

Date: January 12, 2026  
To: Joe Trueblood, Utility Superintendent  
From: Bill Swearingen, Operations Supervisor  
Subject: Plant-Wide Wi-Fi and Communications Cabling Installation

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### **Background**

During recent internet and telephone upgrade efforts, and further identified through the departmental review report, staff recognized a need to enhance wireless connectivity and communications infrastructure throughout the Water Treatment Plant.

### **Project Description**

Installation of a plant-wide Wi-Fi system and new communications cabling throughout the treatment plant. Addressing existing connectivity limitations will improve the reliability of IP phone operations and expand the effective use of mobile devices to support current and future operations and maintenance activities.

### **Proposal Review and Cost Comparison**

Staff evaluated two alternative cost proposals from OnTech Systems to install a plant-wide Wi-Fi system and supporting communications cabling at the Water Treatment Plant. Both alternatives address identical operational needs and include equipment, materials, and installation.

Proposal	Scope Summary	Estimated Cost
Proposal A	Installation of plant-wide Wi-Fi access points and communications cabling, including equipment, materials, and configuration services	\$26,656
Proposal B	Installation of plant-wide Wi-Fi access points and communications cabling, including equipment, materials, and configuration services	\$44,520




### **Recommendation**

Based on the operational safety/security benefits and the need to improve plant-wide connectivity, I would like to recommend approval of Proposal A from OnTech Systems, Inc. for the installation of a plant-wide Wi-Fi system and new communications cabling at the Water Treatment Plant.

Budget Item (2026): \$35,000

Total Cost: \$26,656.00

## Hardware

Description		Price	Qty	Ext. Price
<b>Ubiquiti U7 Pro Tri Band Wi-Fi 7 IEEE 802.11 a/b/g/n/ac/ax/be 9.12 Gbit/s Wireless Access Point</b> - 2.40 GHz, 5 GHz, 6 GHz - MIMO Technology - 1 x Network (RJ-45) - 2.5 Gigabit Ethernet - 21 W - Wall Mountable, Ceiling Mountable		\$239.00	6	\$1,434.00
<b>Ubiquiti U7 Dual Band Wi-Fi 7 IEEE 802.11 a/b/g/n/ac/ax/be 4.30 Gbit/s Wireless Access Point</b> - Outdoor - 2.40 GHz, 5 GHz - 1 x Internal Antenna(s) - 2 x External Antenna(s) - External - MIMO Technology - Multi User MIMO - 1 x Network (RJ-45) - 2.5 Gigabit		\$249.00	10	\$2,490.00
<b>Ubiquiti U7 Pro Tri Band Wi-Fi 7 IEEE 802.11n/ac/ax/be/v/r/k 8.60 Gbit/s Wireless Range Extender</b> - Outdoor - 2.40 GHz, 5 GHz, 6 GHz - Internal - MIMO Technology - Multi User MIMO - 1 x Network (RJ-45) - 2.5 Gigabit Ethernet, Gigabit Ethernet - 21 W - Wall		\$369.00	1	\$369.00

Subtotal: \$4,293.00

## Cabling Options

\* Contains Optional Items

Description	Price	Qty	Ext. Price
<b>Cabling Estimate #1</b> <b>Scope of Work:</b> <ul style="list-style-type: none"> <li>• QTY 6000 - Cat 6A Plenum Cable-Shielded-Blue</li> <li>• QTY 20 - Leviton - Connector Cat 6A Blue-shielded</li> <li>• QTY 20 - Surface Mount Box 2 Port White-Shielded-Leviton</li> <li>• QTY 150 - WJH21 Basic J-Hook 1-5/16-inch</li> <li>• QTY 3 - Leviton Patch Panel Cat 6 24 Port Shielded</li> <li>• QTY 3 - Wall Bracket-4U Vertical Panel Mount-Black</li> <li>• QTY 200 - EMT 3/4 Conduit</li> <li>• QTY 10 - EMT 3/4-inch White End Cap</li> <li>• QTY 20 - EMT 3/4-inch EMT Jiffy Clip</li> <li>• QTY 20 - EMT 3/4-inch Coupling Screw Type</li> <li>• QTY 10 - EMT 3/4-inch Box Connectors Screw Type</li> <li>• QTY 10 - Dual Gang Outlet Box--4-inch x 4-inch</li> <li>• QTY 10 - Dual to Single Gang Reducer Plate 1/2-inch raised</li> <li>• QTY 30 - EMT 1-inch Conduit</li> <li>• QTY 20 - EMT 1-inch Hanger Straps</li> <li>• QTY 20 - EMT 1-inch White End Cap</li> <li>• QTY 2 - Fire Barrier Sealant 3M - 10.1 U.S. fl oz</li> <li>• QTY 1 - GR-20 Lift Rental</li> </ul>	\$39,027.00	1*	\$39,027.00

## Cabling Options

\* Contains Optional Items

Description	Price	Qty	Ext. Price
<b>Cabling Estimate #2</b> <b>Scope of Work:</b> <b>Filter Plant Ground Level</b> <ul style="list-style-type: none"> <li>• QTY 8 Information outlet consisting of ONE (1) Category 6A indoor/outdoor rated cable</li> <li>• Install EMT/PVC raceway where necessary</li> <li>• Install and provide Qty.(1) Panduit Netkey 24 Port Unloaded/Flush Mount Patch Panel</li> <li>• Install customer provided wireless access points</li> <li>• Professional &amp; Technical Services</li> <li>• Miscellaneous Material</li> </ul> <b>Pipe Gallery Level (Lower Level)</b> <ul style="list-style-type: none"> <li>• QTY 7 Information outlet consisting of ONE (1) Category 6A indoor/outdoor rated cable</li> <li>• Install EMT/PVC raceway where necessary</li> <li>• Relocate Qty.(2) existing wireless access points- U6 long-range and AC long-range</li> <li>• Install customer provided wireless access points</li> <li>• Professional &amp; Technical Services</li> <li>• Miscellaneous Material</li> </ul> <b>Filter Plant Upper Level</b> <ul style="list-style-type: none"> <li>• QTY 1 Information outlet consisting of ONE (1) Category 6A indoor/outdoor rated cable</li> <li>• Install customer provided wireless access points</li> <li>• Install EMT/PVC raceway where necessary</li> <li>• Professional &amp; Technical Services</li> <li>• Miscellaneous Material</li> </ul>	\$21,163.00	1	\$21,163.00

\* Optional Subtotal: \$39,027.00

Subtotal: \$21,163.00

## Services

Description	Price	Qty	Ext. Price
<b>Estimated Installation &amp; Configuration: 6-8 Hours of Labor</b> <i>Note: this is a time estimate that will be invoiced separately during our semi-monthly billing for actual time of service</i>	\$150.00	8	\$1,200.00

Subtotal: \$1,200.00



## New UniFi Access Points

Quote Information:      Prepared for:  
**Quote #: 017290**      **City of Sheboygan Water Utility**  
Version: 3      72 Park Ave  
Delivery Date:      Sheboygan, WI 53081  
12/18/2025      Tamara Scheuren  
Expiration Date:      (920) 459-3800  
12/31/2025      tamarascheuren@sheboyganwater.org

Prepared by:  
**Ontech Systems Inc.**  
 Sam DuKatz  
(262) 522-8560  
sam@ontech.com

## Quote Summary

Description	Amount
Hardware	\$4,293.00
Cabling Options	\$21,163.00
Services	\$1,200.00
Total:	
	\$26,656.00

## \*Optional Expenses

Description	One-Time
Cabling Options	\$39,027.00
Optional Subtotal:	
	\$39,027.00

For full quote view with product descriptions, warranty information and disclaimers, please review PDF.  
Note: Quote is valid for 15 days. Taxes, shipping, handling and other fees may apply. We reserve the right to cancel orders arising from pricing or other errors.  
Note: Please do not pay from quote, invoice to follow.

**Ontech Systems Inc.**

**City of Sheboygan Water Utility**

Signature: \_\_\_\_\_  
Name: Sam DuKatz  
Title: Sales Support Specialist  
Date: 12/18/2025

Signature: \_\_\_\_\_  
Name: Tamara Scheuren  
Date: \_\_\_\_\_