# Town of Windsor

# Memorandum

March 13, 2018

**TO:** The Honorable Mayor and Town Council

**FROM:** Michael Stallings, Town Manager M S

SUBJECT: Water System Mapping

As you are aware, we recently entered into a contract with Bowman Consulting to provide the Town with engineering services.

One of the first projects on their list was the water system mapping and master planning project. Kenny Sims and I have met with them and they have developed the attached scope of work for the mapping portion of this project. As you can see, their not to exceed number for this part of the project is \$11,600.

This project will provide the Town with an up to date map of our water system and will help us plan for the future of our system and to better manage our system. During this project, valves, meter boxes, water lines, and other features will be mapped and included in a GIS file for our water system.

This work was included in this year's CIP. The total budget for the master planning and mapping work is \$50,000. Bowman is currently working on the scope and cost for the master planning portion of this project.

I recommend that Council authorize us to proceed with this work.

## **Recommended Motion**

Move that Council authorize and direct the Town Manager to do all things necessary to complete the water system mapping project not to exceed \$11,600 with Bowman Consulting.



March 5, 2018

Proposal No. 08-18-113

Mr. Michael Stallings Town Manager Town of Windsor 8 E. Windsor Boulevard Windsor, VA 23487

Re: Town of Windsor GIS mapping/Surveying Support (the "Project") Proposal to provide Surveying services (the "Proposal")

Dear Mr. Stallings:

We are pleased to submit this Proposal to provide GIS mapping/Surveying services for the above referenced Project.

#### SCOPE OF SERVICES AND FEES

The Town of Windsor is requesting that existing CAD data of their water distribution system be converted to a GIS framework. Bowman has identified the following water distribution system features to be converted to a GIS framework: mains, blowoff valves, storage tanks, wells and fire hydrants. To the extent the attribute information of these features is included in the provided CAD data file, they will also be converted and incorporated into the geodatabase file. Due to inconsistencies in the accuracy of the CAD data, Bowman proposes to adjust the CAD data to the Windsor Zoning data and aerial imagery which will be used as the base. To provide scalability, flexibility, and robust analytic capabilities to the GIS data, Bowman can create a geodatabase to deliver the data or the data can be delivered in shapefile format. In addition to the conversion of the CAD data Bowman will also provide a map of the Town of Windsor water distribution system.

#### Assumptions:

- Geographic scope: extent of Town of Windsor water distribution system included in the provided CAD drawings.
- Water distribution features: mains, services, valves, storage tanks, wells and fire hydrants.
- Projection and Coordinate System: VA State Plane South Zone
- Delivery format: Geodatabase

#### <u>Tasks:</u>

- Geodatabase Setup
- Convert features from CAD into GIS framework
- Create a GIS Based Map of the water distribution system
- Project management

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Town of Windsor GIS mapping/Surveying Support Page 2 of 2

**Deliverables:** 

- Geodatabase of Windsor water distribution system
- Map of Town of Windsor water distribution system

## FEE:

To complete the above scope of services, Bowman proposes to perform the services on a time and material basis with a not to exceed fee of **\$11,600.00**.

### Additional Services:

 Field locate/verify waterline assets/attributes not included in CAD file referenced above. Waterline assets to be located on a per asset basis, as requested using a 1-man RTK crew. Data collection will consist of NEZ values for the center top of the asset. The fee per asset is \$15.62 with a minimum of number of 84 assets charged (representing one day's field work).

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If you are in agreement with this proposal, we will issue a formal Work Order for your signature.

If you should have any questions, please feel free to contact me.

Sincerely, BOWMAN CONSULTING GROUP, LTD.

Kenneth M. Baybett

Kenneth M. Baybutt, PE Principal/Branch Manager

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