



Village of Wellington (VOW)  
12300 Forest Hill Boulevard  
Wellington, FL 33414

October 4<sup>th</sup>, 2018

Project No. 18-1244

Attention: Mr. Bradley C. Wolak, P.E., PMP, Assistant Director, Utilities

Reference: Utility System GIS Update, Village of Wellington, Florida

Dear Mr. Wolak:

Based upon your request, Keshavarz & Associates, Inc. ("Consultant") is pleased to present you with this proposal for professional services. It is our understanding that the Village of Wellington (VOW) would like to update the GIS database for the VOW's potable water distribution system with the goal of generating a complete and comprehensive system including the water mains, valves and hydrants. For several months, the VOW staff have identified several potable water facilities that need to be incorporated in the GIS database and have identified over 4,000 valves, hydrants, air release valves etc. VOW have also contracted with Hydromax to exercise several valves throughout the VOW. During this process, several additional valves have been identified. It is anticipated that Hydromax will be finished testing the valves prior to the Consultant's receipt of the Notice to Proceed. For the purposes of this proposal, it is assumed that up to 5,000 water system facilities will need to be reviewed and verified for incorporation into the potable water distribution system GIS database.

Consultant's role will be one of project management, coordination and administrative services. Consultant has been made aware that Florida Technical Consultants, LLC (FTC), a firm familiar to the Consultant, has been assisting VOW in updating and upgrading their GIS system/databank. As such, Consultant intends to assign the execution of technical matters to FTC and only carry out coordination and project management services to assist VOW with the GIS system updates and the generation of an Outage Management Tool. Please refer to the Subconsultant agreement attached hereto. In order to successfully implement this project, frequent communication and coordination will need to occur between the GIS subconsultant, VOW GIS staff and VOW Utilities staff.

More specifically our scope of services is as follows:

1. Project Management – The Consultant shall actively manage its personnel together with its sub-consultant(s) towards the proper and successful execution of VOW's objectives in the context of the project scope. Consultant's "Project Management" responsibilities range from internal to external methods and approaches affecting the general advancement of the project.



The Consultant shall attend up to three (3) meetings with VOW staff for progress status review. We are anticipating a project kickoff meeting, interim progress meeting and project wrap up meeting. Consultant will lead each of these meetings and provide a meeting agenda and meeting minutes within three (3) business days of the meeting. These meetings will be exclusive of other meetings identified herein.

2. Potable Water System GIS Update – The Consultant, through it's Sub-Consultant, FTC, will update the VOW's potable water distribution GIS database. The facilities / data points identified by the VOW staff and Hydromax (up to 5,000 points) will be reviewed for incorporation into the system. The Consultant shall review the information provided by the VOW and shall compare the information with the GIS system and incorporate added facilities as necessary. It is our understanding that the VOW will provide the facilities / data points with three photographs with offsets from fixed features (pavement, tree, pole, etc.) identifying the location. The Consultant shall review this information and incorporate the facility into the GIS database accordingly. In the event the provided information does not coincide with the GIS database, the Consultant shall coordinate with VOW Staff, review record drawings to update the GIS database as necessary.

The Consultant shall provide the VOW with an updated potable water distribution system GIS database to include the following information:

- Water Mains (Size, Material, Year Installed)
- Water System Valves (Size, Type)
- Water Control Valves (Air Release Valves) (Size, Type)
- Hydrants (ID)

The Consultant shall provide the VOW with periodic updates of the GIS system on a monthly basis by posting the results / progress on the online GIS platform already in use by the VOW.

3. Outage Management Tool:

The Constant shall develop an Outage Management Tool (ESRI Desktop and Web Based Version) and will install it on the VOW server. Four hours of training will be provided to VOW staff for the use of this tool.

This tool will allow VOW staff to:

- Mark the break location
- Identify valves to be closed
- Identify affected properties
  - Based upon meter locations provided by VOW
  - Service connection lines will be drawn from the VOW provided meter locations to the nearest water main





Assumptions:

- VOW IT Department will assist with software and hardware installations.
- VOW to provide record drawings, CAD plans and other pertinent data.
- VOW to provide data and locations for potable water facilities within the first 8 weeks of the project. Additional information received after this timeframe will be subject to additional fees and/or extension of project schedule.
- VOW will assist with the potable water system layout where clear record drawings are not provided or where the found facilities do not match record drawings.
- VOW will provide water meters in form of a shapefile including location addresses.

Project Schedule (from notice to proceed):

Potable Water System GIS update	12 weeks
Outage management Tool	16 weeks

Deliverables:

- Geodatabases adhering to industry standards and model requirements will be provided to the Village for posting on Village infrastructure.
- Maps and dashboards will be created on Village platform.
- Outage Management Tool will be installed at Village.
- Dashboards will be updated.

Our fees for the services shall be a Lump Sum, as follows (refer to Manhour Summary attached hereto):

1. Project Management .....	\$15,140.00
2. Potable Water System GIS Update. ....	\$70,380.00
3. Outage Management Tool .....	<u>\$14,160.00</u>
<b>Total</b>	<b>\$99,680.00</b>

We certainly appreciate the opportunity to present you with this proposal. Upon authorization, we will do our best to be an effective member of your team of professionals.

Respectfully,  
KESHAVARZ & ASSOCIATES, INC.

Randy Wertepny, P.E.  
Vice President Engineering

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## MANHOUR SUMMARY

Project No. 18-1244

## Utility System GIS Update, Village of Wellington

	Sr. Project Manager (PE) / Senior Survey (PSM) \$/hr \$180.00	Project Manager (PE) \$/hr \$155.00	Sr. Engineer (PE) / Surveyor (PSM) \$/hr \$130.00	Administrative Assistant \$/hr \$72.00	Total Hours by Subtask	Total Sub- Consultant Fees	Total Prime Consultant Fees
Task 1: Project Management, Coordination, Administration; Up to three (3) meeting with VOW, includes weekly meetings / coordination and correspondence with GIS subconsultant	10	60	20	20	110	0.00	\$15,140.00
TOTAL Hours Task 1:	10	60	20	20	110		
FEE Estimate	\$1,800.00	\$9,300.00	\$2,600.00	\$1,440.00		\$0.00	\$15,140.00
Task 2: Potable Water System GIS Update (includes dashboard updates)	0	0	0	0	0	\$70,380.00	\$0.00
TOTAL Hours Task 2:	0	0	0	0	0		
FEE Estimate	\$0.00	\$0.00	\$0.00	\$0.00		\$70,380.00	\$0.00
Task 3: Outage Management Tool	0	0	0	0	0	\$14,160.00	
TOTAL Hours Task 3:	0	0	0	0	0		
FEE Estimate	\$0.00	\$0.00	\$0.00	\$0.00		\$14,160.00	\$0.00
Total Prime Consultant Professional Services Hours	10	60	20	20	110		
Total Prime Consultant Professional Services Fees	\$1,800.00	\$9,300.00	\$2,600.00	\$1,440.00			\$15,140.00
Prime Consultant Professional Services							\$15,140.00
SubConsultant Services							\$84,540.00
TOTAL FEE							\$99,680.00





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Randy Wertepny P.E. <randy@keshavarz.com>

October 3, 2018

Randy Wertepny P.E.  
Keshavarz & Associates, Inc.

**Subject:** Village of Wellington  
Potable Water Utility GIS Proposal

Dear Mr. Wertepny,

Florida Technical Consultants (FTC) is pleased to provide this Scope for the Village of Wellington Utilities Department (Village) to build a Potable Water Utility GIS.

### **Background**

The Village needs a GIS system to efficiently maintain their facilities. This scope will complete the GIS for potable water and build analytic tools for system operations and maintenance.

With a complete potable water GIS the village will be able to effectively:

- Access the data from the field with mobile devices
- Quickly find valves and other features in the field
- Interact with the system from the field to mark locations of system updates
- Coordinate with outside contractors, agencies and key stakeholders
- Analyze system quantities needed for reporting
- Maintain data integrity necessary for model updates with Innovyze Software
- Perform enhanced Outage Management
  - Reducing impacts of breaks and
  - Facilitating communication with residents

### **Scope**

FTC will focus on completing the potable water system. FTC shall:

Collect data from Village and other readily available sources

- Review field update points collected by staff in ArcGIS Online (There is an estimated total of 5000 valves of which 1400 have already been found or corrected.)
- Review data from Hydromax
- Review record drawings in complicated areas

### **Method**

- The Potable Water Geodatabase will be housed in the FTC servers while updates are ongoing
- Data from Field, Village and Contractor will be streamed directly into the server
- The Potable Water GIS Data will be adjusted according to the information

### **Potable Water Distribution System**

- Water mains (Size, Material, Year Installed)
- Water System Valves (Size, Type)

- Water Control Valves (ARVs)
- Hydrants (ID)
- All features accurately placed according to best information available from the Village

Work with staff for corrections

- Reconcile GIS with field location points
- Identify areas where field data does not match GIS line work
- Research as built record drawings
- Post areas on GIS platform
- Review areas with staff

Outage Management (ESRI Desktop and Web Based Version). On a typical scenario if there is a water main break, staff will be able to:

- Mark the break location
- Identify valves to be closed
  - Data will be snapped and modeled for desktop valve isolation
- Identify properties affected
  - Service connection points will be mapped using meters provided by Village
  - Service connection lines will be drawn to water lines
  - Data will be reviewed for accuracy
- The Outage Management Tool will be installed on the Village Server
- Staff will be trained in its use

Dashboards

- Dashboards will be upgraded according to Village requirements.

The Scope will NOT include detailed fittings such as backflows, blow-offs, taps or tees etc.

## **Deliverables**

Geodatabases adhering to industry standards and model requirements will be provided to the Village for posting on Village infrastructure. Maps and dashboards will be created on Village platform. Outage Management Tool will be installed at Village. Dashboards will be updated.

## **Assumptions**

- The Village IT Department will assist with software and hardware installations
- The Village will provide all relevant data, record drawings, CAD plans
- The Village will provide field research on locations
- The Village will assist with as-built research on complicated areas

## Milestones

Event Description	Schedule
Receive Notice to Proceed	Start of project
Potable Water System Data Updates	12 weeks
Outage Management Tool Installation	16 weeks
Dashboard Updates	16 weeks
Total	16 weeks

## Fees and Schedule

The following is an estimate level of effort.

Task	Fees
Potable Water System Data Updates	\$67,500
Outage Management Tool Installation	\$14,160
Dashboard Updates	\$2,880
Total Fees	\$84,540

It is estimated the data will be completed and posted to the site at 12 weeks from notice to proceed. The Outage Management Tool will be installed at 16 weeks from notice to proceed (an additional 4 weeks). The program will be billed as a lump sum of \$84,540. Invoices will be submitted monthly based on percent complete measured by valves found / corrected. Should you have any questions, please do not hesitate to contact me at my office at (954) 954-8488, or send me an electronic message at [jbarton@fltechinc.com](mailto:jbarton@fltechinc.com).

Respectfully submitted,



Florida Technical Consultants  
James Barton, P.E.  
President