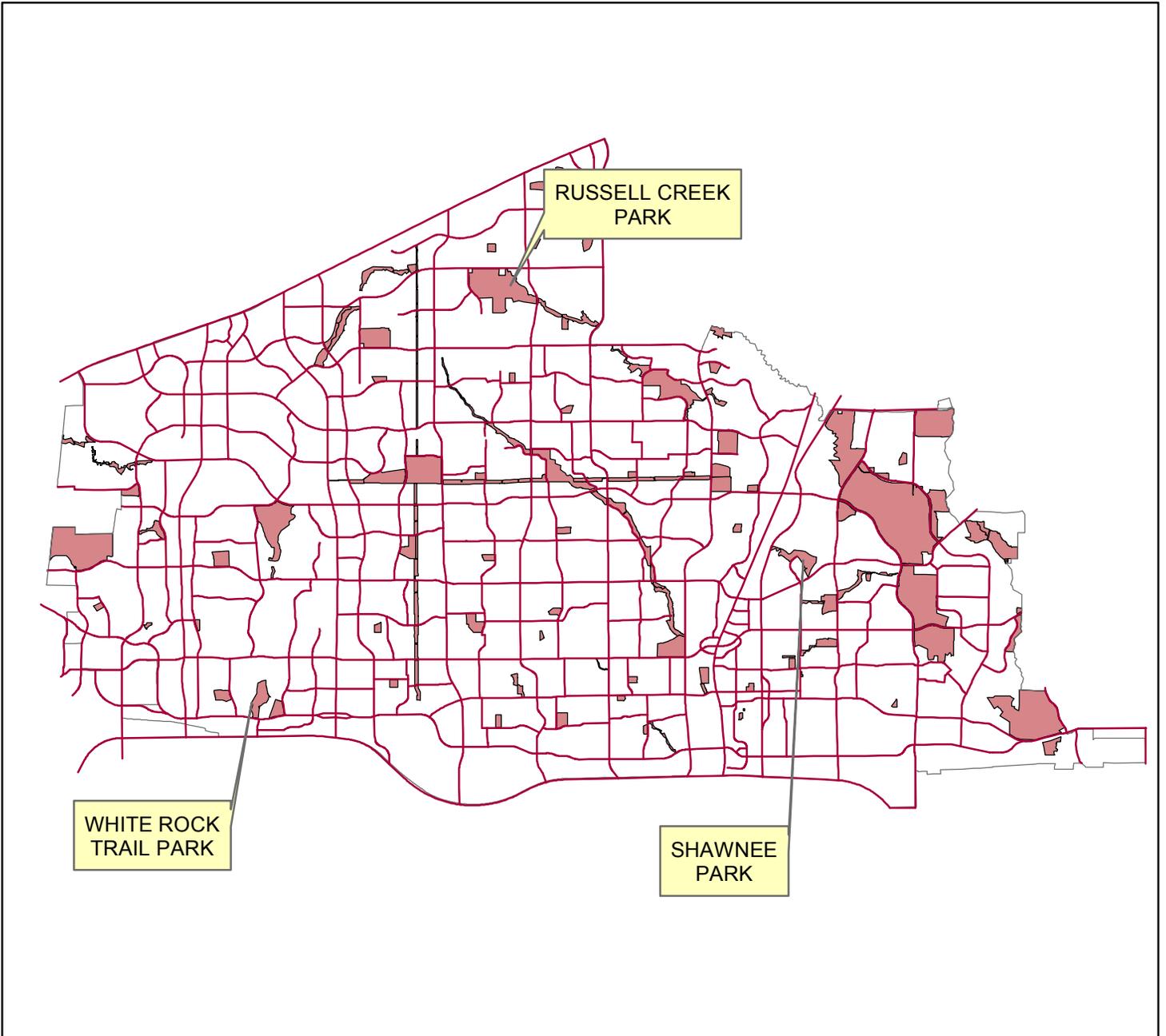




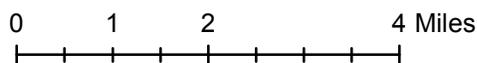
**CITY OF PLANO  
COUNCIL AGENDA ITEM**

<b>CITY SECRETARY'S USE ONLY</b>				
<input type="checkbox"/> Consent <input type="checkbox"/> Regular <input type="checkbox"/> Statutory				
Council Meeting Date:		06/25/12		
Department:		Public Works		
Department Head:		Gerald P. Cosgrove, P.E.		
Agenda Coordinator (include phone #): <b>Linda Sweeney (7157)</b>				<b>Project No. 5849.1</b>
<b>CAPTION</b>				
To approve a Professional Services Agreement by and between the City of Plano and Freese and Nichols, Inc., in the amount of \$133,373, for the City Pond Water Quality Upgrades project; and authorizing the City Manager to execute all necessary documents.				
<b>FINANCIAL SUMMARY</b>				
<input type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> OPERATING EXPENSE <input type="checkbox"/> REVENUE <input checked="" type="checkbox"/> CIP				
FISCAL YEAR: <b>2011-12</b>	<b>Prior Year (CIP Only)</b>	<b>Current Year</b>	<b>Future Years</b>	<b>TOTALS</b>
Budget	0	177,000	0	<b>177,000</b>
Encumbered/Expended Amount	0	0	0	<b>0</b>
This Item	0	-133,373	0	<b>-133,373</b>
BALANCE	0	43,627	0	<b>43,627</b>
<b>FUND(S): MUNICIPAL DRAINAGE CIP</b>				
<p><b>COMMENTS:</b> Funds are included in the FY 2011-12 Municipal Drainage CIP. This item, in the amount of \$133,373, will leave a current year balance of \$43,627 for the Flood Control Structures Evaluation project.</p> <p><b>STRATEGIC PLAN GOAL:</b> Engineering services for pond water quality upgrades to existing ponds at Shawnee Park, White Rock Trail and Russell Creek Trail relates to the City's Goal of Financially Strong City with Service Excellence.</p>				
<b>SUMMARY OF ITEM</b>				
<p>This agreement is for engineering services for the City Pond Water Quality Upgrades project to include providing professional engineering services for the evaluation of the Shawnee Park earth dam and principal pipe spillway, plus provide engineering design and plan preparation services for the installation of water quality improvements to the existing ponds located at Shawnee Park, White Rock Trail Park and Russell Creek Park. The contract fee is for \$133,373.00 and is detailed as follows:</p>				
Project Management & Direct Costs				\$5,269
Surveying				\$20,125
Shawnee Park:				
Geotechnical Investigation (Dam)				\$15,949
Structural Evaluation (Dam)				\$18,223
Structural Evaluation (Pipe Spillway)				\$1,678
Design Services				\$72,129
<b>TOTAL</b>				<b>\$133,373</b>
List of Supporting Documents:		Other Departments, Boards, Commissions or Agencies		
Location Map; Engineering Services Agreement		N/A		

# CITY POND WATER QUALITY UPGRADES PROJECT 5849.1



CITY OF PLANO  
PUBLIC WORKS  
ENGINEERING DIVISION



# CITY POND WATER QUALITY UPGRADES

PROJECT NO. 5849.1

## ENGINEERING SERVICES AGREEMENT

**THIS AGREEMENT** is made and entered by and between the **CITY OF PLANO, TEXAS**, a Home-Rule Municipal Corporation, hereinafter referred to as "City", and **FREESE AND NICHOLS, INC.**, a **TEXAS "S"** Corporation, hereinafter referred to as "Engineer", to be effective from and after the date as provided herein.

### WITNESSETH:

**WHEREAS**, the City desires to engage the services of the Engineer to prepare construction plans, specifications, details and special provisions and to perform other related engineering services in connection with the **CITY POND WATER QUALITY UPGRADES** project located in the City of Plano, Collin County, Texas, hereinafter referred to as the "Project"; and

**WHEREAS**, the Engineer desires to render such engineering services for the City upon the terms and conditions provided herein.

**NOW, THEREFORE**, for and in consideration of the covenants contained herein, and for the mutual benefits to be obtained hereby, the parties hereto agree as follows:

#### **I. Employment of the Engineer**

The City hereby agrees to retain the Engineer to perform professional engineering services in connection with the Project. Engineer agrees to perform such services in accordance with the terms and conditions of this Agreement.

#### **II. Scope of Services**

The parties agree that Engineer shall perform such services as are set forth and described in Exhibit "A", which is attached hereto and thereby made a part of this Agreement. The parties understand and agree that deviations or modifications in the form of written contract modifications may be authorized from time to time by the City.

### **III. Schedule of Work**

The Engineer agrees to commence work immediately upon execution of this Agreement, and to proceed diligently with said work, except for delays beyond the reasonable control of Engineer, to completion as described in the Completion Schedule, attached hereto as Exhibit "B" and thereby made a part of this Agreement.

### **IV. Compensation and Method of Payment**

The parties agree that Engineer shall be compensated for all services provided pursuant to this Agreement in the amount and manner described and set forth in the Payment Schedule attached hereto and incorporated herein as Exhibit "C". The contract amount specified in Exhibit "C" shall not be exceeded without the written permission of the City.

### **V. Information to be Provided by the City**

The City agrees to furnish, prior to commencement of work, all that information requested by Engineer and available in City's files.

### **VI. Insurance**

Engineer agrees to meet all insurance requirements, and to require all consultants who perform work for Engineer to meet all insurance requirements, as set forth on Exhibit "D", which is attached hereto and thereby made a part of this Agreement.

Engineer agrees to notify the City of any changes in insurance policy coverage, including but not limited to changes in limits and cancellation. The Engineer shall notify the City in writing of any changes within forty-eight (48) hours of the change. The Engineer's notice shall include a description of the changes and how those changes vary from the insurance requirements of the contract/agreement.

### **VII. INDEMNITY**

**THE ENGINEER AGREES TO DEFEND, INDEMNIFY AND HOLD THE CITY AND ITS RESPECTIVE OFFICERS, AGENTS AND EMPLOYEES, HARMLESS AGAINST ANY AND ALL CLAIMS, LAWSUITS, JUDGMENTS, FINES, PENALTIES, COSTS AND EXPENSES FOR PERSONAL INJURY (INCLUDING DEATH), PROPERTY DAMAGE OR OTHER HARM OR VIOLATIONS FOR WHICH RECOVERY OF DAMAGES, FINES, OR PENALTIES IS SOUGHT, SUFFERED BY ANY PERSON OR PERSONS, THAT MAY ARISE OUT OF OR BE OCCASIONED BY ENGINEER'S BREACH OF ANY OF THE TERMS OR PROVISIONS OF THIS CONTRACT, VIOLATIONS OF LAW, OR BY ANY NEGLIGENT, GROSSLY**

NEGLIGENT, INTENTIONAL, OR STRICTLY LIABLE ACT OR OMISSION OF THE ENGINEER, ITS OFFICERS, AGENTS, EMPLOYEES, INVITEES, SUBCONTRACTORS, OR SUB-SUBCONTRACTORS AND THEIR RESPECTIVE OFFICERS, AGENTS, OR REPRESENTATIVES, OR ANY OTHER PERSONS OR ENTITIES FOR WHICH THE ENGINEER IS LEGALLY RESPONSIBLE IN THE PERFORMANCE OF THIS CONTRACT. THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH SHALL NOT APPLY TO ANY LIABILITY RESULTING FROM THE SOLE NEGLIGENCE OF THE CITY, AND ITS OFFICERS, AGENTS, EMPLOYEES OR SEPARATE ENGINEERS. THE CITY DOES NOT WAIVE ANY GOVERNMENTAL IMMUNITY OR OTHER DEFENSES AVAILABLE TO IT UNDER TEXAS OR FEDERAL LAW. THE PROVISIONS OF THIS PARAGRAPH ARE SOLELY FOR THE BENEFIT OF THE PARTIES HERETO AND ARE NOT INTENDED TO CREATE OR GRANT ANY RIGHTS, CONTRACTUAL OR OTHERWISE, TO ANY OTHER PERSON OR ENTITY.

ENGINEER AT ITS OWN EXPENSE IS EXPRESSLY REQUIRED TO DEFEND CITY AGAINST ALL SUCH CLAIMS. CITY RESERVES THE RIGHT TO PROVIDE A PORTION OR ALL OF ITS OWN DEFENSE; HOWEVER, CITY IS UNDER NO OBLIGATION TO DO SO. ANY SUCH ACTION BY CITY IS NOT TO BE CONSTRUED AS A WAIVER OF ENGINEER'S OBLIGATION TO DEFEND CITY OR AS A WAIVER OF ENGINEER'S OBLIGATION TO INDEMNIFY CITY PURSUANT TO THIS AGREEMENT. ENGINEER SHALL RETAIN DEFENSE COUNSEL WITHIN SEVEN (7) BUSINESS DAYS OF CITY'S WRITTEN NOTICE THAT CITY IS INVOKING ITS RIGHT TO INDEMNIFICATION UNDER THIS AGREEMENT. IF ENGINEER FAILS TO RETAIN COUNSEL WITHIN THE REQUIRED TIME PERIOD, CITY SHALL HAVE THE RIGHT TO RETAIN DEFENSE COUNSEL ON ITS OWN BEHALF AND ENGINEER SHALL BE LIABLE FOR ALL COSTS INCURRED BY THE CITY.

#### **VIII. Independent Contractor**

Engineer covenants and agrees that Engineer is an independent contractor and not an officer, agent, servant or employee of City; that Engineer shall have exclusive control of and exclusive right to control the details of the work performed hereunder and all persons performing same, and shall be responsible for the acts and omissions of its officers, agents, employees, contractors, subcontractors and consultants; that the doctrine of respondeat superior shall not apply as between City and Engineer, its officers, agents, employees, contractors, subcontractors and consultants, and nothing herein shall be construed as creating a partnership or joint enterprise between City and Engineer.

## **IX. Assignment and Subletting**

The Engineer agrees that neither this Agreement nor the work to be performed hereunder will be assigned or sublet without the prior written consent of the City. The Engineer further agrees that the assignment or subletting of any portion or feature of the work or materials required in the performance of this Agreement shall not relieve the Engineer from its full obligations to the City as provided by this Agreement.

## **X. Audits and Records/Prohibited Interest**

The Engineer agrees that at any time during normal business hours and as often as City may deem necessary, Engineer shall make available to representatives of the City for examination all of its records with respect to all matters covered by this Agreement, and will permit such representatives of the City to audit, examine, copy and make excerpts or transcripts from such records, and to make audits of all contracts, invoices, materials, payrolls, records of personnel, conditions of employment and other data relating to all matters covered by this Agreement, all for a period of one (1) year from the date of final settlement of this Agreement or for such other or longer period, if any, as may be required by applicable statute or other lawful requirement.

The Engineer agrees that it is aware of the prohibited interest requirements of the City Charter and Code of Conduct and will abide by the same. Further, a lawful representative of Engineer shall execute the affidavit shown in Exhibit "E". Engineer understands and agrees that the existence of a prohibited interest during the term of this contract will render the contract voidable.

## **XI. Contract Termination**

The parties agree that City shall have the right to terminate this Agreement with or without cause upon thirty (30) days written notice to Engineer. In the event of such termination, Engineer shall deliver to City all finished or unfinished documents, data, studies, surveys, drawings, maps, models, reports, photographs or other items prepared by Engineer in connection with this Agreement. Engineer shall be entitled to compensation for any and all work completed to the satisfaction of City in accordance with the provisions of this Agreement prior to termination.

## **XII. Engineer's Opinion of Probable Construction Costs**

The parties recognize and agree that any and all opinions of probable construction costs prepared by Engineer in connection with the Project represent the best judgment of Engineer as a design professional familiar with the construction industry, but that the Engineer does not guarantee that any bids solicited or received in connection with the Project will not vary from opinions prepared by Engineer.

### **XIII. Ownership of Documents**

Original drawings and specifications are the property of the Engineer; however, the Project is the property of the City and Engineer may not use the drawings and specifications therefor for any purpose not relating to the Project without City's consent. City shall be furnished with such reproductions of drawings and specifications as City may reasonably require. Upon completion of the work or any earlier termination of this Agreement under Article XI, Engineer will revise drawings to reflect changes made during construction and he will promptly furnish the City with one (1) complete set of reproducible record prints. Prints shall be furnished, as an additional service, at any other time requested by City. All such reproductions shall be the property of the City who may use them without Engineer's permission for any proper purpose including, but not limited to, additions to or completion of the Project. However, use of the documents for other than their intended purpose shall be at the sole risk of the City.

### **XIV. Complete Contract**

This Agreement, including the Exhibits lettered "A" through "E", constitute the entire agreement by and between the parties regarding the subject matter hereof and supersedes all prior or contemporaneous written or oral understandings. This Agreement may only be amended, supplemented, modified or canceled by a duly executed written instrument.

### **XV. Mailing of Notices**

Unless instructed otherwise in writing, Engineer agrees that all notices or communications to City permitted or required under this Agreement shall be addressed to City at the following address:

City of Plano  
Public Works Department, Suite 250  
P.O. Box 860358  
Plano, TX 75086-0358  
Attn: Lee D. Stimpson, P.E.

City agrees that all notices or communications to Engineer permitted or required under this Agreement shall be addressed to Engineer at the following address:

Freese and Nichols, Inc.  
4055 International Plaza, Suite 200  
Fort Worth, TX 76109  
Attn: Mike Wayts, P.E.

All notices or communications required to be given in writing by one party or the other shall be considered as having been given to the addressee on the date such notice or communication is posted by the sending party.

## **XVI. Miscellaneous**

### **A. Paragraph Headings:**

The paragraph headings contained herein are for convenience only and are not intended to define or limit the scope of any provision in this Agreement.

### **B. Contract Interpretation:**

Although this Agreement is drafted by the City, should any part be in dispute, the parties agree that the Agreement shall not be construed more favorably for either party.

### **C. Venue/Governing Law:**

The parties agree that the laws of the State of Texas shall govern this Agreement, and that it is performable in Collin County, Texas. Exclusive venue shall lie in Collin County, Texas.

### **D. Successors and Assigns:**

City and Engineer, and their partners, successors, subcontractors, executors, legal representatives, and administrators are hereby bound to the terms and conditions of this Agreement.

### **E. Severability:**

In the event a term, condition, or provision of this Agreement is determined to be void, unenforceable, or unlawful by a court of competent jurisdiction, then that term, condition, or provision, shall be deleted and the remainder of the Agreement shall remain in full force and effect.

### **F. Effective Date:**

This Agreement shall be effective from and after execution by both parties hereto.

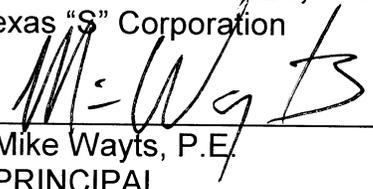
G. Authority to Sign:

The undersigned officers and/or agents of the parties hereto are the properly authorized officials and have the necessary authority to execute this Agreement on behalf of the parties hereto.

**SIGNED** on the date indicated below.

DATE: 6-14-12

**FREESE AND NICHOLS, INC.**  
A Texas "S" Corporation

BY:   
Mike Wayts, P.E.  
PRINCIPAL

**CITY OF PLANO, TEXAS**

DATE: \_\_\_\_\_

BY: \_\_\_\_\_  
Bruce D. Glasscock  
CITY MANAGER

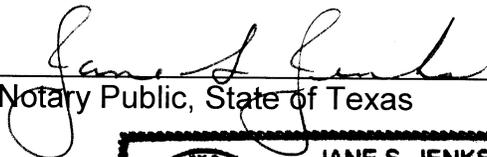
**APPROVED AS TO FORM:**

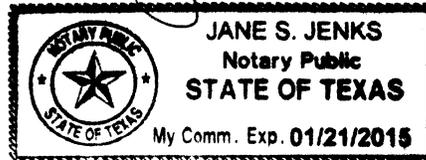
\_\_\_\_\_  
Diane C. Wetherbee  
CITY ATTORNEY

**ACKNOWLEDGMENTS**

STATE OF TEXAS       §  
                                  §  
COUNTY OF DALLAS   §

This instrument was acknowledged before me on the 14<sup>th</sup> day of JUNE, 2012, by **MIKE WAYTS, P.E., PRINCIPAL**, of **FREESE AND NICHOLS, INC.**, a TEXAS "S" corporation, on behalf of said corporation.

  
\_\_\_\_\_  
Notary Public, State of Texas



STATE OF TEXAS       §  
                                  §  
COUNTY OF COLLIN   §

This instrument was acknowledged before me on the \_\_\_\_\_ day of \_\_\_\_\_, 2012, by **BRUCE D. GLASSCOCK, CITY MANAGER**, of the **CITY OF PLANO, TEXAS**, a Home-Rule Municipal Corporation, on behalf of said municipal corporation.

\_\_\_\_\_  
Notary Public, State of Texas

**EXHIBIT A  
SCOPE OF SERVICES**

**CITY POND WATER QUALITY UPGRADES  
PROJECT NUMBER 5849.1  
CIP NUMBER 71128**

**PROJECT DESCRIPTION:**

In coordination with the recommendations made in the City of Plano Pond Retrofit Study – 2010, provide professional engineering services for the evaluation of the Shawnee Park earth dam and principal pipe spillway.

After completion of the evaluation of the Shawnee Park facilities, provide engineering design and plan preparation services for the installation of water quality improvements to the existing ponds located at three locations in the City of Plano:

- Russell Creek Park – Plans to add a floating debris trash rack to the principal spillway structure, to stabilize eroded bank areas surrounding the principal spillway structure, and provide velocity reduction and channel stabilization below the principal spillway outlet pipe.
- White Rock Trail Park – Plans to add a floating debris trash rack to the principal spillway structure, to remove and replace damaged concrete trail, to repair existing principal spillway pipe joints, to stabilize eroded bank areas surrounding the inlet pipe headwall, and to stabilize other eroded pond bank areas.
- Shawnee Park – Plans to replace the existing trash rack on the principal spillway riser with a floating debris trash rack, to install a new emergency spillway, to stabilize the eroding area below the existing emergency spillway, and provide velocity reduction and channel stabilization below the principal spillway outlet pipe.

Trash racks designs provided shall be non-proprietary and serviceable with ordinary maintenance staff expertise.

A dam inspection and breach analysis was provided for each of these ponds by Half Associates, Inc. (June 2011). Based on the inspections and breach analysis, all three ponds were found to be exempt from TCEQ size and hazard classifications.

## **BASIC SERVICES:**

### **A. Design Standards**

1. This project shall be designed in accordance with the following:

#### **City of Plano:**

- Geodetic Monumentation Manual
- Manual for Right-of-Way Management
- Storm Drainage Design Manual
- Stream Bank Stabilization Manual
- Erosion & Sediment Control Manual
- Thoroughfare Standards Rules & Regulations
- Manual for the Design of Water & Sanitary Sewer Lines
- Standard Construction Details
- Special Provisions to Standard Specifications for Public Works Construction, 1997
- Sample Plan Set
- Parks Department Standard Details

#### **NCTCOG:**

- Standard Specifications for Public Works Construction, 1998 Amendment

2. All plans submitted to the City shall be signed and sealed in accordance with state law.
3. Meet with the City of Plano project manager for a project kick-off meeting to discuss project scope, invoicing procedures, obtain design criteria, pertinent utility plans, park plans, plats, right-of-way maps, existing easement information, and other information available for the project areas.

### **B. Design Survey –**

1. Establish a horizontal and vertical control network and project control baseline for the project areas for the anticipated work. At Shawnee Park the survey area shall anticipate work on the dam, principal spillway pipe system and the emergency spillway. The network and baseline are to be tied into the existing City of Plano control network.
2. Establish horizontal and vertical project control monumentation.
3. Tie property lines and corners, the principal spillway riser and outlet, buildings, fence lines, trees 4-inches in diameter and larger, edges of pavements and all other visible surface features to the project control baseline. Existing utility structures shall be located and referenced by utility name (i.e. OnCor Elec., Verizon Telephone, Atmos Gas, Etc.).
4. Vertical topographic information tying the earth dam structure, pavements, walls, manholes (top and inverts), the principal spillway structure (top and inverts), and other improvements as needed within the project areas for the design.
5. Provide a dam cross section at the principal spillway dimensioned to the project baseline.

## **SHAWNEE PARK POND EVALUATION SERVICES:**

### **A. Research and Data Collection –**

1. Meet with the City of Plano project manager and Parks Department Staff to conduct an on-site review and walk through.

### **B. Geotechnical Report –**

1. Perform geotechnical investigation to determine the soil properties of the material in the dam structure, to assist in the determination of the source of seepage on the northwest downstream face of the dam and for the proposed design in the project area. The following is a breakdown of the tasks involved:
  - a. Perform a subsurface investigation consisting of three (3) soil and rock borings, two (2) borings drilled to a depth of 30 feet and one (1) boring drilled to depth of 20 feet to observe general site conditions, explore the subsurface materials, obtain samples for laboratory analysis and observe short-term groundwater levels as encountered during the drilling of the borings. Locations of borings to be submitted to the Engineering Department for confirmation and approval prior to the start of the work.
  - b. Supervise the drilling operations and log borings.
  - c. Perform laboratory testing on selected samples to classify soil and rock types and to determine the engineering properties of the subsurface materials.
2. Submit one copy of geotechnical report to the City with the preliminary submittal of the evaluation report. The geotechnical report shall include, but not be limited to the following:
  - a. Soil classification will be determined based on laboratory tests, a review of the field logs and visual examination of the soils. Parameters for seepage and dam slope stability analysis will be selected based on a review of the boring logs, laboratory test results, published correlations with index properties and engineering judgment and experience with similar materials.
  - b. Seepage and slope stability analysis using the computer models SEEP/W 2007 and SLOPE/W 2007.
  - c. Prepare a geotechnical report that includes the results of the seepage and slope stability analysis, boring logs and boring location map, identify stability issues with the embankment slopes and provide recommendations for seepage control.
3. Show geotechnical boring locations on an exhibit in the evaluation report and on the plan view of the construction drawings cross referenced to the geotechnical report. Soil horizon and vertical bore information shall be shown on the vertical profile view of the construction plans.

05/25/12

Page 3

**C. Structural Evaluation of the Principal Spillway Structure –**

1. Perform a structural evaluation of the existing principal spillway corrugated metal pipe (CMP) riser and barrel assembly and provide documentation on the existing condition of the pipe structure and joints. It is assumed the riser and barrel can be accessed by foot from the downstream outfall. No confined space entry costs are included as part of this proposal.
2. Identify the locations of any observed obvious structural deficiencies or damages to the pipe and document in the Pond Structures Evaluation Report with photos.
3. Note any evidence of and the estimated amount of water flow around the external perimeter of the barrel assembly (i.e. piping).

**D. Evaluation of the Earth Dam Structure –**

1. Perform an evaluation of the earth dam based on the results of the geotechnical investigation, observed evidence found on site and engineering calculations. The loading conditions to be analyzed for the slope stability and seepage analysis are steady-state and maximum flood conditions.

**E. Pond Structures Evaluation Report –**

1. Prepare an evaluation report providing the results of the structural evaluation of the principal spillway structure and the earth dam structure.
2. Provide an exhibit (11" x 17") showing the locations of soil borings and observed problem areas relative to the project base line.
3. Provide recommendations for replacement or repair of the principal spillway structure based on the results of the evaluation and for whether additional work is necessary for the control of the observed seepage on the downstream face of the dam.
4. Provide a conceptual construction cost estimate for up to two alternatives for the recommended work.
5. Submit three (3) copies and a PDF copy of the draft evaluation report to the City for review and comment.
6. Meet with the City Staff to receive City comments and discuss incorporation of the comments into the final report.
7. Incorporate the City comments into the final report and submit three (3) final signed, sealed and dated evaluation reports and a PDF copy to the City. The evaluation report shall be completed prior to the start of Basic Design Services for this project.
8. Depending on the results of the evaluation report and the estimated construction costs, the City will negotiate a modification to this contract to perform the additional engineering design services and prepare the necessary construction drawings to include any additional selected items for the Shawnee Park pond in the construction project.

## **BASIC DESIGN SERVICES:**

### **A. Preliminary Design –**

1. Prepare preliminary construction plans on 22" x 34" standard drawing sheets. Prepare the following sheets at the engineering scale indicated:
  - Cover sheet.
  - General Notes & Quantity sheet.
  - Russell Creek Park plan and details sheet.
  - White Rock Creek Park plan and details sheet(s).
  - Drainage area map for Shawnee Park spillway improvements. Scale 1"= 100'.
  - Shawnee Park emergency spillway and channel stabilization plan and profile sheet. Scale 1"=20' H: 1"= 4' V
  - Shawnee Park details sheet(s).
  - SWPPP narrative sheet meeting TCEQ and City of Plano requirements. Scale 1"= 40'. Erosion control plans for each site shall be shown on the above plan sheets.

Information required can be combined on sheets if the information can be clearly shown and is approved by the City of Plano project manager.

2. Coordinate with affected utilities such as water, gas, telephone, cable TV and electric to obtain accurate information for the location of their facilities.
3. Prepare list of special technical specifications needed for the project (if any).
4. Prepare an estimate of construction quantities and develop the preliminary statement of probable construction cost.
5. Submit four (4) sets of preliminary plans, list of special technical specifications and preliminary statement of probable construction cost to the City for review.
6. Meet with City of Plano staff to discuss City comments on preliminary plans, specifications list and cost estimates.
7. Provide an electronic PDF format half size set of preliminary utility coordination drawings (11" x 17" sheets to scale) to the City for distribution to the franchise utility companies affected by the construction. Utility coordination plans need only include the cover sheet and the plan sheets for all three sites.

### **B. Final Design –**

1. Revise preliminary plans incorporating comments from the City of Plano.
2. Incorporate comments from the utility companies, if any.
3. Finalize construction plans for proposed improvements.
4. Finalize special technical specifications and special conditions (if any).
5. Incorporate standard details into the construction plans and prepare additional details as required.
6. Take off final construction quantities and prepare final construction cost estimates.

7. Submit four (4) sets of pre-final plans, special technical specifications, draft bid schedule (City format) and final statement of probable construction cost to the City for review.
8. Incorporate City final comments into the plans and bid documents.
9. Submit three sets of final blackline prints, three bound copies of the bid documents and one unbound original bid document set to the City of Plano. All documents shall be signed, sealed and dated by the design engineer.
10. Provide an electronic PDF format half size set of preliminary utility coordination drawings (11" x 17" sheets to scale) to the City for distribution to the franchise utility companies affected by the construction. Utility coordination plans need only include the cover sheet and the plan sheets for all three sites.

**C. Bid Phase Services –**

1. Assist the City staff in advertising for bids.
2. Furnish plans and specifications for bidding. Cost for these to be recouped by non-refundable deposit from contractors. Maintain a list of plan holders.
3. Furnish plans and bid documents for up to four plan review rooms from a list approved by the City. These documents are to be furnished at no cost to the plan review rooms when requested.
4. Prepare and distribute addenda to bid documents as necessary.
5. Assist City staff as required in bid opening. Submit list of plan holders to the City, 48-hours prior to the bid letting.
6. Submit a CD-ROM disk of the bid set plans in a PDF format to the City.
7. Provide bid tabulation to the City of Plano within four working days of the bid letting.
8. Evaluate the low and second low bidders. Prepare letter of recommendation to the City of Plano for awarding a contract to the lowest responsible bidder within four working days of the bid letting.
9. Assist City staff in a pre-construction conference.
10. Furnish thirteen sets of final construction plans and three sets of the contract documents manual to the City for construction.

**D. Construction Administration –**

1. Provide review and approval for up to three shop drawing submittals. Fee to include up to one revision re-submittal review for each of the three submittals.
2. Provide up to three (3) site visits when requested by the City. Include an e-mail written report to the City project manager of observations, photos (if any), and issues requiring attention within 48-hours of the visit.
3. Provide written responses to requests for information or clarifications.
4. Prepare construction "Record Drawings" based upon mark-ups and information provided by the construction contractor(s). Submit one blackline set to the City and two CD-ROM disks containing scanned images of the 22" x 34" final "as constructed" blackline drawings (with "record drawing stamps" bearing the signature of the Engineer and the date). The drawings shall be scanned 1 to 1 as Group 4 TIF files at a minimum resolution of 200 dots per inch and a maximum resolution of 400

dots per inch. The TIF files shall be legible and shall include any post processing that may be required to enhance image quality (e.g., de-speckling, de-shading, de-skewing, etc.). Each file shall be named in numeric order.

5. "Record Drawings" shall also be provided as Autocad drawings and in pdf format one sheet to one drawing (No Xrefs).

**E. Construction Control Survey –**

1. Set vertical and horizontal control stakes for construction at a minimum of two for each site.

**ADDITIONAL SERVICES:**

Additional Services to be performed by ENGINEER, if authorized by CITY, which are not included in the above described basic services, are described as follows:

- A. Preliminary design, final design, bid phase, and construction phase services resulting from Shawnee Park Pond Dam Evaluation.
- B. Water quality sampling and testing.
- C. Emergency action plans, breach analyses, and classification of dams.
- D. Assessment of dams' compliance with current TCEQ dam safety rules.
- E. If ENGINEER's services are delayed through no fault of ENGINEER, ENGINEER 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 in CITY or regulatory reviews, delays on the flow of information to be provided to ENGINEER, governmental approvals, etc. These delays may result in an adjustment to compensation as outlined on the face of this AGREEMENT.
- F. TCEQ Approvals or Water Impoundment Permits are not included.
- G. Additional services relating to un-permitted fill, hazardous waste, and any other environmental consideration are not included.
- H. Environmental Protection Agency or other agency approvals or submittals not specified in the above scope of services are not included.
- I. Public Meetings are not included.
- J. Field layouts or the furnishing of construction line and grade surveys.
- K. Making property, boundary and right-of-way surveys, preparation of easement and deed descriptions, including title search and examination of deed records.
- L. Providing services to investigate existing conditions or facilities, or to make

05/25/12

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**Exhibit B**  
**Completion Schedule**

Topographic Survey	30 days from NTP
Shawnee Park Evaluation Study	60 days from NTP
City Review of Shawnee Park Evaluation Study	14 days from ENGINEER Submittal
Preliminary Design	60 days from City Review of Shawnee Park Evaluation Study
City Review of Preliminary Design	45 days from ENGINEER Submittal
Final Design	90 days from City Review of Preliminary Design
City Review of Final Design	45 days from ENGINEER Submittal
Bid Phase Services	75 days from City Review of Final Design
Construction	6 months from issuance of Final Construction Plans

**Exhibit C  
PAYMENT SCHEDULE**

**Not to Exceed:** The total fee for Basic Services in Attachment SC shall be computed on the basis of the Schedule of Charges, but shall not exceed One Hundred Thirty-Three Thousand Three Hundred Seventy-Three (\$133,373)

<u>Task</u>	<u>Description</u>	<u>Fee</u>
<b>BASIC SERVICES</b>		
1 - A	Design Standards	\$5,269
1 - B	Design Survey	\$20,125
<b>SHAWNEE PARK POND EVALUATION SERVICES</b>		
2 - A	Research and Data Collection	\$3,223
2 - B	Geotechnical Report	\$12,726
2 - C	Structural Evaluation of the Principal Spillway Structure	\$1,678
2 - D	Evaluation of the Earth Dam Structure	\$5,388
2 - E	Pond Structures Evaluation Report	\$12,835
<b>BASIC DESIGN SERVICES</b>		
3 - A	Preliminary Design	\$29,961
3 - B	Final Design	\$28,075
3 - C	Bid Phase Services	\$5,328
3 - D	Construction Administration	\$6,465
3 - E	Construction Control Survey	\$2,300
<b>Total:</b>		<b>\$133,373</b>

**COMPENSATION**

**Not to Exceed:** The total fee for Basic Services in Attachment SC shall be computed on the basis of the Schedule of Charges, but shall not exceed One Hundred Thirty-Three Thousand Three Hundred Seventy-Three (\$133,373). 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 OWNER for OWNER's approval before proceeding. Additional Services shall be computed based on the Schedule of Charges.

**Schedule of Charges:**

<u>Position</u>	<u>Min</u>	<u>Max</u>	<u>Position</u>	<u>Min</u>	<u>Max</u>
PRINCIPAL	170.81	429.45	3D VISUALIZATION COORDINATOR	147.42	182.11
GROUP MANAGER	194.55	308.21	O&G ENGINEER VI	225.38	300.00
ENGINEER VIII	267.68	282.79	O&G ENGINEER V	207.41	218.25
ENGINEER VII	237.30	265.90	O&G ENGINEER II	105.44	142.66
ENGINEER VI	175.43	240.98	O&G ENGINEER - TRANSITION	179.93	184.24
ENGINEER V	149.40	196.35	ENVIRONMENTAL SCIENTIST VII	190.54	241.54
ENGINEER IV	126.94	174.23	ENVIRONMENTAL SCIENTIST VI	186.60	186.60
ENGINEER III	113.59	141.45	ENVIRONMENTAL SCIENTIST V	131.90	168.53
ENGINEER II	106.28	121.54	ENVIRONMENTAL SCIENTIST IV	115.69	162.71
ENGINEER I	101.81	115.73	ENVIRONMENTAL SCIENTIST III	83.70	131.93
ELECTRICAL ENGINEER VI	188.80	233.22	ENVIRONMENTAL SCIENTIST II	87.60	95.48
ELECTRICAL ENGINEER V	172.35	179.63	ENVIRONMENTAL SCIENTIST I	69.68	85.50
ELECTRICAL ENGINEER IV	134.81	153.60	ARCHITECT VI	169.61	198.86
ELECTRICAL ENGINEER III	113.35	140.02	ARCHITECT V	138.86	179.70
ELECTRICAL ENGINEER II	95.54	118.03	ARCHITECT IV	137.10	140.25
ELECTRICAL ENGINEER I	89.60	110.68	ARCHITECT III	116.38	140.34
MECHANICAL ENGINEER VI	180.06	222.43	ARCHITECT II	94.61	116.87
MECHANICAL ENGINEER V	147.84	182.62	ARCHITECT I	77.58	95.84
MECHANICAL ENGINEER IV	142.19	175.65	LANDSCAPE ARCHITECT V	132.03	163.09
MECHANICAL ENGINEER III	105.85	136.98	LANDSCAPE ARCHITECT INTERN II	92.81	94.99
MECHANICAL ENGINEER II	98.33	121.47	LANDSCAPE ARCHITECT INTERN I	65.45	84.71
MECHANICAL ENGINEER I	91.58	113.12	PLANNER VII	202.09	249.64
PROGRAM MANAGER II	186.05	229.83	PLANNER VI	184.88	224.63
PROGRAM MANAGER I	121.09	149.59	PLANNER V	138.70	179.50
CONSTRUCTION CONTRACT ADM	140.51	181.83	PLANNER IV	118.46	128.74
CONSTRUCTION CONTRACT ADM	111.94	120.23	PLANNER III	98.10	108.83
CONSTRUCTION CONTRACT ADM	70.86	87.53	PLANNER II	80.98	104.80
CONSTRUCTION MANAGER V	162.79	225.60	PLANNER I	74.01	91.43
CONSTRUCTION MANAGER IV	127.24	173.85	HYDROLOGIST VI	171.49	211.84
CONSTRUCTION MANAGER III	105.75	154.88	HYDROLOGIST V	121.28	149.82
CONSTRUCTION MANAGER II	93.00	134.25	HYDROLOGIST IV	120.34	129.19
CONSTRUCTION MANAGER I	82.95	101.89	HYDROLOGIST III	97.35	125.98
DOCUMENT CONTROL SPECIALIST	104.10	106.76	HYDROLOGIST II	88.64	109.50
DOCUMENT CONTROL SPECIALIST	60.15	65.36	SENIOR GEOLOGIST	120.52	148.88
SR DESIGNER	150.00	198.30	GEOTECHNICAL ENGINEER VI	194.02	239.68
DESIGNER II	134.81	168.45	RIGHT OF WAY AGENT	89.63	110.72
DESIGNER I	117.43	145.06	PUBLIC INVOLVEMENT COORDINATOR	63.94	127.01
SR CADD DESIGNER	155.29	165.60	WORD PROCESSING/SECRETARIAL	57.79	110.81
CADD DESIGNER	111.75	154.84	OPERATIONS ANALYST	118.16	159.11
TECHNICIAN IV	95.06	132.60	CONTRACT ADMINISTRATOR	85.76	88.09
TECHNICIAN III	78.49	98.14	PROJECT CONTROL SPECIALIST	79.13	85.13
TECHNICIAN II	66.68	93.64	INFORMATION SERVICES CLERK III	53.55	66.15
TECHNICIAN I	57.92	74.96	INFORMATION SERVICES CLERK II	42.23	55.13
GIS ANALYST V	131.96	141.60	INFORMATION SERVICES CLERK I	42.00	42.00
GIS ANALYST IV	114.60	138.11	CO-OP	30.00	74.10
GIS ANALYST III	85.58	112.65			
GIS ANALYST II	74.78	79.46			
GIS ANALYST I	57.86	74.88			

The ranges and individual salaries will be adjusted annually.

**RATES FOR INHOUSE SERVICES**

<u>Computer and CAD</u>	<u>Calcomp Plotter</u>	<u>Print Shop</u>
PC CAD Stations \$10.00 per hr.	Bond \$2.50 per plot	Color Copies & Printing \$0.50 per single side copy
	Other \$5.00 per plot	\$1.00 per double side copy
	Color \$5.75 per plot	Black & White Copies & Printing \$0.10 per single side copy
		\$0.20 per double side copy
<b>Testing Apparatus</b>		Binding \$5.75 per book
Density Meter \$700.00 per month		
Gas Detection \$20.00 per test		

**OTHER DIRECT EXPENSES**

Other direct expenses are reimbursed at actual cost times a multiplier of 1.15. They 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

**EXHIBIT "D"**

**ENGINEERING**

**INSURANCE**

**INSURANCE:** (Review this section carefully with your insurance agent prior to bid or proposal submission. See "Insurance Checklist" on the last page or specific coverages applicable to this contract).

**1. General Insurance Requirements:**

- 1.1 The Engineer (hereinafter called "Engineer") shall not start work under this contract until the Engineer has obtained at his own expense all of the insurance called for here under and such insurance has been approved by the City. Approval of insurance required of the Engineer will be granted only after submission to the Purchasing Agent of original, signed certificates of insurance or, alternately, at the City's request, certified copies of the required insurance policies.
- 1.2 All insurance policies required hereunder shall be endorsed to include the following provision: "It is agreed that this policy is not subject to cancellation, non-renewal, without first providing the Risk Manager, City of Plano, at least ten (10) days prior written notice."
- 1.3 No acceptance and/or approval of any insurance by the City shall be construed as relieving or excusing the Engineer from any liability or obligation imposed upon the provisions of the Contract.
- 1.4 The City of Plano (including its elected and appointed officials, agents, volunteers, and employees) is to be named as an additional insured under Engineer's General Liability Policy, and the certificate of insurance, or the certified policy, if requested, must so state. Coverage afforded under this paragraph shall be primary as respects the City, its elected and appointed officials, agents and employees.
  - 1.4.1 The following definition of the term "City" applies to all policies issued under the contract:

The City Council of the City of Plano and any affiliated or subsidiary Board, Commission Authority, Committee, or Independent Agency (including those newly constituted), provided that such affiliated or subsidiary Board Commission, Authority, Committee, or Independent Agency is either a Body Politic created by the City Council of the City of Plano, or one in which controlling interest is vested in the City of Plano; and City of Plano Constitutional Officers.
- 1.5 The Engineer shall provide insurance as specified in the "Insurance Checklist" (Checklist) found on the last page of the bid or proposal form. Full limits of insurance required in the Checklist of this agreement shall be available for claims arising out of this agreement with the City of Plano.

- 1.6 Engineer agrees to defend and indemnify the City of Plano, its officers, agents and employees as provided in Paragraph VII. of this contract.
- 1.7 Insurance coverage required in these specifications shall be in force throughout the Contract Term. Should the Engineer fail to provide acceptable evidence of current insurance within seven (7) days of written notice at any time during the Contract Term, the City shall have the absolute right to terminate the Contract without any further obligation to the Engineer, and the Engineer shall be liable to the City for the entire additional cost of procuring performance and the cost of performing the incomplete portion of the Contract at time of termination.
- 1.8 Written requests for consideration of alternate coverages must be received by the City Purchasing Manager at least ten (10) working days prior to the date set for receipt of bids or proposals. If the City denies the request for alternative coverages, the specified coverages will be required to be submitted.
- 1.9 All required insurance coverages must be acquired from insurers authorized to do business in the State of Texas and acceptable to the City. The City prefers that all insurers also have a policyholder's rating of "A-" or better, and a financial size of "Class VI" or better in the latest edition of A.M. Best, or A or better by Standard and Poors, unless the City grants specific approval for an exception.
- 1.10 Any deductibles shall be disclosed in the Checklist and all deductibles will be assumed by the Engineer. Engineer may be required to provide proof of financial ability to cover deductibles, or may be required to post a bond to cover deductibles.

**2. Engineer's Insurance - "Occurrence" Basis:**

- 2.1 The Engineer shall purchase the following insurance coverages, including the terms, provisions and limits shown in the Checklist.
  - 2.1.1 Commercial General Liability - Such Commercial General Liability policy shall include any or all of the following as indicated on the Checklist:
    - i. General aggregate limit is to apply per project;
    - ii. Premises/Operations;
    - iii. Actions of Independent Contractors;
    - iv. Contractual Liability including protection for the Engineer from claims arising out of liability assumed under this contract;
    - v. Personal Injury Liability including coverage for offenses related to employment;
    - vi. Explosion, Collapse, or Underground (XCU) hazards; if applicable. This coverage required for any and all work involving drilling, excavation, etc.
  - 2.1.2 Business Automobile Liability including coverage for any owned, hired, or non-owned motor vehicles and automobile contractual liability.

- 2.1.3 Workers' Compensation - statutory benefits as required by the State of Texas, or other laws as required by labor union agreements, including Employers' Liability coverage.

**3.0 Engineer's Insurance – Claims Made**

Professional Errors and Omissions

The Engineer shall carry Professional Liability insurance which will pay for injuries arising out of negligent errors or omissions in the rendering, or failure to render professional services under the contract, for the term of the Contract and up to three years after the contract is completed in the amount shown in the Checklist.

Professional Errors and Omissions, Limit \$1,000,000  
per claim and aggregate of \$2,000,000

# ENGINEERING

## City of Plano - Insurance Checklist

("X" means the coverage is required.)

### Coverages Required

### Limits (Figures Denote Minimums)

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> 1. Workers' Compensation & Employers' Liability | Statutory limits of State of Texas<br>\$100,000 accident \$100,000 disease<br>\$500,000 policy limit disease |
| <input type="checkbox"/> 2. For Future Use  |  |
| <input type="checkbox"/> 3. City Approved Alternative Workers' Comp. Program        | \$150,000 medical, safety program  |
| <input checked="" type="checkbox"/> 4. General Liability                            | Complete entry No. 26<br>Minimum \$500,000 each occurrence<br>\$1,000,000 general aggregate                  |
| <input checked="" type="checkbox"/> 5. General aggregate applies per project (CGL)  |  |
| <input checked="" type="checkbox"/> 6. Premises/Operations                          | (Items No. 3-10 & 12 require)  |
| <input checked="" type="checkbox"/> 7. Independent Contractors                      | \$500,000 combined single limit<br>for bodily injury and property damage                                     |
| <input type="checkbox"/> 8. Products  | damage each occurrence with  |
| <input type="checkbox"/> 9. Completed Operations                                    | \$1,000,000 general aggregate that<br>applies to project under contract                                      |
| <input checked="" type="checkbox"/> 10. Contractual Liability                       |  |
| <input checked="" type="checkbox"/> 11. Personal Injury Liability                   | \$500,000 each offense & aggregate   |
| <input type="checkbox"/> 12. XCU Coverages  |  |
| <input checked="" type="checkbox"/> 13. Automobile Liability                        | \$500,000 Bodily Injury & Property   |
| <input checked="" type="checkbox"/> 14. Owned, Hired & Non-owned                    | Damage each accident   |
| <input type="checkbox"/> 15. Motor Carrier Act Endorsement                          |  |
| <input checked="" type="checkbox"/> 16. Professional Liability                      | \$1,000,000 each claim<br>\$2,000,000 aggregate  |
| <input type="checkbox"/> 17. Garage Liability                                       | \$_____ BI & PD each occurrence  |



**EXHIBIT "E"**

**AFFIDAVIT OF NO PROHIBITED INTEREST**

I, the undersigned declare that I am authorized to make this statement on behalf of Freese and Nichols, Inc. and I have made a reasonable inquiry and, to the best of my knowledge, no person or officer of Freese and Nichols, Inc. is employed by the City of Plano or is an elected or appointed official of the City of Plano within the restrictions of the Plano City Charter.

I am aware that Section 11.02 of the City Charter states:

"No officer or employee of the city shall have a financial interest, direct or indirect, in any contract with the city, nor shall be financially interested, directly or indirectly, in the sale to the city of any land, or rights or interest in any land, materials, supplies or service. The above provision shall not apply where the interest is represented by ownership of stock in a corporation involved, provided such stock ownership amounts to less than one (1) per cent of the corporation stock. Any violation of this section shall constitute malfeasance in office, and any officer or employee of the city found guilty thereof shall thereby forfeit his office or position. Any violation of this section with the knowledge, express or implied, of the persons or corporation contracting with the city shall render the contract voidable by the city manager or the city council."

I further understand and acknowledge that a violation of Section 11.02 of the City Charter at anytime during the term of this contract will render the contract voidable by the City.

Freese and Nichols, Inc.

Name of Consultant

By:

*M. Wayts*

Signature

MIKE WAYTS

Print Name

Principal

Title

6-14-12

Date

STATE OF TEXAS

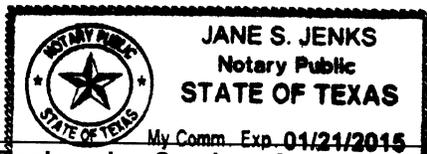
§

COUNTY OF DALLAS

§

§

SUBSCRIBED AND SWORN TO before me this 14<sup>th</sup> day of JUNE, 2012.



*Jane S. Jenks*  
Notary Public, State of Texas