



*HILLERS ELECTRICAL ENGINEERING, INC.*

September 29, 2025

Ms. Anjuli Panse, PE  
Village of Wellington  
1100 Wellington Trace  
Wellington, FL 33414

Subject: Village of Wellington Utilities Operational Technology Master Plan

Dear Juli:

Hillers Electrical Engineering, Inc. (HEE) is pleased to provide the Village of Wellington (Village) this proposal for professional engineering services for the subject project.

This proposal is based on the attached document "Engineering Services for Preparation of an Operational Technology Master Plan " dated September 29, 2025.

Hillers Electrical Engineering (HEE) together with subconsultant Hazen and Sawyer (Hazen) (Hillers Team) will evaluate current and emerging technologies related to process control, monitoring, communication, and networking throughout the Village's utility system. Emphasis will be placed on replacement of the existing TropOS microwave radio communications system and the development of a high-level Operational Technology Master Plan identifying capital improvement projects for inclusion in the Villages Capital Improvement Program. The project will include a series of workshops with Village staff to discuss the current technology platforms deployed throughout the utility and discuss applicability of current and emerging technologies to Village systems. Technical memoranda will be produced for the recommended replacement approach to the TropOS microwave radio communications system and for the Operational Technology Master Plan. The project will be performed on an hourly, not-to-exceed fee basis.

Our proposed hourly, not-to-exceed engineering services fee budget is: \$123,000.52

HEE thanks the Village for the opportunity to assist with this project. Please do not hesitate to call me if you have any questions regarding this proposal or any other related matter.

Sincerely,

Mark E. Luther, PE  
MEL/mel

Attachments

E:\Business Development\Proposal\Wellington\Operational Technology Master Plan\Village of Wellington - Operational Technology Master Plan 09292025.docx

## **Engineering Services for Preparation of an Operational Technology Master Plan**

**Services to be Provided by:** Hillers Electrical Engineers (HEE) and Hazen & Sawyer (Hazen)

**Services Provided to :** Village of Wellington Utilities (Village)

**Proposal Date:** September 29, 2025

### **PROJECT DESCRIPTION**

Village of Wellington operates a 13 MGD nanofiltration water treatment plant and a 10 MGD wastewater treatment plant, in addition to collection, distribution and stormwater management assets connected to the utility communications network. The Village desires a high level, forward looking master plan identifying capital improvement projects leveraging current and emerging technologies that support operational efficiency, resiliency, reliability, maintainability, and emergency responsiveness, in line with applicable Village core values; projects could be further evaluations, studies or designs for implementation.

The master plan shall evaluate technologies in the following subjects:

- PLC's / Process Control / SCADA
- Networking / Communications (onsite and offsite); Village Fiber Optics
- Workflow Optimization
- Edge upgrades (Outside Plant)
- Resiliency

As related to the following Village facilities:

- WRF
- WTP
- Raw water supply wells
- Lift stations
- Booster Pump Stations
- Reclaimed Stations
- Stormwater PS

HEE/Hazen will engage village staff in workshops (quantity as appropriate) to discuss application of various technologies as it relates to the Village operations; discuss /evaluate appropriateness of the technology and whether infrastructure currently exists within utility facilities to implement or needs to be created.

HEE/Hazen will leverage experience with utility peers (similarly sized municipalities/utilities) who are piloting, or implementing, forward-looking technologies and distill the information into high level objectives and challenge points for Village's consideration.

The Village is presently evaluating cybersecurity under a separate project, and the subject will not be included in this evaluation; however, outcomes and policies resulting from that project will be considered in the course of evaluations in this project. Similarly, the village maintains an asset management system for cataloging and maintaining physical system components and this subject will not be included in the master plan evaluations and recommendations. Also excluded from evaluation and recommendation are the subjects of regulatory upgrades and redundancy as these subjects are addressed in various ongoing capital projects.

Subsequent to technical evaluations and workshops, technical memoranda will be prepared to memorialize the evaluation results and recommendations for further action (further evaluation, implementation strategies, engineering designs) as appropriate.

## **SCOPE OF SERVICES**

### **Task 1 – Project Initiation**

Following receipt of a Project Notice-to-Proceed, and as soon as practicable for all parties, key members of the project team will organize and lead a kick-off meeting with the Village staff to discuss the overall work plan, project goals, schedule and make formal requests for data pertinent to the project goals. Lines of communication will be established, data needs will be assessed, and requested, where appropriate.

Key elements will be discussed during the kick-off meeting. Kick-off meeting minutes will be prepared and distributed by the project team.

#### **Task 1 Deliverable:**

1.1 – Minutes from project kick-off meeting

### **Task 2 – TropOS Radio Telemetry System Replacement Technology Evaluation**

Perform an evaluation of technologies to upgrade the existing radio telemetry communication system implemented for remote monitoring and control throughout the Village for collection, distribution, raw water, and stormwater facilities. Evaluate Replacement of the mesh telemetry system in-kind, including evaluation of backhaul radios. Consider alternatives such as licensed radio with cellular backup or dedicated cellular communications (e.g., AT&T FirstNET). Hold technology workshops with Village staff to discuss evaluations and recommendations. Prepare a technical memorandum to memorialize the evaluations, conclusions, and recommendations, resulting from the workshops. The technical memorandum shall be a high-level evaluation with recommendations for implementation and budgetary costs.

#### **Task 2 Deliverable:**

2.1 – TropOS Radio Telemetry System Replacement Technology Evaluation Technical Memorandum.

### **Task 3 - Utilities Wide Operational Technology Master Plan**

Evaluate existing utility technology assets against current and emerging technologies that support operational efficiency, resiliency, reliability maintainability, and emergency responsiveness, to create a forward-looking utilities digital master plan with defined capital improvement projects and budgetary costs. ). Hold technology workshops with Village staff to discuss evaluations and recommendations. Prepare a technical memorandum to memorialize the evaluations, conclusions, and recommendations, resulting from the workshops. The technical memorandum shall be a high-level evaluation with recommendations for implementation and budgetary costs.

- Perform an inventory of existing technology assets across the Village; assess age, condition, need for replacements, upgrades/additions
- Evaluate leasing dark fiber or installing fiber between the two treatment plants to increase resiliency. Consider other sites where fiber connections would be advantageous
- Evaluate implementation of radar or ultrasonic sensors to report lift station levels to SCADA in real-time for predictive flow management and predictive maintenance
- Evaluate implementation of ISA 101 standards for high performance HMI graphics to reduce operator error and improve situational awareness, safety, and compliance
- Evaluate creating a standards manual and templates for SCADA HMI graphics congruent with ISA 101 for use in future capital projects requiring HMI graphics modifications or deployment
- Evaluate implementation of smart sensors for predictive maintenance and smart leak

detection using Industrial Internet-of-Things (IIoT) technology

- Evaluate implementation of a Digital Twin Simulation model using artificial intelligence and SCADA historical data to allow training, emergency simulation, and testing of process optimizations without risk to operations
- Evaluate integration of artificial intelligence with plant control systems for model-driven optimization of operations such as chemical dosing, aeration, and filtration to improve efficiency and compliance margins while reducing chemical and energy usage
- Evaluate implementation of smart meters on facility power distribution systems to track real-time energy usage and integrate with VTSCADA for use in process optimization
- Evaluate implementation of tablets with mobile maintenance forms to replace “paper” logs and improve traceability, compliance tracking, and visibility
- Evaluate the implementation of custom internal-only facility dashboards in VTSCADA or other software for decision makers displaying key performance metrics and trends (water compliance, energy consumption, efficiency)
- Evaluate implementing alarm notification tools available in VTSCADA or external software packages to improve emergency responsiveness
- Evaluate implementing advanced analytics in VTSCADA to detect trends or anomalies to signal potential process upsets or failures

#### Task 3 Deliverable:

#### 3.1 – Utilities Wide Digital Master Plan Technical Memorandum

##### **ASSUMPTIONS**

1. Project will be executed on a time and materials, not-to-exceed basis.
2. It is anticipated that up to six (6) two-hour workshops will be conducted with Village staff, HEE and Hazen to discuss and evaluate technologies.
3. Technical memoranda will be high-level in nature describing CIP projects related selected technologies by the Village and next steps for further investigation or implementation.

##### **SCHEDULE**

<b>Task</b>	<b>Description</b>	<b>Time of Completion from NTP</b>
1.1	Projection Initiation	2 weeks
2.1	TropOS Radio Telemetry System Replacement Technology Evaluation Technical Memorandum	8 weeks
3.1	Utilities wide Digital Master Plan	24 weeks

**Utilities Operational Technology Master Plan**  
**Village of Wellington Utilities**  
**HILLERS ELECTRICAL ENGINEERING, INC.**  
**Scope Fee Breakdown -Study Phase Services**  
**Date: 9/29/2025**

Rate	\$229.95	\$187.52	\$167.58	\$155.17	\$112.50	\$101.25	\$149.31	\$138.41				
	Principle	Project Manager	Professional Engineer	Lead Engineer	Designer	CADD/ Technician	Construction Coordinator	Lead field Inspector	Total Task	SUBTOTAL	Subconsultant	TASK TOTAL
PHASE OF WORK	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Cost	Cost	Cost
Construction Phase												
Task 1:Project Initiation	4		8						12	\$2,260.44		\$2,260.44
Task 2:Tropos Radio Telemetry System Replacement Technology Evaluation	12		46						58	\$10,468.08		\$10,468.08
Task 3:Utilities Wide Operational Technology master Plan	40		300						340	\$59,472.00		\$59,472.00
Subconsultants-Hazen and Sawyer											\$50,800.00	
Totals	56		354						410			\$72,200.52
Cost by Labor Rate	\$12,877.20		\$59,323.32							\$72,200.52	\$50,800.00	\$123,000.52

# Proposal to Provide

## Support for Development of a Operational Technology Master Plan

**Services to be provided by:** Hazen and Sawyer (Hazen)

**Services provided to (“Village”):** Hillers Electrical Engineers (HEE)

**Proposal Date:** September 30, 2025

### Proposal Terms

#### PROJECT DESCRIPTION

Village of Wellington operates a 13 MGD nanofiltration water treatment plant and a 10 MGD wastewater treatment plant, in addition to collection, distribution and stormwater management assets connected to the utility communications network. The Village desires a high level, forward looking master plan identifying capital improvement projects leveraging current and emerging technologies that support operational efficiency, resiliency, reliability, maintainability, and emergency responsiveness, in line with applicable Village core values; projects could be further evaluations, studies or designs for implementation.

The master plan will evaluate technologies in the following subjects:

- PLC’s / Process Control / SCADA
- Networking / Communications (onsite and offsite); Village Fiber Optics
- Workflow Optimization
- Edge upgrades (Outside Plant)
- Resiliency

As related to the following Village facilities:

- WRF
- WTP
- Raw water supply wells
- Lift stations
- Booster Pump Stations
- Reclaimed Stations
- Stormwater PS

Hiller Electrical Engineering (HEE)/Hazen and Sawyer (Hazen) will engage village staff in workshops (quantity as appropriate) to discuss application of various technologies as it relates to

the Village operations; discuss /evaluate appropriateness of the technology and whether infrastructure currently exists within utility facilities to implement or needs to be created. HEE/Hazen will leverage experience with utility peers (similarly sized municipalities/utilities) who are piloting, or implementing, forward-looking technologies and distill the information into high level objectives and challenge points for Village's consideration. Subsequent to technical evaluations and workshops, technical memoranda will be prepared to memorialize the evaluation results and recommendations for further action (further evaluation, implementation strategies, engineering designs) as appropriate. Hazen will provide the following services as a subconsultant to HEE to support the development of the master plan.

## **SCOPE OF SERVICES**

### **Task 1 – Project Initiation**

Following receipt of a Project Notice-to-Proceed, and as soon as practicable for all parties, key members of the project team will organize and lead a kick-off meeting with the Village staff to discuss the overall work plan, project goals, schedule and make formal requests for data pertinent to the project goals. Lines of communication will be established, data needs will be assessed, and requested, where appropriate. Key elements will be discussed during the kick-off meeting. Notes will be prepared and distributed from Hazen to HEE.

Task 1 Deliverable:

1.1 – Notes from project kick-off meeting

### **Task 2 – TropOS Radio Telemetry System Replacement Technology Evaluation**

Perform an evaluation of technologies to upgrade the existing radio telemetry communication system implemented for remote monitoring and control throughout the Village for collection, distribution, raw water, and stormwater facilities. Evaluate Replacement of the mesh telemetry system in-kind, including evaluation of backhaul radios. Consider alternatives such as licensed (900 MHz) radio with cellular backup or dedicated cellular (e.g., AT&T FirstNET). Hold technology workshops with Village staff to discuss evaluations and recommendations. Prepare a technical memorandum to memorialize the evaluations, conclusions, and recommendations, resulting from the workshops. The technical memorandum shall be a high-level evaluation with recommendations for implementation and budgetary costs. Hazen will lead the development of the technical memorandum and provide draft and final versions to HEE.

Task 2 Deliverable:

2.1 – TropOS Radio Telemetry System Replacement Technology Evaluation Technical Memorandum.

### **Task 3 - Utilities Wide Digital Master Plan**

Evaluate existing utility technology assets against current and emerging technologies that support operational efficiency, resiliency, reliability maintainability, and emergency responsiveness, to create a forward-looking utilities digital master plan with defined capital improvement projects

and budgetary costs. ). Hold technology workshops with Village staff to discuss evaluations and recommendations. Prepare a technical memorandum to memorialize the evaluations, conclusions, and recommendations, resulting from the workshops. The technical memorandum shall be a high-level evaluation with recommendations for implementation and budgetary costs.

- Perform an inventory of existing technology assets across the Village; assess age, condition, need for replacements, upgrades/additions
- Evaluate leasing dark fiber or installing fiber between the two treatment plants to increase resiliency. Consider other sites where fiber connections would be advantageous
- Evaluate implementation of radar or ultrasonic sensors to report lift station levels to SCADA in real-time for predictive flow management and predictive maintenance
- Evaluate implementation of ISA 101 standards for high performance HMI graphics to reduce operator error and improve situational awareness, safety, and compliance
- Evaluate creating a standards manual and templates for SCADA HMI graphics congruent with ISA 101 for use in future capital projects requiring HMI graphics modifications or deployment
- Evaluate implementation of smart sensors for predictive maintenance and smart leak detection using Industrial Internet-of-Things (IIoT) technology
- Evaluate implementation of a Digital Twin Simulation model using artificial intelligence and SCADA historical data to allow training, emergency simulation, and testing of process optimizations without risk to operations
- Evaluate integration of artificial intelligence with control systems for model-driven optimization of operations such as chemical dosing, aeration, and filtration to improve efficiency and compliance margins while reducing chemical and energy usage
- Evaluate implementation of smart meters on facility power distribution systems to track real-time energy usage and integrate with VTSCADA for use in process optimization
- Evaluate implementation of tablets with mobile maintenance forms to replace “paper” logs and improve traceability, compliance tracking, and visibility
- Evaluate the implementation of custom internal-only facility dashboards in VTSCADA or other software for decision makers displaying key performance metrics and trends (water compliance, energy consumption, efficiency)
- Evaluate implementing alarm notification tools available in VTSCADA or external software packages to improve emergency responsiveness
- Evaluate implementing advanced analytics in VTSCADA to detect trends or anomalies to signal potential process upsets or failures

HEE will be the lead for Task 3, with Hazen providing support on an as-needed basis.

Task 3 Deliverable:

### 3.1 – Utilities Wide Digital Master Plan Technical Memorandum



## ASSUMPTIONS

1. The Village is presently evaluating Cyber Security under a separate project, and the subject will not be included in this evaluation; however, outcomes and policies resulting from that project will be considered in the course of evaluations in this project.
2. The village maintains an asset management system for cataloging and maintaining physical system components and this subject will not be included in the master plan evaluations and recommendations.
3. Also excluded from evaluation and recommendation are the subjects of regulatory upgrades and redundancy as these subjects are addressed in various ongoing capital projects.

## SCHEDULE

Task	Description	Time of Completion from NTP
1	Projection Initiation	2 weeks
2	TropOS Radio Telemetry System Replacement Technology Evaluation Technical Memorandum	8 weeks
3	Utilities wide Digital Master Plan	24 weeks


## COMPENSATION

Compensation for all tasks, unless specifically noted below, will be billed on a lump sum basis based on percent of work complete and total project fees presented in Attachment A.

## AUTHORIZATION

Work described in this proposal will commence upon authorization to proceed and receipt of a signed agreement.

### Hazen and Sawyer (Hazen)

Signed:  \_\_\_\_\_

Name: Kurt Pfeffer, PE

Title: Vice President

Date: 9/30/2025

### Hiller Electrical Engineers (HEE)

Signed: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**ATTACHMENT A**

BUDGET SUMMARY - Not To Exceed

Task No.	Description	BUDGET SUMMARY for Technology Master Plan							
		Vice President	Senior Associate	Principal Engineer	Engineer/ Asst Engr	Principal Designer	Office	Total Labor	Sub-Consultant
1	Project Initiation	8	8	8	0	0	4	28	\$0
2	Telemetry Replacement Evaluation	32	16	0	48	8	4	108	\$0
3	Master Plan	32	16	40	0	8	8	104	\$0
	SUB-TOTAL	72	40	48	48	16	16	240	\$0
	Labor Raw Costs	\$296	\$266	\$165	\$143	\$155	\$99		
	Labor Sub-Total	\$21,312	\$10,640	\$7,920	\$6,864	\$2,480	\$1,584		
	Labor Total							\$50,800	
	Subconsultant Labor Total	\$0							
	Subconsultant Multiplier	1.0							
	Subconsultant Total	\$0							
	Reimbursable Expenses	\$0							
	Project Total	\$50,800							