

**CITY OF WEST ALLIS  
AMENDED WORK ORDER #4**

TO: **SYMBIONT SCIENCE, ENGINEERING AND CONSTRUCTION, INC.**

DATE: **April 25, 2022**

PROJECT: **GIS APPLICATION DESIGN**

SUBJECT: **Engineering Consultant Services**

In accordance with Resolution Nos. 2022-0288, 2021-0774, 2020-0675, and the Agreement for Professional Services dated as of October 1, 2019 (the "Agreement"), you are directed to proceed with work on the Project as outlined below:

Work: See attached Scope of Services for Lead Service Line Solution.

Estimate: \$ 24,050.00

Schedule: Work to commence immediately. To be completed as part of the Basic Services under the Agreement.

This Work Order, including any attachments, is incorporated into the Agreement. All work defined in this Work Order and payment therefor shall be performed in accordance with the terms and conditions of the Agreement, unless otherwise modified herein. Any modification(s) of this Work Order is subject to approval and acceptance pursuant to the Agreement.

Issued:

Received and Approved:

CITY OF WEST ALLIS

SYMBIONT SCIENCE, ENGINEERING  
AND CONSTRUCTION, INC.

By: 

Dave Webking

By: 

Title: Director of Public Works

Title: V.P. Engineering

Date: 5/4/22

Date: 4/28/22

ATTACHMENTS:

Scope of Services

COMPTROLLER'S CERTIFICATE

Countersigned this 4th day of May, 2022  
and I certify that the necessary funds have been  
provided to pay the liability that may be  
incurred by the City of West Allis under this  
Contract.

  
Jason Kaczmarek, Director of Finance/Comptroller

City of West Allis

Symbiont Project # 21PS37150 Public Works Add-On

Lead Service Line Solution

Scope of Services and Estimated Costs

**Background**

The following scope of services is based on ongoing efforts to support the City of West Allis Information Technology department implement GIS datasets and solutions specific to the City of West Allis Public Works Department priorities and organizational initiatives. The tasks outlined below are specific to configuration and implementation of a comprehensive Lead Service Line Solution.

**Overall Scope of Services**

Outlined below are anticipated tasks associated with GIS support services.

- Geodatabase enhancements and development
- Existing Layer Development
- Feature Class (FC) development, configuration, and population
- Feature/Map Service Creation
- Web Map (WM) configuration
- GIS viewer creation and updates
- Mobile GIS application Implementation and configuration using Field Maps (FM)
- Survey 1,2,3 creation
- Technical support and troubleshooting

**Scope Initiatives**

**Lead Service Line Solution :**

Task 1: Lead Service Line Solution: <b>Feature Class Updates &amp; Development</b>	<ul style="list-style-type: none"><li>• City will provide Symbiont with layer schema requirements<ul style="list-style-type: none"><li>○ FC fields, FC domains, FC requirements</li></ul></li><li>• Symbiont will update the City's existing public and private side lateral line layer schema per City specifications<ul style="list-style-type: none"><li>○ Add new fields, incorporate and update domains</li></ul></li><li>• Symbiont will digitize/clip remaining private side laterals per City's recommended approach<ul style="list-style-type: none"><li>○ Estimated laterals to be digitized equals approximately 18,823 private laterals</li></ul></li><li>• Symbiont will build Lead Service Line Point FC per Symbiont Lead Service Line Solution, DNR, and City specifications</li><li>• Lead Service Line layer will be updated to include all relevant data contained in existing Lead lateral layers.</li><li>• FCs will be loaded into City Enterprise GIS database</li><li>• FC templates will be configured for editing requirements</li></ul>

	<ul style="list-style-type: none"> <li>• Updated and new FCs will be published as (Feature/Map Service)</li> <li>• Symbiont will work with City staff to integrate the appropriate desktop/browser editing capabilities</li> <li>• Symbiont will build and integrate a Service Line Sync tool that updates service line information with attributes when updates are being made to Service Line Point Layer</li> </ul>
Task 2: Lead Service Line Solution: <b>Web Application</b>	<ul style="list-style-type: none"> <li>• Symbiont will configure a Lead Service Line Solution Web Application for viewing and management of LSL program datasets</li> <li>• Symbiont will integrate water, street condition, and other infrastructure datasets as well as property ownership relevant layers into the Web Application</li> <li>• Symbiont will integrate Lead Service Line customer survey data into the Web Application</li> <li>• Symbiont will integrate batch editing capabilities so users can update/populate lead service line records efficiently</li> <li>• Other tools will be integrated including but not limited to: <ul style="list-style-type: none"> <li>◦ layer control, printing, filtering, querying, address labels, etc.</li> </ul> </li> <li>• Symbiont will demo Lead Service Line Web Application to City; If required additional modifications will be made per feedback from City Staff</li> </ul>
Task 3: Lead Service Line Solution: <b>Field Map</b>	<ul style="list-style-type: none"> <li>• Symbiont will configure Lead Service Line WM per City specifications to function properly in ESRI Field Maps <ul style="list-style-type: none"> <li>◦ Integration of appropriate layer(s)</li> <li>◦ Symbology, labeling, transparency, etc.</li> </ul> </li> <li>• Symbiont will configure Lead Service Line FM per City specifications <ul style="list-style-type: none"> <li>◦ Form (formatting, input, type, required, default values, conditional visibility)</li> </ul> </li> <li>• Symbiont will demo Lead Service Line FM to City; If required, additional modifications will be made per feedback from City Staff.</li> </ul>
Task 4: Lead Service Line Solution: <b>Public Survey Form</b>	<ul style="list-style-type: none"> <li>• Symbiont will configure a Lead Service Line Customer Self Identification Form that the city can use to collect customer reported service line materials and information from the Public.</li> <li>• Survey will be configured on the City's existing ArcGIS Online account utilizing Survey 1,2,3.</li> </ul>

Summary of Estimated Cost/Task

Task	Estimated Cost
Task 1: Lead Service Line Solution: <b>Feature Class Updates &amp; Development</b>	\$15,250
Task 2: Lead Service Line Solution: <b>Web Application</b>	\$3,900
Task 3: Lead Service Line Solution: <b>Field Map</b>	\$3,000
Task 4: Lead Service Line Solution: <b>Public Survey Form</b>	\$1,900
<b>Total</b>	<b>\$24,050</b>