

AN ORDINANCE approving PROFESSIONAL SERVICES AGREEMENT – TRFP SCADA MIGRATION – WORK PACKAGE 2 - WORK ORDER #67290 - \$586,520.00 (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. 2 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 SOLIDS, UV AND FILTERS (COORDINATED WITH CHEMICALS FOR FLUORIDE, ORTHOPHOSPHATE, CHLORINE AND AMMONIA) TO THE NEW IGNITION PLATFORM AT THE THREE RIVERS FILTRATION PLANT;

involving a not-to-exceed cost of FIVE HUNDRED EIGHTY-SIX THOUSAND FIVE HUNDRED TWENTY AND 00/100 DOLLARS - (\$586,520.00). A copy of said Contract is on file with the Office of the City Clerk and made available for public inspection, according to law.

SECTION 2. That this Ordinance shall be in full force and effect from and after its passage and any and all necessary approval by the Mayor.

Council Member

APPROVED AS TO FORM AND LEGALITY

Malak Heiny, City Attorney

PROFESSIONAL SERVICES AGREEMENT

("TRFP SCADA Migration – Work Package 2")

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 FOR CITY
BOARD OF PUBLIC WORKS

BY:


Shan Gunawardena, Chair

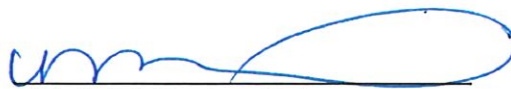
BY:


Kumar Menon, Member

BY:


Chris Guerrero, Member

ATTEST:


Michelle Fulk-Vondran, Clerk

DATE:

9.23.2025

APPROVED FOR ENGINEER

BY:

David Houck

Digitally signed by David Houck
Date: 2025.09.10 13:33:21 -04'00'

DATE:

PART I 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 executing 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 second 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 or the initial work package (Work Package 1). 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. 2

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:

PSA Attachments:

Attachment 1 – Process Control System Standards Document (issued electronically)

- All integration work shall align with City Process Control Standards.

Attachment 2 – City of Fort Wayne SCADA Migration Project Development Plan (March 2023 and Attachments) (issued electronically)

- All integration work shall follow the City's SCADA Migration Project Development Plan.

Attachment 3 – 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 iterative updates to the process control narratives through the workshopping process. At the end of the project, the Programmer shall provide an updated document in track changes. 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. The City will execute the final integration of the work packages into a single document.

Attachment 4 – 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 closely coordinate iterative updates to the PIDs through the workshopping process. At the end of the project, the Programmer shall provide an updated redlined document. The intent at the end of all work packages is to have a comprehensive document that reflects the TRFP and remote site PIDs. The City will translate the redlines into the existing Autocad drawings.

Attachment 5 – DRAFT Input / Output (IO) 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 through the workshopping process. The intent at the end of all work packages is to have a comprehensive document that reflects the TRFP and remote site IO. The City will execute the final integration of the work packages into a single document.

Attachment 6 – 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 7 –Existing HMI Screen Captures (available upon request)

Attachment 8 – DRAFT Professional Service Agreement (issued electronically in track changes)

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

Attachment 9 – Cost Summary Table and Proposed Schedule (issued electronically)

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

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 meeting minutes within 7-days.
- 1.3 Coordinate submittal reviews with the integration team, inspection team and City.
- 1.4 Coordinate validation, rollout and cutover with the 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 (tasks include minimum number of workshops, Programmer shall lead workshops as necessary to plan and execute work).
 - Other meetings aligned with SCADA Development Document and as necessary to execute work.

Task 2 Develop AOI / UDT for Ethernet AnalogIN, MotorCS and MotorAS (FWAnalogINdata, FWMotorCSdata and FWMotorASdata)

- 2.1 Develop AOI/UDT for an Analog input, constant speed motor and adjustable speed motor with data communicated to the PLC over Ethernet IP. These AOI's will be limited to 50 elements.
Task 2 shall not be incorporated into IFix. IFix will interface with the new programs but only maintain its existing functionality.
- 2.2 Workshop (Task 2 Workshop 1) details of AOI/UDTs with City. Concept is for the AOI/UDT to perform similar to existing AOI/UDTs.
- 2.3 Finalize AOI/UDT. Utilize AOI/UDT for systems including Plant 1 and 2 flocculators that are networked to PLCs. Coordinate with City to store completed AOI/UDTs to AssetCentre.
- 2.4 Complete work as part of Milestone 1.

Task 3 Integrate Groups 1 – 3 Systems

The tables below summarizes elements included in this task by grouping. The groupings have been developed to allow the City and Programmer to manage the integration process. Reference additional scope elements and details in the process control narratives.

- Only planned improvements as indicated in the supplied control narrative will be included if in place at the time of rollout, future improvements are not included.

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

Table 1 Work Package 2 Task 3 Group 1 Systems

Building		Old PLC Number	New PLC Number	PLC Control Elements (Not a Complete List)	PLC Action	OIT Action
3290	PLANT 2 FILTERS	3290-PLC-27	3290-PLC-1	Plant 2 Filter 11/13	Update firmware to Ver 35 or City standard. Update programming. Update messaging between Filter 3290-PLC-4, 3290-PLC-7, 3195-PLC-1 and other filter PLCs to direct message and align with City standards to the extent practicable.	City will update Ignition Edge terminal operating system from Linux to Microsoft Windows. Coordinate operating system update with City. Update graphics to Ignition Perspective. Align graphic with City standards, programming updates, HMI integration, and workshop discussion.
3290	PLANT 2 FILTERS	3290-PLC-28	3290-PLC-2	Plant 2 Filter 12/14		
3290	PLANT 2 FILTERS	3290-PLC-29	3290-PLC-3	Plant 2 Filter 15		
3290	PLANT 2 FILTERS	3290-PLC-30	3290-PLC-4	Plant 2 Filter 16		
3290	PLANT 2 FILTERS	3290-PLC-31	3290-PLC-5	Plant 2 Filter 17/19		
3290	PLANT 2 FILTERS	3290-PLC-32	3290-PLC-6	Plant 2 Filter 18/20	Update firmware to Ver 35 or City standard. Update programming.	None
3290	WASHWATER RETENTION TANK	3395-PLC-37	3290-PLC-7	Reclaim system. Sodium bisulfite.		
3580	WEST GATEHOUSE	----	3580-PLC-1	Coordinates with reclaim and Griswold lift station	Update firmware to Ver 35 or City standard. Update programming.	None

Table 2 summarizes the work package systems included in Task 3 Group 2. Complete work as part of Milestone 2. See work sequence requirements.

Table 2 Work Package 2 Task 3 Group 2 Systems

Building		Old PLC Number	New PLC Number	PLC Control Elements (Not a Complete List)	PLC Action	OIT Action
3190	PLANT 1 FILTERS	3190-PLC-21	3190-PLC-1	Plant 1 Filter 1/3	Update firmware to Ver 35 or City standard. Update programming.	City will update Ignition Edge terminal operating system from Linux to Microsoft Windows with City. Coordinate operating system update with City. Update graphics to Ignition Perspective. Align graphic with City standards, programming updates and workshop discussion.
3190	PLANT 1 FILTERS	3190-PLC-22	3190-PLC-2	Plant 1 Filter 2/4		
3190	PLANT 1 FILTERS	3190-PLC-23	3190-PLC-3	Plant 1 Filter 5		
3190	PLANT 1 FILTERS	3190-PLC-24	3190-PLC-4	Plant 1 Filter 6		
3190	PLANT 1 FILTERS	3190-PLC-25	3190-PLC-5	Plant 1 Filter 7/9		

Building		Old PLC Number	New PLC Number	PLC Control Elements (Not a Complete List)	PLC Action	OIT Action
3190	PLANT 1 FILTERS	3190-PLC-26	3190-PLC-6	Plant 1 Filter 8/10		

Table 3 summarizes the work package systems included in Task 3 Group 3. Complete work as part of Milestone 2. See work sequence requirements.

Table 3 Work Package 2 Task 3 Group 3 Systems

Building		Old PLC Number	New PLC Number	PLC Control Elements (Not a Complete List)	PLC Action	OIT Action
3390	PLANT 3 FILTERS	3390-PLC-33	3390-PLC-1	Plant 3 Filter 21/23	Update firmware to Ver 35 or City standard. Update programming.	City will update Ignition Edge terminal operating system from Linux to Microsoft Windows. Coordinate operating system update with City. Update graphics to Ignition Perspective. Align graphic with City standards, programming updates, HMI integration, and workshop discussion.
3390	PLANT 3 FILTERS	3390-PLC-34	3390-PLC-2	Plant 3 Filter 22/24		
3390	PLANT 3 FILTERS	3390-PLC-35	3390-PLC-3	Plant 3 Filter 25/27		
3390	PLANT 3 FILTERS	3390-PLC-36	3390-PLC-4	Plant 3 Filter 26/28		

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 three control narrative workshops. Intent is to update/refine controls and IO to reflect monitoring and control expectations. Prior to Workshop :
- 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 prior to workshops and lead workshops.
- Provide final updated documents at the end of the task.
- 3.2 Develop and submit HMI and OIT screen submissions and PLC and HMI tagging modifications based on control narratives, IO lists and PIDs. Develop HMI and OIT 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 HMI/OIT development workshop. Programmer shall plan for 2-weeks for City to review and comment on submissions. Allow for a minimum of three follow up meetings to refine screen submissions.

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 1 Work Package 2 , Table 2, and Table 3 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 the 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. See SCADA Migration Project Development Plan for details on updating calculated tags. Any tags not mapped will need City 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 Groups 1 and 2 Systems

The tables below summarize elements included in this task by grouping. Reference additional scope elements and details in the process control narratives.

- Only planned improvements as indicated in the supplied control narrative will be included if in place at the time of rollout, future improvements are not included.

Table 4 summarizes the work package systems included in Task 4 Group 1. Complete work as part of Milestone 2. See work sequence requirements.

Table 4 Work Package 2 Task 4 Group 1 Systems

Building		Old PLC Number	New PLC Number	PLC Control Elements (Not a Complete List)	PLC Action	OIT Action
3195	UV ROOM	3195-PLC-49 (UVD)	3195-PLC-1	UV Systems 1, 2 and 3 Orthophosphate feed Ammonia and chlorine feed Washwater Pumps Monitoring	Replace PLC and program as part of SCADA Migration project. City will provide PLC. Use chemical feed standards developed as part of Work Package 1. Coordinate updated programming and data transfers with UV vendor as necessary. City will compensate UV vendor for any vendor PLC panel updates separately.	City will update Ignition Edge terminal operating system from Linux to Microsoft Windows. Coordinate operating system updates with City. Update graphics to Ignition Perspective. Align graphics with City standards, programming updates, HMI integration, and workshop discussion. Remove PanelView. Provide aluminum plate to cover hole.
3195	UV ROOM	3195-PLC-38	3195-PLC-2	Vendor Panel - UV System 1	Vendor PLC, coordinate data transfer with SCADA Migration	No Action
3195	UV ROOM	3195-PLC-39	3195-PLC-3	Vendor Panel - UV System 2	Vendor PLC, coordinate data transfer with SCADA Migration	No Action
3195	UV ROOM	3195-PLC-40	3195-PLC-4	Vendor Panel - UV System 3	Vendor PLC, coordinate data transfer with SCADA Migration	No Action

Table 5 summarizes the work package systems included in Task 4 Group 2. Complete work as part of Milestone 2. See work sequence requirements.

Table 5 Work Package 2 Task 4 Group 2 Systems

Building		Old PLC Number	New PLC Number	PLC Control Elements (Not a Complete List)	PLC Action	OIT Action
3165	CHLORINE AND AMMONIA FEED ROOMS	PLC-54	3165-PLC-1	Vendor PLC chlorine dioxide generator 1	Vendor PLC, coordinate data transfer with SCADA Migration	No Action
3165	CHLORINE AND AMMONIA FEED ROOMS	PLC-55	3165-PLC-2	Vendor PLC chlorine dioxide generator 2	Vendor PLC, coordinate data transfer with SCADA Migration	No Action
3180	PLANT 1 SOUTH PASSAGEWAY	3180-PLC-6	3180-PLC-1	CO2 coordination Ammonia Storage and Feed Sodium Chlorite Storage Sodium Chlorite Transfer and Day Tanks Chlorine Feed	Update firmware to Ver 35 or City standard. Update programming. Use chemical feed standards developed as part of Work Package 1.	Remove existing PanelView. Provide aluminum plate to cover hole.
3180	PLANT 1 SOUTH PASSAGEWAY	3180-PLC-53	3180-PLC-2	Chlorine Dioxide Makeup and Feed Plants 1, 2 and 3	Update firmware to Ver 35 or City standard. Update programming. Use chemical feed standards developed as part of Work Package 1.	Update graphics and functionality on existing PanelView Plus 7
3280	PLANT 2 SOUTH PASSAGEWAY	3280-PLC-10	3280-PLC-1	Bulk orthophosphate storage Plant 2 analyzers	Update to Ver 35, Incorporate AOIs. Update programming. Use chemical feed standards developed as part of Work Package 1.	None
3380	PLANT 3 SOUTH PASSAGEWAY	3380-PLC-9	3380-PLC-1	Fluoride system Water quality analyzers	Update to Ver 35, Incorporate AOIs. Update programming. Use chemical feed standards developed as part of Work Package 1.	None

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 each workshop:

- 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 and lead each workshop

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 HMI/OIT development workshop. 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 4 and Table 5 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. See SCADA Migration Project Development Plan for details on updating calculated tags. Any tags not mapped will need City approval.
- Any tags not mapped will need City 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 operability requirements (Section 8.0 and Section 9.0 of SCADA Migration Development Plan).

Task 5 Integrate Group 1 Systems

The table below summarizes elements included in this task by grouping. Reference additional scope elements and details in the process control narratives.

- Only planned improvements as indicated in the supplied control narrative will be included if in place at the time of rollout, future improvements are not included.

Table 6 summarizes the work package systems included in Task 5 Group 1. Complete work as part of Milestone 2. See work sequence requirements.

Table 6 Work Package 2 Task 5 Group 1 Systems

Building		Old PLC Number	New PLC Number	PLC Control Elements (Not a Complete List)	PLC Action	OIT Action
3140	PLANT 1 NORTH PASSAGEWAY	3130-PLC-42	3140-PLC-1	Plant 1 Primary Lime Sludge Plant 1 Floc Mixers (future incorporate into HMI) Plant 1 Primary Collectors (future) Blowers (future) Plant 1 Analyzers, turbidity, temp, free chlorine	Replace PLC and program as part of SCADA Migration project. City will provide PLC.	Remove existing PanelView. Provide aluminum plate to cover hole. City will provide HMI. HMI is necessary prior to transitioning systems.
3260	PLANT 2 CENTER GALLERY	3260-PLC-43	3260-PLC-1	Plant 2 secondary lime sludge Plant 2 secondary flocculation		
3320	PLANT 3 NORTH GALLERY	3320-PLC-44	3320-PLC-1	Plant 2 primary lime sludge Plant 2 primary flocculation		
3340	PLANT 3 NORTH PASSAGEWAY	3340-PLC-46	3340-PLC-1	Plant 3 Primary Lime Sludge Groundwater Well No. 1 CO2 Storage		
3360	PLANT 3 CENTER GALLERY	3360-PLC-45	3360-PLC-1	Plant 3 Secondary Lime Sludge		

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 each workshop:

- 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 and lead workshops.

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 HMI/OIT development workshop. 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 associated with Table 6 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.
- 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. See SCADA Migration Project Development Plan for details on updating calculated tags. Any tags not mapped will need City approval.

- Any tags not mapped will need City 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).

Milestones and Work Sequence

- A. Programmer shall complete work in accordance with following requirements and to accommodate the operation of existing facilities during integration period. City will coordinate the Programmer's progress schedule with plant operations. Programmer shall provide City written notice 7 days (unless otherwise noted) prior to time when existing facilities must be taken out of service to perform Work. Not later than 7 days (unless otherwise noted) 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. Programmer shall schedule all planned shutdowns, downloads, outages, etc. to minimize interference with plant operations.

Filters, chemical feed, solids handling, and other systems, except as noted below, shall be available for operation at all times through construction.

Milestone 1

1. Complete Task 2 as part of Milestone 1 within 60 days of Notice to Proceed.

Milestone 2

1. Complete Milestone 2 within 300 days of Notice to Proceed.
2. Complete Task 3, Group 1 filters prior to Task 3, Groups 2 and 3.
 - a. Group 1 includes Plant 2 filters (3290- PLC-1 thru 6) and the washwater retention tank (3290-PLC-7). These PLCs were included in Group 1 to coordinate IO that is currently communicated from all filters, through Filter 15 PLC (3290-PLC-3) to 3290-PLC-7 and 3195-PLC-1. The City standard requires direct read messaging PLCs to the extent practicable. The current messaging arrangement was a legacy of Automation Direct PLCs that have been replaced.
 - b. Filter 15 controls the acid wash and air scour systems. Acid wash and air scour systems are necessary to backwash filters that have the acid wash and air scour improvements. Modifications to the messaging scheme and controls are necessary to support the future transition of IO to 3290-PLC-7. Limit Filter 15 outages to no more than 4 hours to maintain acid wash and air scour capabilities (on improved filters). and sustain messaging until messaging is updated.
 - c. No more than 2 filters can be taken out of service at a time. Filters shall be integrated and tested as part of the SCADA Development Plan, released by Programmer for operation, returned to service, and operate successfully for 3 consecutive calendar days and at least one backwash, prior to City providing next filter for integration.
 - d. Updating existing Ignition plant SCADA to use current templates and methods limiting the use of flex-repeaters to allow for more flexibility and maintenance.
 - e. Update Ignition UDTs in OITs so descriptions and functionality match plant SCADA.

- f. Washwater retention tank operation is necessary to backwash filters. City backwashes 6 – 8 filters per day. Programmer shall limit any retention tank outages to 4 hours. Closely plan outages with City to allow them to manage backwash cycles.
3. Task 4 Group 1 work requires replacing 3195-PLC-1.
 - a. Coordinate updates with Task 1 filter improvements.
 - b. Work on Task 4 can be concurrent to Tasks 3 and 5. Work shall not interfere with day to day operations.
 - c. 3195-PLC-1 monitors and manages parts of several processes including UV disinfection, chloramination (chlorine and ammonia feed to UV effluent) and orthophosphate addition (not including bulk storage). The PLC also brokers messaging between filters and retention tank. The intent is to separate this relationship to the extent practicable as part of Task 3.

Replacing the PLC or downloading to the PLC requires close coordination with Operations, including possibly stopping plant flow for a period of time. Programmer shall limit PLC transition and any PLC downloads to a period of 2 hours or less. Programmer shall complete site acceptance testing and return the systems to service based on the following general sequence and maximum allotted time. It is critical that the Programmer plans the shutdowns, functionally tests the systems and resolves messaging prior to replacing the PLC or downloading to the PLC to ensure reliable operation of the system. Any disruptions in 3195-PLC-1 can have significant impacts on treatment capacity and water quality. Limit unit process outages to the following schedules:

 - i. UV system (2 hours following initial PLC replacement / download).
 - ii. Ammonia and chlorine valves (1 hour) at this point the City may end shutdown, begin raw water pumping and treatment.
 - iii. Orthophosphate feed (2 hours)
 - iv. Other miscellaneous systems shall be (2 hours) unless approved by City.
 4. Task 5 includes systems associated with solids handling. The systems are dependent (to an extent) on each other, but independent of other TRFP operations. Work on solids handling can be completed concurrent to Tasks 3 and 4. Work requires removing existing OITs and replacing with HMIs. City will provide HMIs. Coordinate HMI installation schedule with City. HMI installation is necessary prior to beginning work on individual systems.

D. SCHEDULE

The project will be completed per design schedule. This schedule is based on receiving prompt review and approvals from City agencies and Program Manager (2-weeks per review are included in the schedule).

<u>SCHEDULE</u>	<u>DATE</u>
Task 1	Duration of Project
Milestone 1 (Task 2)	60 days from NTP
Milestone 1 (Task 3, 4 and 5)	300 days from NTP

E. 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 II

CITY'S RESPONSIBILITIES

City shall, at its expense, do the following in a timely manner so as not to delay the services:

A. INFORMATION REPORTS/CITY UTILITY MAPS/AERIAL MAPS/CONTOUR MAPS

Make available PLC programs, interface applications and any other information relevant to completing work.

B. REPRESENTATIVE

Designate a representative for the project who shall have the authority to transmit instructions, receive information, interpret and define City's requirements and make decisions with respect to the Services. The City representative for this Agreement will be Christos Kyrrou.

C. DECISIONS

Provide all criteria and full information as to City's requirements for the Services and make timely decisions on matters relating to the Services.

D. HARDWARE AND SOFTWARE

City will support the project through the transfer of PLCs and OIT Identified in Table 7. Programmer shall schedule and coordinate City support of project.

Table 7 City Support and Equipment

Building		Old PLC Number	New PLC Number	EXISTING PLC	City PLC Action	City HMI/OIT Action
3190	PLANT 1 FILTERS	3190-PLC-21	3190-PLC-1	1756-L81E LOGIX5581E	No Action	Update OIT operating system
3190	PLANT 1 FILTERS	3190-PLC-22	3190-PLC-2	1756-L81E LOGIX5581E	No Action	Update OIT operating system
3190	PLANT 1 FILTERS	3190-PLC-23	3190-PLC-3	1756-L81E LOGIX5581E	No Action	Update OIT operating system
3190	PLANT 1 FILTERS	3190-PLC-24	3190-PLC-4	1756-L81E LOGIX5581E	No Action	Update OIT operating system
3190	PLANT 1 FILTERS	3190-PLC-25	3190-PLC-5	1756-L81E LOGIX5581E	No Action	Update OIT operating system
3190	PLANT 1 FILTERS	3190-PLC-26	3190-PLC-6	1756-L81E LOGIX5581E	No Action	Update OIT operating system
3290	PLANT 2 FILTERS	3290-PLC-27	3290-PLC-1	1756-L81E LOGIX5581E	No Action	Update OIT operating system
3290	PLANT 2 FILTERS	3290-PLC-28	3290-PLC-2	1756-L81E LOGIX5581E	No Action	Update OIT operating system
3290	PLANT 2 FILTERS	3290-PLC-29	3290-PLC-3	1756-L71 LOGIX5571	No Action	Update OIT operating system
3290	PLANT 2 FILTERS	3290-PLC-30	3290-PLC-4	1756-L71 LOGIX5571	No Action	Update OIT operating system
3290	PLANT 2 FILTERS	3290-PLC-31	3290-PLC-5	1756-L81E LOGIX5581E	No Action	Update OIT operating system
3290	PLANT 2 FILTERS	3290-PLC-32	3290-PLC-6	1756-L81E LOGIX5581E	No Action	Update OIT operating system
3290	WASHWATER RETENTION TANK	3395-PLC-37	3290-PLC-7	1756-L81E LOGIX5581E	No Action	None
3390	PLANT 3 FILTERS	3390-PLC-33	3390-PLC-1	1756-L71 LOGIX5571	No Action	Update OIT operating system

Building		Old PLC Number	New PLC Number	EXISTING PLC	City PLC Action	City HMI/OIT Action
3390	PLANT 3 FILTERS	3390-PLC-34	3390-PLC-2	1756-L71 LOGIX5571	No Action	Update OIT operating system
3390	PLANT 3 FILTERS	3390-PLC-35	3390-PLC-3	1756-L71 LOGIX5571	No Action	Update OIT operating system
3390	PLANT 3 FILTERS	3390-PLC-36	3390-PLC-4	1756-L71 LOGIX5571	No Action	Update OIT operating system
3580	WEST GATEHOUSE	----	3580-PLC-1	Recently installed ControlLogix	No Action	No Action
3195	UV ROOM	3195-PLC-49 (UVD)	3195-PLC-1	1756-L71 LOGIX5571	Transfer 1756-L81E LOGIX5581E to Programmer	Update OIT operating system
3195	UV ROOM	3195-PLC-38	3195-PLC-2	1769-L33ER LOGIX5333ER	No Action	No Action
3195	UV ROOM	3195-PLC-39	3195-PLC-3	1769-L33ER LOGIX5333ER	No Action	No Action
3195	UV ROOM	3195-PLC-40	3195-PLC-4	1769-L33ER LOGIX5333ER	No Action	No Action
3165	CHLORINE AND AMMONIA FEED ROOMS	PLC-54	3165-PLC-1	1756-L71 LOGIX5571	No Action	No Action
3165	CHLORINE AND AMMONIA FEED ROOMS	PLC-55	3165-PLC-2	1756-L71 LOGIX5571	No Action	No Action
3180	PLANT 1 SOUTH PASSAGEWAY	3180-PLC-6	3180-PLC-1	1756-L71 LOGIX5571	No Action	No Action
3180	PLANT 1 SOUTH PASSAGEWAY	3180-PLC-53	3180-PLC-2	1756-L71 LOGIX5571	No Action	No Action
3280	PLANT 2 SOUTH PASSAGEWAY	3280-PLC-10	3280-PLC-1	1769-L33ER LOGIX5333ER	No Action	No Action
3380	PLANT 3 SOUTH PASSAGEWAY	3380-PLC-9	3380-PLC-1	1756-L81E LOGIX5581E	No Action	No Action
3140	PLANT 1 NORTH PASSAGEWAY	3130-PLC-42	3140-PLC-1	1756-L61 LOGIX5561	Transfer 1756-L81E LOGIX5581E to Programmer	Provide HMI
3260	PLANT 2 CENTER GALLERY	3260-PLC-43	3260-PLC-1	1756-L61 LOGIX5561	Transfer 1756-L81E LOGIX5581E to Programmer	Provide HMI
3320	PLANT 3 NORTH GALLERY	3320-PLC-44	3320-PLC-1	1756-L61 LOGIX5561	Transfer 1756-L81E LOGIX5581E to Programmer	Provide HMI
3340	PLANT 3 NORTH PASSAGEWAY	3340-PLC-46	3340-PLC-1	1756-L61 LOGIX5561	Transfer 1756-L81E LOGIX5581E to Programmer	Provide HMI
3360	PLANT 3 CENTER GALLERY	3360-PLC-45	3360-PLC-1	1756-L61 LOGIX5561	Transfer 1756-L81E LOGIX5581E to Programmer	Provide HMI

- City supplied HMI's for Galleries and Passageways listed in the table above will not be developed as local OIT's, but as SCADA nodes.

- City will compensate UV Vendor for any PLC work associated with UV vendor control panels. Programmer shall coordinate with UV vendor.
- City will supply all material.
- City will supply all dosing algorithms.

PART III

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 \$586,520.00 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.

	<u>Per Diem Rate</u>
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

- 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.
- City shall pay Engineer within 30 days of receipt of approved invoice.
- 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.
- 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 15th 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 15th of each calendar year, the Engineer shall invoice the City for all outstanding services through December 31st of the prior year (Year End Invoice). If Engineer is unable to provide the Year End Invoice by January 15th, the Engineer shall notify the City Representative by January 15th, 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 10th 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 31st 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 IV Non-Consent Decree STANDARD TERMS AND CONDITIONS

1. **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.

3. **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 alteration 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.

8. **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 disclaims any authority to direct or supervise the means, methods, techniques, sequences or procedures of construction selected by CITY's contractors.

9. **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*
- | | |
|---------------------------|-------------------------|
| Bodily Injury by Accident | \$500,000 each accident |
| Bodily Injury by Disease | \$500,000 policy limit |

- Bodily Injury by Disease \$500,000 each employee
- b) General Liability \$1,000,000 minimum per occurrence/ \$2,000,000 aggregate (if the value of the projects exceeds \$10,000,000 then this shall be \$5,000,000 aggregate).
- c) Automobile Liability, including Hired and Non-Owned Auto \$1,000,000 minimum per occurrence
- d) Products/Completed Operations Liability \$2,000,000 aggregate
- e) Personal & Advertising Liability \$1,000,000 any one person or organization

The Certificate of Insurance must show the City of Fort Wayne, its Divisions and Subsidiaries as an Additional Insured and a Certificate Holder, * except for Worker's Compensation, 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 law, 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 terms, 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: \$43,500.00

Task 2 -- Develop AOI/UDT

For Services outlined in Tasks 2.1 through 2.3 a not to exceed fee of: \$17,400.00

Task 3 - Integrate Group 1 Systems (Milestone 2)

For Services outlined in Tasks 3.1 through 3.7 a not to exceed fee of: \$182,120.00

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

For Services outlined in Tasks 4.1 through 4.7 a not to exceed fee of: \$226,200.00

Task 5 - Integrate Group 3 Systems (Part of Milestone 2)

For Services outlined in Tasks 5.1 through 5.7 a not to exceed fee of: \$107,300.00

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 : \$10,000.00

TOTAL NOT TO EXCEED FEE: \$586,520.00

ATTACHMENT #2

EMPLOYEE HOURLY RATE SCHEDULE

<u>EMPLOYEE/SERVICE DESCRIPTION</u>	<u>RATE</u>
David Houck/Engineer	\$145/Hour
Jim Hortenberry/Engineer	\$145/Hour
Andrew McCarel/IT Engineer	\$145/Hour
Joshua Houck/Engineer	\$145/hour

Interoffice Memo

City Utilities
Engineering

Date: 10/1/2025
To: Common Council Members
From: Eric Ruppert, Manager, City Utilities Engineering
RE: TRFP SCADA Migration – Work Package No. 2
WO#67290

Eric Ruppert
10/2/2025

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.2 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 Solids, UV and Filters (coordinated with chemicals for fluoride, orthophosphate, chlorine and ammonia) to the new Ignition platform at the Three Rivers Filtration Plant.

Implications of not being approved: 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 Three Rivers Filtration 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 professional service agreement on September 23, 2025.

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

Council Introduction Date: 10/14/2025

CC: BOW
Matthew Wirtz
Jill Helfrich
Construction Manager
File