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approving PROFESSIONAL

SPECIAL ORDINANCE NO. S-

AN ORDINANCE approving PROFESSIONAL SERVICES AGREEMENT – TRFP SCADA MIGRATION – WORK PACKAGE 1 - WORK ORDER #67290 - \$431,810.00 (funded by State Revolving Fund Water Bond) between PHOENIX CONSULTING, LLC and the City of Fort Wayne, Indiana, by and through its Board of Public Works.

NOW, THEREFORE, BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF FORT WAYNE, INDIANA:

SECTION 1. That the PROFESSIONAL SERVICES AGREEMENT

- TRFP SCADA MIGRATION – WORK PACKAGE 1 - WORK ORDER #67290 
(funded by State Revolving Fund Water Bond) between PHOENIX CONSULTING,

LLC and the City of Fort Wayne, Indiana, in connection with the Board of Public

Works, is hereby ratified, and affirmed and approved in all respects, respectfully for:

ALL LABOR, INSURANCE, MATERIAL, EQUIPMENT, TOOLS, POWER, TRANSPORTATION, MISCELLANEOUS EQUIPMENT, ETC., NECESSARY FOR: SERVING AS CITY'S PROFESSIONAL REPRESENTATIVE FOR THE PROJECT. **PROVIDING** PROFESSIONAL ENGINEERING CONSULTATION AND ADVICE. AND OTHER CUSTOMARY SERVICES INCIDENTAL THERETO. SCADA MIGRATION - WORK PACKAGE NO. 1 WORK AT THE THREE RIVERS FILTRATION PLANT FOR THE CONTINUING UPGRADE OF THE EXISTING CONTROL SYSTEM TO A NEW PLATFORM. THE WORK IN THIS AGREEMENT INCLUDES THE DEVELOPMENT OF HMI SCREENS, PROGRAMMING, AND MIGRATION OF THE RAW WATER, CHEMICALS AND **CLARIFIERS** COORDINATED WITH CONTROL ROOM IMPROVEMENTS (3110 AND 3200) TO THE NEW IGNITION PLATFORM AT THE THREE RIVERS FILTRATION PLANT:

involving a not-to-exceed cost of FOUR HUNDRED THIRTY-ONE THOUSAND EIGHT HUNDRED TEN AND 00/100 DOLLARS - (\$431,810.00). A copy of said Contract is on file with the Office of the City Clerk and made available for public inspection, according to law.

1	SECTION 2. That this Ordinance shall be in full force and effect from
2	and after its passage and any and all necessary approval by the Mayor.
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4	
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6	Council Member
7	APPROVED AS TO FORM AND LEGALITY
8	ATTROVED AS TO FORWARD ELOALITY
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10	Malak Heiny, City Attorney
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## PROFESSIONAL SERVICES AGREEMENT

("TRFP SCADA Migration – Work Package 1")

This Agreement is by and between

CITY OF FORT WAYNE ("CITY")

by and through its

Board of Public Works City of Fort Wayne 200 E. Berry Street, Suite 210 Fort Wayne, IN 46802

and

Phoenix Consulting, LLC (ENGINEER) 3201 Stellhorn Road Fort Wayne, IN 46815

Who agree as follows:

City hereby engages Engineer to perform the services set forth in Part I - Services ("Services") and Engineer agrees to perform the Services for the compensation set forth in Part III - Compensation ("Compensation"). ENGINEER shall be authorized to commence the Services upon execution of this Agreement and written authorization to proceed from City. City and Engineer agree that these signature pages, together with Parts I-IV and attachments referred to therein, constitute the entire Agreement ("Agreement") between them relating to the Project.

# **APPROVALS**

APPROVED FOI BOARD OF PUE	
BY:	Shan Gunawardena Chalir
BY:	Kumar Menon, Member
BY;	ABSENT Chrls Guerrero, Member
ATTEST:	Michelle Fulk-Vondran, Clerk
DATE:	<u>6.10.2025</u>
APPROVED FOI	R ENGINEER
BY:	David Houck Digitally signed by David Houck Date: 2025.06.02 16:05:08 -04'00
DATE:	

### PART | Standard

### SCOPE OF BASIC ENGINEERING SERVICES

## A. GENERAL

Engineer shall provide the City professional Engineering services in all phases of the project to which this scope of services applies. These services will include serving as City's professional representative for the Project, providing professional Engineering consultation and advice furnishing instrumentation & Control Engineering services and other customary services incidental thereto.

## **B. PROJECT DESCRIPTION**

The City is planning for a SCADA Migration Project at the Three Rivers Filtration Plant (TRFP), The SCADA Migration involves the transition of the existing General Electric IFIX SCADA system to a new Inductive Automation Ignition Perspective platform as well as other related services. A wide range of improvements generally related to the SCADA Migration Project are underway or have been completed to prepare the facility for this transition.

This is the Initial work package relating to the TRFP SCADA Migration that includes selected PLC control panels and related treatment processes. The City anticipates future work packages to migrate systems not included in this work package. The TRFP systems are complex and interrelated. The Programmer shall work with the City and others to coordinate monitoring and control across systems as necessary to achieve the aesthetic and functional expectations and requirements for the improvements.

### C. SCOPE OF SERVICES

## TRFP Work Package No. 1

The Proposer shall provide the services described in the tasks below in accordance with the City Process Control System Standards and the SCADA Migration Development Plan and other related documents and work sequences. Additional details associated with integration requirements are included in attachments to this document:

## RFP Attachments:

# Attachment 1 - Cost Summary Table and Proposed Schedule (Issued electronically)

Programmer shall complete Cost Summary Table as part of proposal submittal.

## Attachment 2 - Process Control System Standards Document (issued electronically)

All integration work shall align with City Process Control Standards.

# Attachment 3 – City of Fort Wayne SCADA Migration Project Development Plan (October 2021 and Attachments) (issued electronically)

• All Integration work shall follow the City's SCADA Migration Project Development Plan.

# Attachment 4 - DRAFT Process Control Narratives

The attachment includes draft process control narratives for the work package process systems
in .pdf and .docx format. The documents include planned and future work associated with each
unit and sub-unit process. The process control narrative planned work is part of this SCADA
Migration Project work package. The future work is provided for reference, as the Programmer
works with the City to execute the work package requirements.

• The process control narratives are working documents. The Programmer shall closely coordinate updates to the process control narratives with the City to provide the most up to date document as future work packages are contemplated. The intent at the end of all work packages is to have a comprehensive document that reflects the TRFP and remote site process control narratives.

## <u>Attachment 5 – DRAFT Professional Service Agreement (Issued electronically in track changes)</u>

Programmer shall provide proposed redlined markups to Professional Services Agreement as part
of proposal submittal.

## Attachment 6 - DRAFT Process and Instrument Diagrams (PIDs)

- The attachment includes all draft Master PIDs. The PIDs associated with this work package are
  highlighted in the index. The Master PIDs include both existing systems and future systems. The
  future work is provided for reference, as the Programmer works with the City to execute the
  work package requirements.
- The PIDs are working documents. The Programmer shall redline PIDs through the work package development and integration. The Programmer shall closely coordinate updates to the PIDs with the City to provide the most up to date document as future work packages are contemplated. The Intent at the end of all work packages is to have a comprehensive document that reflects the TRFP and remote site PIDs.

# Attachment 7 - DRAFT Input / Output Lists

- The attachment includes draft IO for the TRFP in .pdf and .xlsx formats. The Excel worksheet can
  be sorted for PLCs associated with this work package. The IO list includes both existing and future
  IO (this can be sorted as "blanks" and "F" in the worksheet). The future work is provided for
  reference, as the Programmer works with the City to execute the work package requirements.
- The IO list is a working document. The Programmer shall update the IO list through the work package development and integration. The City's intent is to manage the Excel worksheet as a working document through the SCADA Migration project (all work packages). The Programmer shall closely coordinate updates to the IO list with the City to provide the most up to date document as future work packages are contemplated. The intent at the end of all work packages is to have a comprehensive document that reflects the TRFP and remote site IO.

## Attachment 8 - PLC Programs (issued electronically in native file format)

 Programmer shall work with the City to manage PLC programs through Rockwell AssetCentre In accordance with the City Process Control System Standards.

## Attachment 9 - Existing HMI Screen Captures (available upon request)

## Work Sequence

A. Programmer shall complete work in accordance with following requirements and to accommodate operation of existing facilities during integration period. Coordination of progress schedule and plant operations shall be accomplished through the City. Programmer shall provide City written notice 7 days prior to time when existing facilities must be taken out of service to perform Work. Not later than 7 days after City receives written notice, City will take existing facilities out of service and make them available to Programmer to perform Work. City reserves right to place facilities taken out of service back into service on emergency basis upon notification to Programmer.

Work associated with Milestones 2 and parts of Milestone 3 (Building 3110 and Building 3200) require close coordination with City construction contract. Programmer shall work closely with City and City's Contractor to execute work in accordance with the Milestones. Similar Milestone language will be included in City construction contract for installing and wiring control panels and related work.

Chemical feed and raw water systems, except as noted below, shall be available for operation at all times through construction.

### Milestone 1

1. Complete Task 2 (chemical feed and inventory AOI/UDT and screen development) as part of Milestone 1.

### Milestone 2

- Complete Task 3 as part of Milestone 2. This task milestone is coordinated with City's planned shutdown of Plant 3 during cold weather.
- 2. The City anticipates the raw water feed and chemical feed systems associated Plant 3 will be out of service from December 1, 2025 to March 1, 2026. Complete work associated with 3200-PLC-2 (Plant 3 Lime System) during the City's planned outage. Programmer shall have system integration work prepared for transition beginning December 1, 2025. Programmer shall closely coordinate with City and City Contractor to complete work during shutdown period.
  - a. City Contractor will install 3200-PLC-2, provide conduit, pull wiring and terminate wiring in 3200-PLC-2 to the extent possible prior to December 1, 2025.
  - b. Following the shutdown of Plant 3, City Contractor will transition related I/O from existing 3200-PLC-1&2 and complete field conduit, wiring and terminations. Note that existing PLC also includes I/O related to raw water control, chemical feed control and other unit processes that are transitioned as part of Milestone 3. Closely coordinate with City Contractor to transition the IO, Integrate, functionally test and complete training on the system prior to Plant 3 startup anticipated March 1, 2026.
  - c. City Contractor will install lime storage and day tank level transmitters prior to transitioning level switches. Programmer shall integrate system.
  - d. City Contractor will network batch lime slakers, one at a time. Programmer shall integrate system.
  - e. City can feed lime from Plant 3 to Plant 1&2 for testing. Coordinate testing needs and requirements with City.

## Milestone 3

- 1. Complete Tasks 4 and 5 as part of Milestone 3.
- Complete work associated with 3200-PLC-1 (Plant 3 Chemical Feed) and 3200-LCP-1 (Raw Water Control Panel).
  - a. City Contractor will install 3200-PLC-1 and 3200-LCP-1 and run conduit and wiring to the extent possible prior to beginning transitions. The goal is to minimize the transition time from the existing PLC to new PLC and minimize the impact to operations.
  - b. Transition related I/O from existing 3200-PLC-1&2.
    - a. Plant 3 raw water. Limit any local control of raw water valves (at the individual valve) to 8 hours.

- Ferric sulfate day tank fill is automated through PLC. Limit day tank transfer sequence outage to 8 hours.
- c. Complete work on one ferric sulfate chemical feed pump one pump at a time. Limit time when one pump is out of service to 4 hours.
- c. Coordinate Plant 1&2 raw water transition from existing 3110-PLC-3 to 3200-LCP-1 and 3200-PLC-1. Limit any local control of raw water valves (at the individual valve) to 8 hours.
- d. Note that raw water transition affects PLC messaging to many PLCs throughout the TRFP. Provide interim arrangements (If necessary) and final solution to manage PLC to PLC communications to affected PLCs.
- e. Coordinate carbon day tank fill transition from existing 3110-PLC-47 to 3200-PLC-1. Limit carbon day tank transfer outage to 8 hours if carbon system is in-service.
- f. City Contractor will remove existing 3200-PLC-1&2 following the completion of Milestone 3.
- Complete work associated with Softening Building PLCs (3110-PLC-3, 3110-PLC-4 and 3110-PLC-47) consolidated to new 3110-PLC-1.
  - a. Complete work as part of Milestone 3.
  - Coordinate raw water transition from existing 3110-PLC-3 to 3200-PLC-1 and 3200-LCP-1 (part of Milestone 2).
  - c. City Contractor will complete networking of existing lime paste slaking systems. Programmer shall complete integration of paste slakers prior to transitioning 3110 PLCs.
  - d. City Contractor is required to provide request to remove existing control panels minimum of 7 -days prior to removal.
  - e. City Contractor will run conduit and wiring to the extent possible prior to beginning transitions. Installing 3110-PLC-1 requires relocating parts of the MCCQ UPS. The goal is to minimize the transition time from the existing PLC to new PLC and minimize the impact to operations.
  - f. Remove 3110-PLC-3 and Install 3110-PLC-1.
    - i. Complete work associated with Milestone 2 prior to beginning transition to minimize risks associated with working on multiple lime systems concurrently.
    - ii. Remove wiring and control panel 3110-PLC-3 and install 3110-PLC-1. Complete removal and installation in 5 consecutive calendar days. Coordinate integration to Process Control System as part of transition. Provide for temporary alarming of Plant 1&2 lime system (status currently available to 3110-PLC-3) to CP-3 annunciator panel during transition.
  - g. Sequence transition of I/O from CP-5 to 3110-PLC-1.
    - i. Plant 1&2 lime system is primarily controlled through relay logic and local interactions at CP-5 with some status signals routed to 3110-PLC-3. Plant 1 & 2 transfer system allows for redundant lines of transfer. Contractor shall maintain automated lime transfer capabilities during transition either from CP-5 or Process Control System. Coordinate transition of conveyor and bucket elevator sequences with Owner. Sequences are described in Specification Section 40-61 16 Process Control Narratives.
    - Conveyor 3110-M-0404 does not have redundancy. Coordinate transition of this conveyor with Owner. Limit conveyor transition to 8 hours.
    - Complete transition of signals, startup and testing from existing CP-5 to 3110-PLC-1 in 10 consecutive calendar days.
    - iv. Provide lime storage and day tank level transmitters prior to transitioning level switches.
  - h. Sequence transition of I/O from 3110-PLC-47 to 3110-PLC-1.
    - Ferric sulfate day tank fill is automated through PLC. Limit day tank transfer sequence outage to 8 hours.
    - II. Complete work on one ferric sulfate chemical feed pump one pump at a time. Limit time when one pump is out of service to 4 hours.

## Task 1 Project Management

- 1.1 Prepare and manage project and project schedule. Ensure all work is executed in accordance with City Process Control System Standards and the SCADA Migration Development Plan.
- 1.2 Attend monthly progress review meetings and workshops. Keep minutes of meetings and workshops and distribute the meetings within 7-days.
- 1.3 Coordinate submittal reviews with Integration team, inspection team and City.
- 1.4 Coordinate validation, rollout and cutover with integration team, inspection team and City.
- 1.5 The following meetings (and meeting minutes) are required (at a minimum):
  - Project kickoff and monthly (or more often) task and schedule coordination meetings
  - Monthly progress meetings
  - Workshops described in Individual tasks
  - Other meetings aligned with SCADA Development Document and as necessary to execute work.

Task 2 Develop Standardized Chemical Feed and Storage System Feed Use and Inventory AOI/UDT and Level 1 and 2 HMI Screens

Deliver AOI and UDT and screen development into City systems ready for integration as part of Milestone 1. Task 2 shall not be incorporated into IFix. IFix will interface will the new programs but only maintain its existing functionality.

## Chemical Feed and Storage AOI and UDT

- 2.1 Develop PLC Add On Instruction (AOI), Ignition (User Data Type) UDT, develop standardized setpoint screens and layout of level 1 & 2 to manage chemical feed and chemical storage system use and inventory. With the Intent of developing screens that will allow process user interface consistency across the different systems. Chemical storage and feed systems consist of a wide range of bulk storage (liquid and solid), chemical transfer (liquid, solid and gas) and day tank arrangements for chemical systems including the following:
  - Carbon (raw water feed)
  - Ferric sulfate (raw water and secondary clarifier feed)
  - Polymer (raw water feed)
  - Lime (raw water feed)
  - Chlorine dioxide (filter feed)
  - Chlorine (re-carbonation and UV effluent)
  - Carbon dioxide (re-carbonation)
  - Ammonla (UV effluent)
  - Orthophosphate (combined UV effluent
  - Hydrofluosilicic acid fluoride (re-carbonation)

For each chemical storage/feed system provide chemical feed and inventory management. The calculation includes

- Changes in volumes and time to refill based on average daily use and average weekly use.
- Allows operator entered maximum fill and minimum fill volumes (mass/volume and level).
- Provides entry for chemical feed costs.
- Calculates chemical costs based on use.
- Displays volume, use and inventory tables.
- Allows for inputs to verify volume/level of bulk storage into PLC.
- Coordinates the PLC calculations with City planning for operator data entry into an Ignition database (separate from the process control system Historian database).
- Identifies other attributes as part of the coordination with City. Some examples include:

Provide standardized chemical use monitoring (volume/mass totalizers including today, yesterday, month to date, last month (allow searching for historical use):

- Bulk storage tank change in level (account for chemical fill)
- Day tank change in level
- Pump speed (based on calibration)
- Pump flow (if flow meter is provided)
- Chemical dosage.

Table 1 illustrates a chemical inventory concept.

Table 1 Chemical Use Concept

Flow	Chemical Feed	Flow Meter	Day Tank	Chemical Storage
Current Flow (ml/min or gal/hr)	VALUE FOR EACH C	HEMICAL		1
Flow Today				
Flow Yesterday				
Flow This Month				
Flow This Time Last Year	<b>-</b> [			
Calculated Inventory	The second secon			
Measured Inventory				
Time to Empty				
Recommended Order				

The chemical bulk storage, day tank transfer and day tank fill systems have unique elements that vary from chemical to chemical. To the extent practicable, coordinate and standardize systems with other chemicals. Coordinate the PLC calculations with City planning for operator data entry into an ignition database (separate from the process control system Historian database).

Level 1 and 2 SCADA Screens to Manage Chemical Feed/Chemical Inventory/Use and Rate Change

Incorporate chemical feed systems into rate change screens. Note that rate changes currently involve multiple manual updates to flow and chemical feed systems. The intent for the control improvements is

to automate rate changes through the unit processes including the chemical feed systems. At a minimum provide Level 1 and Level 2 monitoring for the updated rate change including:

- Raw water flow control (some elements part of future work package)
- Chemical feed systems
- Filter flow (part of separate work package)

Incorporate screen concepts for online versus manual sample validation. Some examples include:

- pH (part of this work package)
- Turbidity (future work packages)
- Chlorine residual (future work packages)
- UV 254 (future work packages)
- 2.2 Lead a minimum of three workshops to review and refine AOI and UDT and screen development.

# Task 3 Integrate Group 1 Systems

Table 2 summarizes the work package systems included in task 3 group 1. Complete work as part of Milestone 2. See work sequence requirements.

Table 2 Work Package 1 Task 3 Group 1 Systems

В	Building		New PLC Number	PLC Control Elements (Not a Complete List)	PLC Action <sup>1</sup>	OiT Action <sup>1</sup>
3200	PLANT 3 CHEMICAL BUILDING	3200-PLC- 1, 2	3200-PLC- 2	Plant 3 Lime System receiving and conveyance system.	PLC and control panel provided as part of planned City project. Program PLC as part of SCADA Mlgration.	Contractor install Ignition Edge Terminal as part of panel replacement. Integrate Ignition Edge OIT.t
3200	SOFTENING BUILDING		3200-PLC- 3	Plant 3 Paste lime slaker 1		. Update Panelview Configuration
3200	SOFTENING BUILDING	M H M N	3200-PLC- 4	Plant 3 Paste lime slaker 2		Update Panelview Configuration
3200	PLANT 3 CHEMICAL BUILDING	3200-PLC- 19	3200-PLC- 5	Batch Lime Slaking System 1 Slurry Aging Tank 1 and Grit Removal Plant 3 Lime Slurry Feed	Vendor PLC. Update to Ver 35. Program AOIs as subroutine. Update AOIs to support setpoint control and monitoring. Coordinate with Vendor.	No Action

PLC and Inductive Automation Ignition Integration

- 3.1 Review draft functional control narratives, IO lists, IO tagging and PIDs with City staff as part of a minimum of two workshops. Intent is to update/refine controls and IO to reflect monitoring and control expectations. Prior to Workshop 1:
  - Review existing PLC code and IO and compare to control narratives and IO lists.
  - Provide updated functional control narratives in Microsoft Word (track changes)
  - Provide updated IO list and tag list in Microsoft Excel Format. Provide tagging updates in accordance with the Process Control Standards. All tag lists must include folder structures for approval.
  - Provide redline PID markups related to work package elements.

Provide updated documents for Workshop 2.

Provide final updated documents at the end of the task.

- 3.2 Develop and submit HMI screen submissions and PLC and HMI tagging modifications based on control narratives, IO lists and PIDs. Develop HMI screens for the following:
  - Level 1 TRFP overview
  - Level 2 TRFP unit process overview
  - Level 3 Individual sub unit process diagrams and/or table views
  - Level 4 System controls and popups

Submit screens and review screens as part of Workshop 3. Develop and Programmer shall plan for 2-weeks for City to review and comment on submissions. Allow for a minimum of two follow up meetings to refine screen submissions.

Work package may include additional add on instruction (AOI) / user defined data type (UDT) templates considered as part of the updates (chemical storage for example). Provide separate workshops and submittals to refine AOI/UDT.

- 3.3 Prepare and submit Validation Plan requirements in accordance with Section 5.0 of SCADA Migration Development Plan including but not limited to:
  - Compare existing PLC program against edited version with PLC updates for tagging and add-on instruction (AOI) modifications as part of pre-submission QA/QC
  - Prepare Factory Acceptance Test (FAT) Plan for Rollout and Cutover
  - Prepare Site Acceptance Test (SAT) Plan for Rollout and Cutover
  - Prepare Training Plan
  - Prepare Submittal Plan.

Validation Plan shall plan transitions by unit process or sub-unit process for all systems associated with Table 2 also includes:

- All process systems.
- Ancillary systems associated with each unit process or sub-unit process and building services are coordinated with each transition.
- Historian data is maintained through the transition process. Tags will be remapped to support use of the current historian.
- Ignition systems are required to historize at minimum the data that is currently historized in IFIX.
- Coordinate iFIX screen transition with City to minimize disruptions/confusion when preliminary treatment can no longer be controlled from iFIX.

- 3.4 Confirm/Update PLC firmware, minimum version 35 (unless approved by City) based on work package requirements. Coordinate PLC replacements and OIT replacements with City.
- 3.5 Execute rollout requirements by unit process or sub-unit process in accordance with Section 6.0 of SCADA Migration Development Plan including but not limited to:
  - Complete FAT testing associated with the PLC program modifications and modifications to iFIX HMI
  - Integrate PLC updates and iFIX by unit process
  - Ensure Historian data is maintained through the transition process
  - Complete SAT testing to ensure functionality of system.
- 3.6 Execute cutover requirements by unit process or sub-unit process in accordance with Section 7.0 of SCADA Migration Development Plan including but not limited to:
  - Complete FAT testing associated with the PLC program modifications and modifications to Ignition Perspective HMI
  - Integrate PLC updates and ignition Perspective
  - Complete SAT testing.
  - Each current historian tag should be remapped to single PLC tag and maintain existing engineering units. Any tags not mapped will need owner approval.
  - Coordinate Proficy historian tag continuity.
  - Ensure continuity of totalized values.
  - Provide final markups to IO list (in Excel format) and PID redline markups).

## Training

3.7 Execute training and operability requirements (Section 8.0 and Section 9.0 of SCADA Migration Development Plan).

## Task 4 Integrate Group 2 Systems

Table 3 summarizes the work package systems included in task 4 group 2. Complete work as part of Milestone 3. See work sequence requirements.

Table 3 Work Package 1 Task 4 Group 2 Systems

Bullding		Old PLC Number	New PLC Number	PLC Control Elements (Not a Complete List)	PLC Action <sup>1</sup>	OIT Action <sup>1</sup>
3110	SOFTENING BUILDING	3110-PLC-3 3110-PLC-4 3110-PLC-47	3110- PLC-1	Plant 1 Lime System Plant 2 Lime System Ferric Sulfate Day Tanks 1 and 2 Plant 1 Ferric Sulfate Feed Plant 2 Ferric Sulfate Feed	PLC and control panel provided as part of planned City project. Program PLC as part of work package.	None
3110	SOFTENING BUILDING	3110-PLC-14	3110- PLC-2	St Marys Flow Meter Boller Sump Pumps	Update to Ver 35, Incorporate AOIs. Update programming	None

Ви	illding	Old PLC Number	New PLC Number	PLC Control Elements (Not a Complete List)	PLC Action <sup>1</sup>	OIT Action <sup>1</sup>
3110	SOFTENING BUILDING		3110- PLC-3	Vendor panel - Plant 1 and 2 lime paste slaker 1	Update to Ver 35, Incorporate AOIs. Update programming	Update Panelview Configuration
3110	SOFTENING BUILDING		3110- PLC-4	Vendor panel - Plant 1 and 2 lime paste slaker 2	Update to Ver 35, Incorporate AOIs. Update programming	Update Panelvlew Configuration
3110	SOFTENING BUILDING		3110- PLC-5	Vendor panel - Plant 1 and 2 lime paste slaker 3	Update to Ver 35, Incorporate AOIs. Update programming	Update Panelview Configuration
3110	SOFTENING BUILDING	ww. st. n.	3110- PLC-6	Vendor panel - Plant 1 and 2 lime paste slaker 4	Update to Ver 35, Incorporate AOIs. Update programming	Update Panelview Configuration
3200	PLANT 3 CHEMICAL BUILDING	3200-PLC- 1&2	3200- PLC-1	Plant 1, 2 and 3 Raw Water Plant 3 Polymer Ferric Sulfate Transfer Pumps 1 and 2 Ferric Sulfate Day Tanks 3 and 4 Ferric Sulfate Feed Pumps 4 and 5 (Plant 3) Carbon Transfer Pumps 4 and 5 Carbon Day Tanks 1, 2, 3 and 4 Plant 3 Polymer System	PLC and control panel provided as part of planned City project. Integrate PLC as part of work package.	None

PART III

PLC and Inductive Automation Ignition Integration

- 4.1 Review draft functional control narratives, IO lists, IO tagging and PIDs with City staff as part of a minimum of two workshops. Intent is to update/refine controls and IO to reflect monitoring and control expectations. Prior to Workshop 1:
  - Review existing PLC code and IO and compare to control narratives and IO lists.
  - Provide updated functional control narratives in Microsoft Word (track changes)
  - Provide updated IO list and tag list in Microsoft Excel Format. Provide tagging updates in accordance with the Process Control Standards. All tag lists must include folder structures for approval.
  - Provide redline PID markups related to work package elements.

Provide updated documents for Workshop 2.

Provide final updated documents at the end of the task.

- 4.2 Develop and submit HMI screen submissions and PLC and HMI tagging modifications based on control narratives, IO lists and PIDs. Develop HMI screens for the following:
  - Level 1 TRFP overview
  - Level 2 TRFP unit process overview
  - Level 3 Individual sub unit process diagrams and/or table views
  - Level 4 System controls and popups

Submit screens and review screens as part of Workshop 3. Develop and Programmer shall plan for 2-weeks for City to review and comment on submissions. Allow for a minimum of two follow up meetings to refine screen submissions.

- 4.3 Prepare and submit Validation Plan requirements in accordance with Section 5.0 of SCADA Migration Development Plan including but not limited to:
  - Compare existing PLC program against edited version with PLC updates for tagging and add-on instruction (AOI) modifications as part of pre-submission QA/QC
  - Prepare Factory Acceptance Test (FAT) Plan for Rollout and Cutover
  - Prepare Site Acceptance Test (SAT) Plan for Rollout and Cutover
  - Prepare Training Plan
  - Prepare Submittal Plan.

Validation Plan shall plan transitions by unit process or sub-unit process for all systems associated with Table 3 also including:

- Ancillary systems associated with each unit process or sub-unit process and building services are coordinated with each transition.
- Historian data is maintained through the transition process. Tags will be remapped to support use of the current historian.
- Ignition systems are required to historize at minimum the data that is currently historized in IFIX.
- Coordinate IFIX screen transition with City to minimize disruptions/confusion when preliminary treatment can no longer be controlled from IFIX.
- 4.4 Confirm/Update PLC firmware, minimum version 35 (unless approved by City) based on work package requirements. Coordinate PLC replacements and OIT replacements with City.
- 4.5 Execute rollout requirements by unit process or sub-unit process in accordance with Section 6.0 of SCADA Migration Development Plan including but not limited to:
  - Complete FAT testing associated with the PLC program modifications and modifications to IFIX HMI
  - Integrate PLC updates and IFIX by unit process
  - Ensure Historian data is maintained through the transition process
  - Complete SAT testing to ensure functionality of system.
- 4.6 Execute cutover requirements by unit process or sub-unit process in accordance with Section 7.0 of SCADA Migration Development Plan including but not limited to:
  - Complete FAT testing associated with the PLC program modifications and modifications to ignition
     Perspective HMI
  - Integrate PLC updates and Ignition Perspective
  - Complete SAT testing.
  - Each current historian tag should be remapped to single PLC tag and maintain existing engineering units. Any tags not mapped will need owner approval.

- Coordinate Proficy historian tag continuity.
- Ensure continuity of totalized values.
- Provide final markups to IO list (in Excel format) and PID redline markups).

# Training

4.7 Execute training and operablilty requirements (Section 8.0 and Section 9.0 of SCADA Migration Development Plan).

# Task 5 Integrate Group 3 Systems

Table 4 summarizes the work package systems included in task 5 group 3. Complete work as part of Milestone 3. See work sequence requirements.

Table 4 Work Package 1 Task 5 Systems Group 3 Systems

	Building	Old PLC Number	New PLC Number	PLC Control Elements (Not a Complete List)	PLC Action <sup>1</sup>	OIT Action
3100	CHLORINE STORAGE BULIDING	3100-PLC-5	3100-PLC-1	Chlorine Storage Ferric Storage	PLC replaced and programmed 2023, confirm AOIs Update to Ver 35.	None
3150	PLANT 1 CONTROL HOUSE	3150-PLC-201	3150-PLC-1	Plant 1 CO2	Update to Ver 35, Incorporate AOIs. Update programming	Update Panelview Configuration
3150	PLANT 1 CONTROL HOUSE	3150-PLC-202	3150-PLC-2	Plant 1 CO2	Update to Ver 35, Incorporate AOIs. Update programming	Update Panelview Configuration
3210	CARBON STORAGE	3210-PLC-50	3210-PLC-1	Carbon storage	Update to Ver 35, Incorporate AOIs. Update programming.	None
3250	PLANT 2 CONTROL HOUSE	3250-PLC-07	3250-PLC-1	Plant 2 ferric day tank and feed pumps Plant 2 ferric mixers Decant pumps Plant 2 primary and secondary clarification (future)	PLC replaced and programmed 2023. Update to Ver 35. Update programming.	None
3250	PLANT 2 CONTROL HOUSE	3250-PLC-203	3250-PLC-2	CO2 System	Update to Ver 35, Incorporate	Update Panelview Configuration

Building		Old PLC Number	New PLC Number	PLC Control Elements (Not a Complete List)	PLC Action <sup>1</sup>	OIT Action
					AOIs. Update programming	
3250	PLANT 2 CONTROL HOUSE	3250-PLC-204	3250-PLC-3	CO2 System	Update to Ver 35, Incorporate AOIs. Update programming	Update Panelvlew Configuration
3350	PLANT 3 CONTROL HOUSE	3350-PLC-08	3350-PLC-1	Plant 3 Ferric day tank and feed pumps Plant 3f flocculator Plant 3 primary and secondary sludge collection	PLC replaced and programmed 2023. Update to Ver 35. Update programming.	None
3350	PLANT 3 CONTROL HOUSE	3350-PLC-205	3350-PLC-02	Plant 3 CO2 System	Update to Ver 35, Incorporate AOIs. Update programming	Update Panelview Configuration
3350	PLANT 3 CONTROL HOUSE	3350-PLC-206	3350-PLC-03	Plant 3 CO2 System	Update to Ver 35, Incorporate AOIs. Update programming	Update Panelview Configuration

## PLC and Inductive Automation Ignition Integration

- 5.1 Review draft functional control narratives, IO lists, IO tagging and PIDs with City staff as part of a minimum of two workshops. Intent is to update/refine controls and IO to reflect monitoring and control expectations. Prior to Workshop 1:
  - Review existing PLC code and IO and compare to control narratives and IO lists.
  - Provide updated functional control narratives in Microsoft Word (track changes)
  - Provide updated IO list and tag list in Microsoft Excel Format. Provide tagging updates in accordance with the Process Control Standards. All tag lists must include folder structures for approval.
  - Provide redline PID markups related to work package elements.

Provide updated documents for Workshop 2.

Provide final updated documents at the end of the task.

- 5.2 Develop and submit HMI screen submissions and PLC and HMI tagging modifications based on control narratives, IO lists and PIDs. Develop HMI screens for the following:
  - Level 1 TRFP overview
  - Level 2 TRFP unit process overview
  - Level 3 Individual sub unit process diagrams and/or table views
  - Level 4 System controls and popups

Submit screens and review screens as part of Workshop 3. Develop and Programmer shall plan for 2-weeks for City to review and comment on submissions. Allow for a minimum of two follow up meetings to refine screen submissions.

- 5.3 Prepare and submit Validation Plan requirements in accordance with Section 5.0 of SCADA Migration Development Plan including but not limited to:
  - Compare existing PLC program against edited version with PLC updates for tagging and add-on instruction (AOI) modifications as part of pre-submission QA/QC
  - Prepare Factory Acceptance Test (FAT) Plan for Rollout and Cutover
  - Prepare Site Acceptance Test (SAT) Plan for Rollout and Cutover
  - Prepare Training Plan
  - Prepare Submittal Plan.

Validation Plan shall plan transitions by unit process or sub-unit process for all systems summarized in Table 4 also including:

- All process systems.
- Ancillary systems associated with each unit process or sub-unit process and building services are coordinated with each transition.
- Historian data is maintained through the transition process. Tags will be remapped to support use of the current historian.
- Ignition systems are required to historize at minimum the data that is currently historized in iFIX.
- Coordinate iFIX screen transition with City to minimize disruptions/confusion when preliminary treatment can no longer be controlled from iFIX.
- 5.4 Confirm/Update PLC firmware, minimum version 35 (Unless approved by City) based on work package requirements. Coordinate PLC replacements and OIT replacements with City.
- 5.5 Execute rollout requirements by unit process or sub-unit process in accordance with Section 6.0 of SCADA Migration Development Plan including but not limited to:
  - Complete FAT testing associated with the PLC program modifications and modifications to iFIX HMI
  - Integrate PLC updates and iFiX by unit process
  - Ensure Historian data is maintained through the transition process
  - Complete SAT testing to ensure functionality of system.
- 5.6 Execute cutover requirements by unit process or sub-unit process in accordance with Section 7.0 of SCADA Migration Development Plan Including but not limited to:
  - Complete FAT testing associated with the PLC program modifications and modifications to Ignition Perspective HMI
  - Integrate PLC updates and Ignition Perspective
  - Complete SAT testing.
  - Each current historian tag should be remapped to single PLC tag and maintain existing engineering units. Any tags not mapped will need owner approval.
  - Coordinate Proficy historian tag continuity.
  - Ensure continuity of totalized values.
  - Provide final markups to IO list (in Excel format) and PID redline markups).

## Training

5.7 Execute training and operability requirements (Section 8.0 and Section 9.0 of SCADA Migration Development Plan).

## **PART IV**

## A. SCHEDULE

The project will be completed per attached design schedule. This schedule is based on receiving a Notice to Proceed by <u>July 15, 2025</u> and receiving prompt review and approvals from City agencies and Program Manager (2-weeks per review are included in the schedule).

SCHEDULE	<u>DATE</u>
Task 1	Duration of Project
Milestone 1 (Task 2) Milestone 2 (Task 3)	September 30, 2025 March 1, 2026
Milestone 3 (Task 4 and 5)	March 1, 2026
Milestone 4 (Task 2)	January 1, 2027

## **B. OPTIONAL ADDITIONAL SERVICES**

Upon separate written authorization by City and negotiated fees, Engineer can provide the following additional services:

- Collaborate with Project Manager to evaluate the potential use of an emerging technology solution to
  assist in completion of project scope or add engineering value to project deliverables. "Emerging
  technology" shall be defined as pre-commercial, early commercial, or commercial technology within a
  new or existing application.
- "Engineering Value" defined as benefits to the City Including Improved project payback period or return
  on Investment; reduced waste, labor, energy consumption, chemical usage, maintenance requirements;
  and/or optimizing systems affected by project.
- This task may include the following activities: communication with third party technology vendors, performing research into identified technology solutions, and providing documentation of technical opinion.

## **CONTINGENCY TASKS** (but not specifically limited to):

Contingency Items are authorized by the Program Manager and shall have prior approval of fees prior to commencement.

· Attend additional meetings as needed to review and discuss the project.

### PART V

### COMPENSATION

### A. COMPENSATION

Compensation for services performed in accordance with Part I – Scope of Basic Engineering Services of this Agreement will be based on hours actually spent and expenses actually incurred with a not-to-exceed Engineering fee of \$431,810.00 as summarized in attached Attachment 1.

Engineer's costs will be based on the hours incurred to complete the project times the hourly rates of the various personnel, per Attachment 2 – Hourly Rate Schedule.

The Engineer shall provide the Services at the hourly rates attached hereto as Attachment 2 – Hourly Rate Schedule. The Engineer may propose adjustments to its hourly rates from time to time. To propose an adjustment in rates, Engineer shall submit a "Rate Adjustment Request" on a form made available by the City. All proposed adjustments are subject to City approval. If the proposed adjustments are approved, the adjustments shall become effective on the date identified in the Rate Adjustment Request form provided by Engineer, which shall thereafter be attached to the Agreement as an additional Exhibit. If the City rejects the proposed adjustments, the City shall provide written notice to the Engineer and the parties shall work in good faith to identify mutually acceptable hourly rates. If an agreement cannot be reached within (10) days following the date that the City provides written notice to the Engineer of its rejection of the proposed rates, the Engineer shall continue to provide the Services at the original agreed upon rates for the duration of this Agreement. Any adjustment of hourly results under this paragraph that is anticipated to increase the total Contract Price for the Services shall be approved by the Board of Public Works. Otherwise, Board approval shall not be required.

#### Expenses

Engineer will be reimbursed for travel related expenses, overnight stays, and other expenses per the table below. Per Diem reimbursement is only applicable for individuals traveling 50 miles or more to or from Fort Wayne. Overnight stay is not expected for an individual who is within a 100 mile range, unless expected for multiple days. Travel days are only applicable to individuals traveling 100 miles or more to or from Fort Wayne.

	Per Dlem Rat
Travel Day 1 (City or State)	\$112.00
Workshop	\$200
Non-Travel Day	\$68.00
Overnight Accommodations	\$108.00

Payment for outside consulting and/or professional services such as Geotechnical, Utility Locates, Registered Land Surveyor for easement preparation, or Legal Services performed by a Subconsultant at actual cost to ENGINEER plus 10 percent for administrative costs. The Engineer will obtain written City approval before authorizing these services.

### B. BILLING AND PAYMENT

## 1. Timing/Format

- a. Engineer shall invoice City monthly for Services completed at the time of billing. Such invoices shall be prepared in a form and supported by documentation as City may reasonably require and shall include the employee name and title of all staff billing to project.
- b. City shall pay Engineer within 30 days of receipt of approved invoice.
- c. Engineer shall invoice City in whole dollar amounts on the grand total of each invoice. Rounding shall be implemented only on grand total amounts and not subtotals of Individual tasks or fees. Contract amounts due to rounding may not exceed the not-to-exceed amount.
- d. To be considered for payment, invoicing for January through September must be received no later than 90 days from the end of the month that the services were provided. For services provided in the

- months of October, November, and December, invoices must be received by January 15<sup>th</sup> of the following year. Any invoices submitted after the deadlines noted in this paragraph will be considered late and may not be paid.
- e. By January 15<sup>th</sup> of each calendar year, the Engineer shall invoice the City for all outstanding services through December 31<sup>st</sup> of the prior year (Year End Invoice). If Engineer is unable to provide the Year End Invoice by January 15<sup>th</sup>, the Engineer shall notify the City Representative by January 15<sup>th</sup>, in writing, and shall coordinate with the City Representative to determine the earliest feasible date to deliver the Year End Invoice. Any Year End Invoices or notices submitted after the deadlines noted in this paragraph will be considered late and may not be paid.
- f. By January 10<sup>th</sup> of each calendar year, the Engineer shall provide City Representative, in writing, a list of any outstanding payments due (Aged Receivables) for services rendered through December 31<sup>st</sup> of the prior year. The City Representative shall review the list of Aged Receivables and confirm that they are being processed for payment.

## 2. Billing Records

Engineer shall maintain accounting records of its costs in accordance with generally accepted accounting practices. Access to such records will be provided during normal business hours with reasonable notice during the term of this Agreement and for 3 years after completion.

# PART VI Non-Consent Decree STANDARD TERMS AND CONDITIONS

- STANDARD OF CARE. Services shall be performed in accordance with the standard of professional practice ordinarily exercised by the applicable profession at the time and within the locality where the services are performed. No warranty or guarantee, express or implied, are provided, including warranties or guarantees contained in any uniform commercial code.
- 2. CHANGE OF SCOPE. The scope of Services set forth in this Agreement is based on facts known at the time of execution of this Agreement, including, if applicable, information supplied by ENGINEER and CITY. ENGINEER will promptly notify CITY of any perceived changes of scope in writing and the parties shall negotiate modifications to this Agreement.
- SAFETY. ENGINEER shall establish and maintain programs and procedures for the safety of its employees. ENGINEER specifically disclaims any authority or responsibility for general job site safety and safety of persons other than ENGINEER employees.
- 4. DELAYS. If events beyond the control of ENGINEER, including, but not limited to, fire, flood, explosion, riot, strike, war, process shutdown, act of God or the public enemy, and act or regulation of any government agency, result in delay to any schedule established in this Agreement, such schedule shall be extended for a period equal to the delay. In the event such delay exceeds 90 days, ENGINEER will be entitled to an equitable adjustment in compensation.
- 5. TERMINATION/SUSPENSION. Either party may terminate this Agreement upon 30 days written notice to the other party in the event of substantial failure by the other party to perform in accordance with its obligations under this Agreement through no fault of the terminating party. CITY shall pay ENGINEER for all Services, including profit relating thereto, rendered prior to termination, plus any expenses of termination.

ENGINEER or CiTY, for purposes of convenience, may at any time by written notice terminate the services under this Agreement. In the event of such termination, ENGINEER shall be paid for all authorized services rendered prior to termination including reasonable profit and expenses relating thereto.

- 6. REUSE OF PROJECT DELIVERABLES. Reuse of any documents or other deliverables, including electronic media, pertaining to the Project by CITY for any purpose other than that for which such documents or deliverables were originally prepared, or alternation of such documents or deliverables without written verification or adaptation by ENGINEER for the specific purpose intended, shall be at CITY's sole risk.
- 7. OPINIONS OF CONSTRUCTION COST. Any opinion of construction costs prepared by ENGINEER is supplied for the general guidance of the CITY only. Since ENGINEER has no control over competitive bidding or market conditions, ENGINEER cannot guarantee the accuracy of such opinions as compared to contract bids or actual costs to CITY.
- B. RELATIONSHIP WITH CONTRACTORS. ENGINEER shall serve as CITY's professional representative for the Services, and may make recommendations to CITY concerning actions relating to CITY's contractors, but ENGINEER specifically discialms any authority to direct or supervise the means, methods, techniques, sequences or procedures of construction selected by CITY's contractors.
- MODIFICATION. This Agreement, upon execution by both parties hereto, can be modified only by a written instrument signed by both parties.
- 10. PROPRIETARY INFORMATION. Information relating to the Project, unless in the public domain, shall be kept confidential by ENGINEER and shall not be made available to third parties without written consent of CITY.
- 11. INSURANCE. ENGINEER shall maintain in full force and effect during the performance of the Services the following insurance coverage; provided, however, that if a High Risk insurance Attachment is attached hereto, the requirements of the High Risk insurance Attachment shall be substituted in lieu of the following requirements;

a) Worker's Compensation per statutory requirements

b)General Llability \$1,000,000 minimum per occurrence/ \$1,000,000 aggregate (if the value of the projects exceeds \$10,000,000 then this shall be \$5,000,000 aggregate).

- c) Automobile Liability \$1,000,000 per occurrence
- d) Products Liability \$1,000,000 per occurrence
- e) Completed Operations Liability \$1,000,000 minimum per occurrence

The Certificate of Insurance must show the City of Fort Wayne, its Divisions and Subsidiaries as an Additional Insured and a Certificate Holder, with 30 days notification of cancellation or non-renewal. All Certificates of insurance should be sent to the following address:

City of Fort Wayne Purchasing Department

200 East Berry St., Suite #480

Fort Wayne, IN 46802

12. INDEMNITIES. To the fullest extent permitted by law, ENGINEER shall indemnify and save harmless the City from and against loss, liability, and damages sustained by CITY, its agents, employees, and representatives by reason of injury or death to persons or damage to tangible property to the extent caused directly by the negligent errors or omissions of ENGINEER, its agents or employees.

To the fullest extent permitted by faw, City shall indemnify and save harmless, Engineer from and against loss, liability, and damages sustained by Engineer, its agents, employees, and representatives by any reason of injury or death to persons or damage to tangible property to the proportionate extent caused by the negligence of City, its agents or employees.

- 13. LIMITATIONS OF LIABILITY. Each party's liability to the other for any loss, cost, claim, liability, damage, or expense (including attorneys' fees) relating to or arising out of any negligent act or omission in its performance of obligations arising out of this Agreement, shall be limited to the amount of direct damage actually incurred. Absent gross negligence or knowing and willful misconduct which causes a loss, neither party shall be liable to the other for any indirect, special or consequential damage of any kind whatsoever.
- 14. ASSIGNMENT. The rights and obligations of this Agreement cannot be assigned by either party without written permission of the other party. This Agreement shall be binding upon and insure to the benefit of any permitted assigns.
- 15. ACCESS. City shall provide ENGINEER safe access to any premises necessary for ENGINEER to provide the Services.
- 16. PREVAILING PARTY LITIGATION COSTS. In the event any actions are brought to enforce this Agreement, the prevailing party shall be entitled to collect its litigation costs from the other party.
- 17. NO WAIVER. No waiver by either party of any default by the other party in the performance of any particular section of this Agreement shall invalidate another section of this Agreement or operate as a waiver of any future default, whether like or different in character.
- 18. SEVERABILITY. The various term, provisions and covenants herein contained shall be deemed to be separate and severable, and the invalidity or unenforceability of any of them shall not affect or impair the validity or enforceability of the remainder.
- 19. AUTHORITY. The persons signing this Agreement warrant that they have the authority to sign as, or on behalf of, the part for whom they are signing.
- 20. STATUTE OF LIMITATION. To the fullest extent permitted by law, parties agree that, except for claims for indemnification, the time period for bringing claims regarding Engineer's performance under this Agreement shall expire one year after Project Completion.

## ATTACHMENT #1

## **SUMMARY SHEET**

# SCOPE OF BASIC ENGINEERING SERVICES FEE PROPOSAL

Task 1 - Project Management and Schedule

For Services outlined in Tasks 1.1 through 1.5 a not to exceed fee of:

\$40,890.00

Task 2 - Develop Standardized Chemical Feed and Storage System Feed Use and Inventory AOI/UDT and

Level 1/2 HMI Screens (Milestone 1)

For Services outlined in Tasks 2.1 through 2.4 a not to exceed fee of:

\$58,000.00 -

Task 3 - Integrate Group 1 Systems (Milestone 2)

For Services outlined in Tasks 3.1 through 3.7 a not to exceed fee of:

\$100,920.00

Task 4 - Integrate Group 2 Systems (Part of Milestone 3)

For Services outlined in Tasks 4.1 through 4.7 a not to exceed fee of:

\$168,200.00

Task 5 - Integrate Group 3 Systems (Part of Milestone 3)

For Services outlined in Tasks 5.1 through 5.7 a not to exceed fee of:

\$63,800.00

Optional Services - As authorized by PM

Contingency Allowance - As authorized by PM

For Additional Services and tasks required during the performance

of the work, but not specifically described herein, a sum not to exceed of :

\$0.00

TOTAL NOT TO EXCEED FEE:

\$431,810.00

# ATTACHMENT #2

# EMPLOYEE HOURLY RATE SCHEDULE

EMPLOYEE/SERVICE DESCRIPTION	RATE
David Houck/Engineer	\$145/Hour
Jim Hortenberry/Engineer	\$145/Hour
Andrew McCarel/IT Engineer	\$145/Hour
Joshua Houck/Engineer	\$145/hour
Controls Contract Group	\$145/hour

# Interoffice Memo

City Utilities Engineering

9- W/m 6/12/2025

Date:

6/12/2025

To:

Common Council Members

From:

Eric Ruppert, Manager, City Utilities Engineering

RE:

TRFP SCADA Migration - Work Package No. 1

WO#67290

## Council District # N/A - At Plants

Engineer shall provide the City professional Engineering services in all phases of the Project to which the scope of services applies. These services will include serving as City's representative for the Project, providing professional Engineering consultation and advice, and other customary services incidental thereto. SCADA Migration – Work Package No.1 work at the Three Rivers Filtration Plant for the continuing upgrade of the existing control system to a new platform. The work in this agreement includes the development of HMI screens, programming, and migration of the Raw Water, Chemicals and clarifiers coordinated with control room improvements (3110 and 3200) to the new Ignition platform at the Three Rivers Filtration Plant.

<u>Implications of not being approved</u>: SCADA is the control system for both the plants and is used to assist operators in monitoring/ managing processes. Due to changes in technology, our SCADA system has outlived its useful life. The SCADA Migration project involves replacing this system with a new platform that will be more widely supported and easier to modify in the future. This migration also implements high performance graphics to assist in the operation of the Water Pollution Control Plant.

## If Prior Approval is being Requested, Justify: N/A

## Selection and Approval Process:

The consultant was selected through the Request for Proposal process. A request for proposals was developed and sent to five shortlisted firms. Three shortlisted firms submitted Competitive Sealed Proposals for this portion of the project. A scoring matrix was used to score all firms based on responses to the RFP's. RFP scoring was based on expertise, qualifications, proposed scope of work and fee. Using this process, City Utilities Engineering selected Phoenix for this project and finds their scope and fee to be the best value for this project. The Board of Public Works approved the contract on June 10, 2025.

The cost of said project funded by: State Revolving Fund Water Bond

Council Introduction Date:

6/24/2025

CC: BOW

Matthew Wirtz Jill Helfrich

Construction Manager

File