



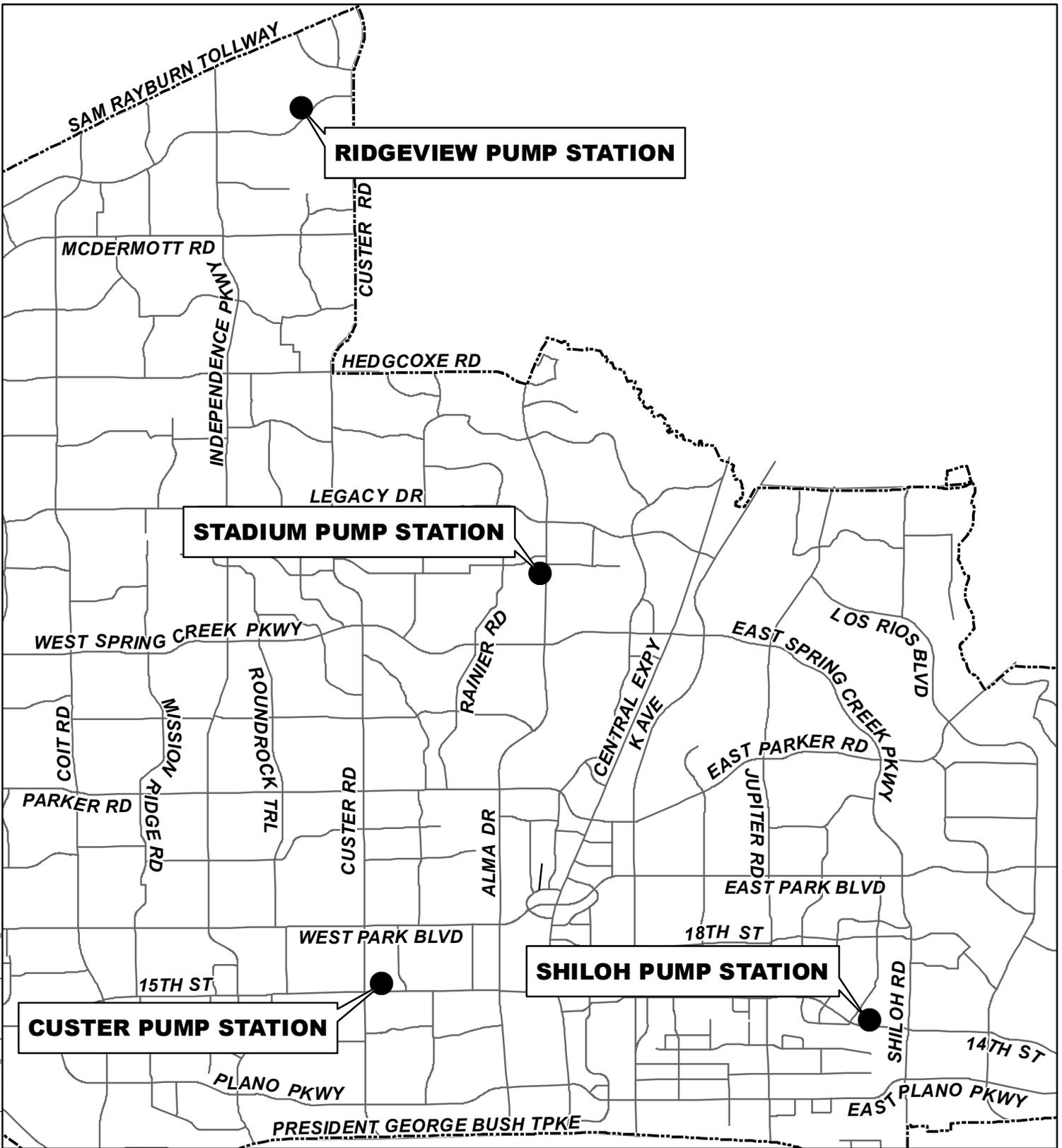
**CITY OF PLANO
COUNCIL AGENDA ITEM**

CITY SECRETARY'S USE ONLY					
<input type="checkbox"/> Consent <input type="checkbox"/> Regular <input type="checkbox"/> Statutory					
Council Meeting Date:		02/23/15			
Department:		Engineering			
Department Head:		Jack Carr, P.E.			
Agenda Coordinator (include phone #): Kathleen Schonne (7198)				Project No. 6526	
CAPTION					
To approve a Professional Services Agreement by and between the City of Plano and ARCADIS-US, Inc., in the amount of \$750,910, for Booster Chlorination at Water Pump Stations; and authorizing the City Manager to execute all necessary documents.					
FINANCIAL SUMMARY					
<input type="checkbox"/> NOT APPLICABLE <input type="checkbox"/> OPERATING EXPENSE <input type="checkbox"/> REVENUE <input checked="" type="checkbox"/> CIP					
FISCAL YEAR:	2014-15, 2015-16 & 2016-17	Prior Year (CIP Only)	Current Year	Future Years	TOTALS
Budget		0	805,000	2,500,000	3,305,000
Encumbered/Expended Amount		0	0	0	0
This Item		0	-750,910	0	-750,910
BALANCE		0	54,090	2,500,000	2,554,090
FUND(S): WATER CIP					
<p>COMMENTS: Funding is available in the FY 2014-15 Water CIP. This professional services agreement, in the amount of \$750,910, will leave a current year balance of \$54,090 available for further expenditure on the Disinfection Improvements project.</p> <p>STRATEGIC PLAN GOAL: Obtaining professional engineering services to implement booster chlorination at four water pump stations relates to the City's goal of Financially Strong City with Service Excellence.</p>					
SUMMARY OF ITEM					
Due to the intricacies of this project, Engineering issued RFP# 2015-004-X. Based on the information provided during the selection process, ARCADIS -US, Inc. was determined to be the best firm for this project.					
This agreement with ARCADIS-US, Inc. is for engineering services necessary to implement booster chlorination at four water pump stations (Custer, Ridgeview, Shiloh and Stadium).					
The contract fee is in the amount of \$750,910 and is detailed as follows:					
BASIC SERVICES					
1. Task 100 Project Administration			\$ 19,060		
2. Task 200 Research and Data Collection			\$ 4,510		
3. Task 300 Preliminary			\$ 79,960		
4. Task 400 Detailed Design			\$ 267,200		
5. Task 500 Bid Phase			\$ 9,630		
6. Task 600 Construction Administration			\$ 76,140		
			\$ 456,500		

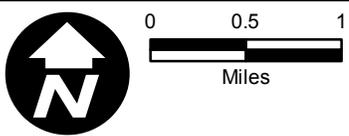


**CITY OF PLANO
COUNCIL AGENDA ITEM**

SPECIAL SERVICES	
7. Task 700 Startup, Training, SOP	\$ 73,680
8. Task 800 Programming/Integration	\$ 97,250
9. Task 850 Construction Management Assistance	\$ 46,980
10. Task 900 Design Survey	\$ 45,740
11. Task 901 Geotechnical Report	\$ 30,760
Total Special Services Fee	\$ 294,410
 Total Fee	 \$ 750,910
Custer Pump: https://www.google.com/maps/place/Chevron/@33.041428,-96.732974,17z/data=!3m1!4b1!4m2!3m1!1s0x864c2292a0b6	
Ridgeview Pump: https://www.google.com/maps/place/Custer+Rd+%26+Ridgeview+Dr,+Plano,+TX+75025/@33.1156065,-96.7335113,17z/data=!3m1!4b1!4m2!3m1!1s0x864c17cead584e7b:0xd4465deef972bac0	
Shiloh Pump: https://www.google.com/maps/place/14th+St+%26+Shiloh+Rd,+Plano,+TX+75074/@33.0143663,-96.6646014,17z/data=!3m1!4b1!4m2!3m1!1s0x864c1960101204e7:0x80616801f74a40f4	
Stadium Pump: https://www.google.com/maps/place/Legacy+Dr+%26+Alma+Dr,+Plano,+TX+75023/@33.0678496,-96.7132213,15z/data=!4m2!3m1!1s0x864c182da9187f85:0x2246b44b5af136d	
List of Supporting Documents: Location Map; Engineering Services Agreement	Other Departments, Boards, Commissions or Agencies N/A

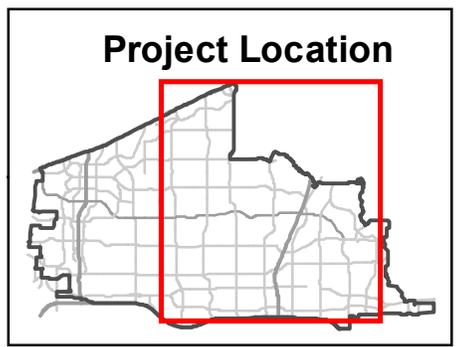


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**Booster Chlorination
At Water Pump Stations
Project No. 6526**

February, 2015
City of Plano GIS Division



BOOSTER CHLORINATION AT WATER PUMP STATIONS

PROJECT NO. 6526

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 **ARCADIS-US, INC.**, a **DELAWARE** Corporation, licensed to do business in the State of Texas, 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 **BOOSTER CHLORINATION AT WATER PUMP STATIONS** 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 THE ENGINEER'S, OR ITS OFFICER'S, AGENT'S, EMPLOYEE'S, CONSULTANT'S, REPRESENTATIVE'S OR ANY OTHER ENTITY OVER WHICH THE ENGINEER EXERCISES CONTROL'S, NEGLIGENCE, INTENTIONALLY TORTIOUS CONDUCT,

INFRINGEMENT UPON INTELLECTUAL PROPERTY RIGHTS, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER. THE INDEMNITY PROVIDED FOR IN THIS PARAGRAPH SHALL NOT APPLY TO ANY LIABILITY RESULTING FROM THE 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
Engineering Department, Suite 250
Attn: Shahrzad Tavana, P.E.
P.O. Box 860358
Plano, TX 75086-0358

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

ARCADIS-US, INC.
Attn: Ben Kuhnel, P.E.
12400 Coit Road, Suite 1200
Dallas, TX 75251

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:

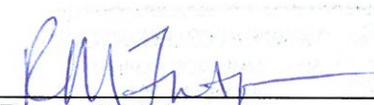
The undersigned officers and/or agents of the parties hereto are the properly authorized officials and have the necessary authority to execute this Agreement on behalf of the parties hereto.

SIGNED on the date indicated below.

ARCADIS-US, INC.

A Delaware Corporation, licensed to do business in the State of Texas

DATE: 2/11/15

BY: 
Randy McIntyre, P.E.
VICE PRESIDENT

CITY OF PLANO, TEXAS

DATE: _____

BY: _____
Bruce D. Glasscock
CITY MANAGER

APPROVED AS TO FORM:

Paige Mims
CITY ATTORNEY

ACKNOWLEDGMENTS

STATE OF TEXAS §
 §
COUNTY OF DALLAS §

This instrument was acknowledged before me on the 11 day of February, 2015, by **RANDY MCINTYRE, P.E., VICE PRESIDENT**, of **ARCADIS-US, INC.**, a **DELAWARE** corporation, licensed to do business in the State of Texas, on behalf of said corporation.



Charmaine M. Richardson
Notary Public, State of Texas

STATE OF TEXAS §
 §
COUNTY OF COLLIN §

This instrument was acknowledged before me on the _____ day of _____, 2015, 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

SCOPE OF SERVICES

BOOSTER CHLORINATION AT WATER PUMP STATIONS

**PROJECT NUMBER 6526
CIP NUMBER(S)**

PROJECT DESCRIPTION:

This Project will provide engineering services for design to implement booster chlorination (addition of chlorine and/or ammonia using chemical feed systems) at four identified water pump stations (Custer, Ridgeview, Shiloh and Stadium). Chemical feed system control and analytical instrumentation to monitor disinfectant levels will be integrated with the existing City of Plano SCADA system. The SCADA design will be updated with programming to provide operator flexibility and provide continuous water quality data to system operators. This project includes engineering services to develop bid documents including the technical specifications, access plans, construction administration, and other related services for the contractors to complete the project. Deliverables will include Engineering plans and specifications, SCADA programming and integration, operations manuals and operator training on new chemical feed and control systems.

BASIC SERVICES:

A. Design Standards

This project shall be designed in accordance with the following:

- Applicable Texas Administrative Code Requirements
- Applicable Texas Commission on Environmental Quality Requirements
- Geodetic Monumentation Manual
- Erosion & Sediment Control Manual
- Manual for the Design of Water & Sanitary Sewer Lines
- Standard Construction Details
- Barrier Free Ramp Details
- NCTCOG Standard Specifications for Public Works Construction
- Special Provisions to Standard Specifications for Public Works Construction

All plans submitted to the City shall be signed and sealed in accordance with state law.

B. Task 100 – Project Administration

The Engineer will perform contract set-up, monitoring, and control activities to track progress, update schedules, track budget, assure quality, and coordinate with the City's Project Manager. Project management tasks include preparation of monthly activity / progress reports to be submitted with the monthly invoices, along with day-to-day administrative and technical tasks. Subtasks include:

1. Set-up, Monitor, and Control – The Engineer will perform the weekly activities required to manage schedule, resources, budget, communication and risk. The Engineer will set up a project Sharepoint site for sharing information and posting deliverables on the project.
2. Kickoff Meeting – The Engineer will host a kickoff meeting with the City to capture the project goals and objectives and establish protocol for project communications.
3. Quality Assurance/Quality Control – The Engineer will employ its firm's written QA/QC procedures throughout the course of the Project and work assignment. The Engineer will identify highly experienced individuals for performing QA/QC reviews on the different project deliverables.
4. Invoicing and Monthly Activity / Progress Reports – The Engineer will prepare monthly activity reports to be submitted with the monthly invoices. The activity reports will include a list of work performed during the month, an updated schedule and a list of issues and concerns including status of previous action items, and upcoming major milestones, meetings/workshops or deliverables.
5. Closeout Project – The Engineer will debrief the City Project Leadership Team, perform closeout activities and submit the final project invoice.

C. Task 200 - Research and Data Collection

1. Data Request - The Engineer will prepare a data request then meet with the City of Plano engineering staff as necessary to obtain design criteria, record and construction plans for each identified pump station, geotechnical reports from previous investigations at each identified pump station site, current water quality data for the water distribution system, analytical testing equipment preferences, pump station specific implementation schedule and other information available for the project area.
2. Site Walk - Engineer will meet with the City of Plano project manager and conduct an on-site review and walk through of each facility.

D. Task 300 - Preliminary Design

1. Preliminary Design Report - The Engineer will develop a Preliminary Design Report that identifies design flows, chemical dose ranges, storage capacities, monitoring and control approach, and preliminary layouts for each of the four chlorination facilities. The preliminary design report will also document the equipment proposed to be used at each facility. Review of existing documents will be conducted to determine survey and geotechnical investigation needs. Architecture for the chemical facilities will match the

existing site architecture. Communication with the city staff will be required to confirm redundancy provisions and chemical mixing and residual sampling approach.

2. Data Review - Engineer will review historical water quality data and distribution system configuration to identify chemical feed points, system design criteria, and control philosophy.
3. SCADA/Communications - Engineer will determine necessary improvements to SCADA and communications equipment to facilitate incorporation of the chemical facilities.
4. Preliminary Design Plans - The Engineer will prepare preliminary design plans.
5. Technical Specification TOC - The Engineer will prepare technical specification table of contents.
6. Cost Estimate - The Engineer will prepare an estimate of construction quantities and develop the preliminary statement of probable construction cost.
7. Submittal - The Engineer will submit sets of half-size preliminary plans (30% level), outline of technical specifications and preliminary statement of probable construction cost to the City for review.
 - Engineering (2 sets)
 - Public Works (2 sets)
 - Inspectors (1 set)
 - One CD
8. Review Workshop - The Engineer will host a Draft Preliminary Design workshop with the City to review city comments on the Preliminary Design Report and make certain the team is in agreement prior to moving forward into detailed design.

E. Task 400 - Detailed Design

1. Detailed Design Plans - The Engineer will prepare 50%, 75%, and 100% construction plans. Prepare the following sheets at the engineering scale indicated:
 - Cover Sheet
 - General Notes
 - Project Site Plans Scale 1"= 20'
 - Structural, Architectural, Mechanical, Electrical, and Instrumentation sheets
 - Section and Detail sheets
 - SWPPP sheets meeting EPA and City of Plano requirements. Scale 1"= 40'.

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. Technical Specifications - The Engineer will prepare technical specifications and special conditions.

3. Standard Details - The Engineer will incorporate standard details into the construction plans and prepare additional details as required.
4. Equipment Vendor Coordination - The Engineer will coordinate with equipment suppliers to identify suitable equipment alternatives, work with the City to develop contract requirements, and developing detailed control narratives for control of the system.
5. Permitting - The Engineer will determine necessary permits for the chlorination facilities including facilitating coordination with the Texas Commission on Environmental Quality for design reviews if required.
6. Planning Department Site Plan - The Engineer will prepare site plan for submittal to Planning Department.
7. Cost Estimate - The Engineer will take off final construction quantities and prepare construction cost estimates at 50% and 100% milestones.
8. Submittals - The Engineer will submit 50%, 75%, and 100% sets of drawings and technical specifications.
9. Design Review Workshops - The Engineer will host design review meetings with City staff after each design milestone to capture and incorporate comments.
10. Pre-Final Submittal - The Engineer will submit 6 sets of pre-final plans, technical specifications, draft bid schedule and final statement of probable construction cost to the City for review.
11. Final Submittal - The Engineer will incorporate City final comments into the plans and bid documents.

F. Task 500 - Bid Phase

1. Advertising - The Engineer will assist the City staff in advertising for bids.
2. Bid Documents - The Engineer will submit one set of final bond prints, two bound copies of the bid documents and one unbound original bid document set to the City of Plano. The Engineer will also submit a CD-ROM disk of the bid set plans in a PDF format.
3. Pre-Bid Conference - The Engineer will assist City staff in conducting a pre-bid conference and site visits if needed.
4. Addenda - The Engineer will prepare addenda to bid documents as necessary (two addenda assumed).
5. Bid Opening - The Engineer will assist City staff as required in bid opening.
6. Bid Tabulation - The Engineer will provide bid tabulation to the City of Plano within four working days of the bid letting.
7. Bidder Evaluation - The Engineer will 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.
8. Pre-Construction Conference - The Engineer will assist City staff in a pre-construction conference.
9. Construction Sets - The Engineer will furnish eleven full size sets and one half size set of final construction plans and three sets of the contract documents manual to the City for construction.

G. Task 600 - Construction Administration

1. Progress Meetings - The Engineer will participate in bi-weekly construction phase progress meeting with the Contractor and City staff (16 meetings assumed).
2. Site Visits – The Engineer will conduct site visits and provide a written inspection report submitted to the City for each visit (as requested, 8 site visits assumed).
3. RFIs – The Engineer will provide written responses to requests for information or clarifications (32 RFI's assumed).
4. Shop Drawings – The Engineer will review shop drawing submittals and provide written response to the City (40 shop drawings assumed).
5. Substantial Completion Punchlist - The Engineer will assist the City staff in conducting the substantial completion inspection and develop punchlist.
6. Final Inspection – The Engineer will conduct final inspection and prepare recommendation of final acceptance of work.
7. Record Drawings – The Engineer will prepare construction "Record Drawings" based upon mark-ups and information provided by the construction contractor(s). Submit one blackline set to the City and a CD-ROM disk containing images of the 24" x 36" final "as constructed" blackline drawings (with "record drawing stamps"). The drawings shall be 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.

SPECIAL SERVICES:

H. Task 700 - Start-up Assistance, Training, and SOP Development

1. Startup Testing – The Engineer will provide Startup Testing services. Coordinate with the Contractor and City for Contractor's individual equipment testing as well as overall performance testing. Start-up plans will include testing each individual piece of equipment and testing their operation as a system. It will include simulating failures and system alarms to provide that all redundancy and safety elements perform correctly. Test the chemical pumps across their range of operation and down to low levels in the storage tanks to make certain the pumps perform properly and the City gets the full usable volume out of their tanks. Witness individual equipment and system testing conducted by Contractor.
2. Commissioning – During the Commissioning Phase, the Engineer will assist the City by responding to issues as they arise. Coordinate with Contractor for support or equipment/piping adjustments while City assumes control of each facility.
3. System Training – The Engineer will provide overall system training to ensure the intent of the design and anticipated operation strategy and maintenance requirements are fully communicated to the City. Training will be a 4-hour training delivered twice during commissioning of the facility and once more

sometime within the year following operation of the facilities by the City. Classroom portions of the training will be videotaped.

4. Standard Operating Procedures – The Engineer will develop standard operating procedures (SOPs) by working with City operators for the facilities to ensure that operators have the same response when making decisions on how to operate the facilities.
5. Consolidated O&M Manual – The Engineer will prepare a consolidated O&M manual by combining the Contractor provided O&M electronic files into a linked and tabbed pdf file for use by the City. Provide a CD or DVD with the compiled O&M.
6. Chemical Purchase Specification – The Engineer will prepare a specification for purchase of chemicals and assist in procurement of bulk chemical contracts. Provide recommendations to the City for service agreements for the process analyzers/instruments.

I. Task 800 – SCADA System Programming/Integration Services

1. SCADA Workshops – The Engineer will conduct up to three (3) workshops (50%, 75%, and 100%) with City operations staff to present and review proposed Chlorination system SCADA system functionality detailed control strategies, control system logic and operator interface. Incorporate City comments and feedback in workshops and develop final screens and programming.
2. PLC and User Interface Programming – The Engineer will develop programming of the programmable logic controller and the graphical user interface to facilitate operator management of the chemical storage and feed facilities.

J. Task 850 – Construction Management and Quality Assurance Assistance

1. Schedule Services – The Construction Manager will review and monitor the Construction Contractor's schedule for compliance with the project milestones.
2. Cost Control Services – The Construction Manager will assist in the review of the Construction Contractor's monthly payment application. Additionally, upon request review and negotiate requests for additional compensation or other price proposals provided by the Construction Contractor.
3. Liaison Services – The Construction Manager will serve as liaison with Construction Contractor, working principally through Construction Contractor's superintendent and assist the superintendent in understanding the intent of the Construction Contract Documents. Assist as OWNER'S liaison with Construction Contractor, when Construction Contractor's operations affect OWNER'S on-site operations. Obtain from OWNER or CONTRACTOR, additional details or information, when required at the job site for proper execution of the Work.
4. Monthly Progress Meetings – The Construction Manager will attend bi-weekly progress meetings and chair meetings upon request.

5. Other Meetings – The Construction Manager will attend and chair other meetings as requested by the City. These meetings may include startup meetings, instrumentation coordination meetings, trade meetings, etc.
6. As-Needed Inspections – The Engineer will provide as-needed inspections of the mechanical, electrical and field instrument installations to ensure these project components are installed in accordance with the plans and specifications, as well as, in accordance with the respective manufacturer's recommendations and requirements.

K. Task 900 - Design Survey

1. Establish a horizontal and vertical control network and project control baseline established at each water pump station for the project areas. 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 right-of-way lines and corners, property lines and corners, 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. T.U. Elec., GTE Telephone, Lone Star Gas, Etc.).
4. Vertical topographic information tying pavement, drives, walls, manholes (top and inverts), storm drain inlets (top and inverts), and other improvements as needed within the project areas for the design.
5. When underground utilities are exposed, tie to project control baseline.
6. Identify the street address of all adjacent properties to the proposed construction and show on drawings.
7. Survey existing top of curb, if curb will be removed during construction.

L. Task 901 - Geotechnical Report

1. Perform geotechnical investigation for proposed design in the project area. Submit one copy of geotechnical report to the City with the preliminary design plans.
2. The geotechnical report shall include, but not be limited to the following:
 - A subsurface investigation consisting of soil and rock borings drilled to depth of 10 feet or 5 feet below bottom of proposed waterline, sewer line or pier (which ever is greater) 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.
 - Laboratory testing on selected samples to classify soil and rock types and to determine the engineering properties of the subsurface materials.
 - Determine required depth for piers.
3. Utilize existing geotechnical data available from the City of Plano for improvements.

4. Show geotechnical boring locations on the plan view of the construction drawings and cross reference to the geotechnical report. Soil horizon and vertical bore information shall (shall not) be shown on the vertical profile view of the construction plans.

EXHIBIT B

Activity	Duration (working days)
Notice to Proceed	0
Preliminary Design	35
City First Review	15
50% Design	30
50% City Review	15
75% Design	20
75% City Review	15
100% Design	20
100% City Review	10
Final Design & Preparation of Special Conditions and Technical Specifications	10
City Final Review	5
Assemble Bid Documents	5
Advertise for Bids	20
Receive Bids	0
Research Bidder(s) and Prepare Recommendation	4
Prepare City Council Agenda	20
Council Award	0
Prepare & Execute Contract	30
Schedule Preconstruction Meeting	7
Notice to Proceed	10
Construction	160

A working day is defined as Monday through Friday, excluding City of Plano Holidays.

**EXHIBIT C
PAYMENT SCHEDULE**

**BOOSTER CHLORINATION AT WATER PUMP STATIONS
PROJECT NUMBER 6526**

WORK STAGE SUBMITTAL OR COMPLETION	TOTAL
BASIC SERVICES	
1. Task 100 Project Administration	\$ 19,060
2. Task 200 Research and Data Collection	\$ 4,510
3. Task 300 Preliminary Design	\$ 79,960
4. Task 400 Detailed Design	\$ 267,200
5. Task 500 Bid Phase	\$ 9,630
6. Task 600 Construction Administration	\$ 76,140
Total Basic Services Fee	\$ 456,500
SPECIAL SERVICES	
7. Task 700 Startup, Training, SOP	\$ 73,680
8. Task 800 Programming/Integration	\$ 97,250
9. Task 850 Construction Management Assistance	\$ 46,980
10. Task 900 Design Survey	\$ 45,740
11. Task 901 Geotechnical Report	\$ 30,760
Total Special Services Fee	\$ 294,410
 Total Fee	 \$ 750,910

Rate Schedule for Special Services (Basic Services are Lump Sum)

This document describes the basis for compensation and terms of payment.

Hourly Rates: Charges for services provided will be in accordance with the following schedule:

Category	Hourly Rate
Design Tech II/Field Technician II	69
Drafter I/Field Technician III and IV	82
Drafter II/Field Technician V	94
Construction Manager	105
Document Tech	118
Project Assistant I and II	132
CADD Designer /Field Supervisor	182
Engineer/Scientist	123
Staff Engineer/Scientist/Architect	138
Project Engineer/ Scientist/Architect	148
Senior Engineer/ Scientist/Architect I	153
Senior Engineer/Scientist/Architect II	183
Principal Engineer/Scientist/Architect I	230
Principal Engineer/Scientist/Architect II	263
Engineer/Scientist Director	279

Other Direct Costs: All expenses incurred for a project, except in-house services specified below, from outside vendors will be invoiced at cost plus 5% to cover administrative expenses. These items may include, but are not limited to: shipping charges; printing; supplies; equipment; traveling expenses; special insurance; licenses; permits; or subcontractors.

In-house services consist of:

- Transportation - \$0.62 per mile for vehicles.
- Equipment - a schedule of usage rates for specialty equipment is available for field assignments
- Web Hosting – a schedule of monthly web hosting rates is available for client access web sites

Payment: All invoices are due and payable within 30 days of billing date.

Other Direct Costs: All expenses incurred for a project, except in-house services specified below, from outside vendors will be invoiced at cost plus 5% to cover administrative expenses. These items may include, but are not limited to: shipping charges; printing; supplies; equipment; traveling expenses; special insurance; licenses; permits; or subcontractors.

In-house services consist of:

- Transportation - \$0.62 per mile for vehicles.
- Equipment - a schedule of usage rates for specialty equipment is available for field assignments
- Web Hosting – a schedule of monthly web hosting rates is available for client access web sites

Payment: All invoices are due and payable within 30 days of billing date.

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.)

<u>Coverages Required</u>	<u>Limits (Figures Denote Minimums)</u>
<input checked="" type="checkbox"/> 1. Workers' Compensation & Employers' Liability	Statutory limits of State of Texas \$100,000 accident \$100,000 disease \$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 Minimum \$500,000 each occurrence \$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	<u>\$500,000</u> combined single limit 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 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 \$2,000,000 aggregate
<input type="checkbox"/> 17. Garage Liability	\$_____ BI & PD each occurrence

EXHIBIT "E"

AFFIDAVIT OF NO PROHIBITED INTEREST AND COMPLIANCE WITH CITY OF PLANO'S EQUAL RIGHTS ORDINANCE

A. No Prohibited Interest

I, the undersigned, declare that I am authorized to make this statement on behalf of **ARCADIS-US, INC.**, a Corporation organized under the laws of the State of Delaware, and I have made a reasonable inquiry and, to the best of my knowledge, no person or officer of **ARCADIS-US, 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."

B. Equal Rights Compliance

1. Section 2-11(F) of the City Code of Ordinances reads as follows:

"It shall be unlawful for an employer to discriminate against any person on the basis of race, color, sex, religion, age, national origin, genetic information, sexual orientation, gender identity, disability status or United States military/veteran status by the following actions or inactions:

- (a) for an employer to fail or refuse to hire, or to discharge, any person;
- (b) for an employer to discriminate against any person with respect to compensation, terms, conditions or privileges, of employment;
- (c) for an employer to limit, segregate or classify employees or applicants for employment in any way that would deprive or tend to deprive a person of employment or employment opportunities, or that would otherwise adversely affect a person's status as an employee;
- (d) for an employment agency to fail or refuse to refer for employment, or to otherwise discriminate against, any person because of a protected employment characteristic;
- (e) for an employment agency to classify or refer for employment any person, on the basis of a protected employment characteristic;
- (f) for a labor organization to exclude or expel from its membership, or to otherwise discriminate against, any person because of a protected employment characteristic;
- (g) for a labor organization to fail or refuse to refer for employment any person because of a protected employment characteristic;
- (h) for a labor organization to limit, segregate or classify its members or applicants for membership, in any way that would deprive or tend to deprive a person of employment or employment opportunities, or that would otherwise adversely affect a person's status as an employee or as an applicant for employment; or
- (i) for a labor organization to cause or attempt to cause an employer to discriminate against a person in violation of this subsection;

- (j) for an employer, a labor organization or a joint labor-management committee, to discriminate against any person because of a protected employment characteristic in the admission to, or employment in, any program established to provide apprenticeship or other training;
- (k) for an employer to print or publish, or cause to be printed or published, any notice or advertisement relating to employment by the employer that indicates any preference, limitation, specification or discrimination, based on a protected employment characteristic;
- (l) for an employment agency to print or publish, or cause to be printed or published, any notice or advertisement relating to membership in or any classification or referral for employment by the employment agency that indicates any preference, limitation, specification or discrimination, based on a protected employment characteristic; or
- (m) for a joint labor-management committee to print or publish, or cause to be printed or published, any notice or advertisement relating to admission to, or employment in, any program established to provide apprenticeship or other training by the joint labor-management committee that indicates any preference, limitation, specification or discrimination, based on a protected employment characteristic."

2. I am aware that my company, its directors, officers and employees must comply with Section 2-11(F) of the City Code of Ordinances unless an exclusion applies, as indicated below. Further, I understand that if Section 2-11(F) applies, I am entitled to apply to the City Manager for a waiver from signing this section of the affidavit based on a conflict with state or federal law. The contract will not be executed prior to the waiver issue being resolved.

Having made reasonable inquiry, I affirm that my company, its directors, officers and employees agree to comply with Section 2-11(F); or my company is excluded from this Ordinance based on the following: **[PLEASE CHECK BELOW, IF APPLICABLE]**

_____ A religious organization.

_____ A political organization.

_____ An educational institution.

_____ A branch or division of the United States government or any of its departments or agencies.

_____ A branch or division of the State of Texas or any of its departments, agencies or political subdivisions.

_____ A private club that is restricted to members of the club and guests and not open to the general public.

_____ Is not an "employer" under Section 2-11(F) because it has not had 15 or more employees for each working day in each of 20 or more calendar weeks in the current or preceding calendar year.

[THIS SPACE INTENTIONALLY LEFT BLANK]

I also understand and acknowledge that a violation of Section 11.02 of the City Charter or Section 2-11(F) of the City Code of Ordinances, if applicable, at any time during the term of this contract may render the contract voidable by the City.

ARCADIS-US, INC.

By:

[Handwritten Signature]

Signature

Randy Mc Intyre

Print Name

V.P.

Title

2/11/15

Date

STATE OF TEXAS §
 §
COUNTY OF DALLAS §

SUBSCRIBED AND SWORN TO before me this 11 day of February, 2015.

Charmaine M. Richardson
Notary Public, State of Texas

