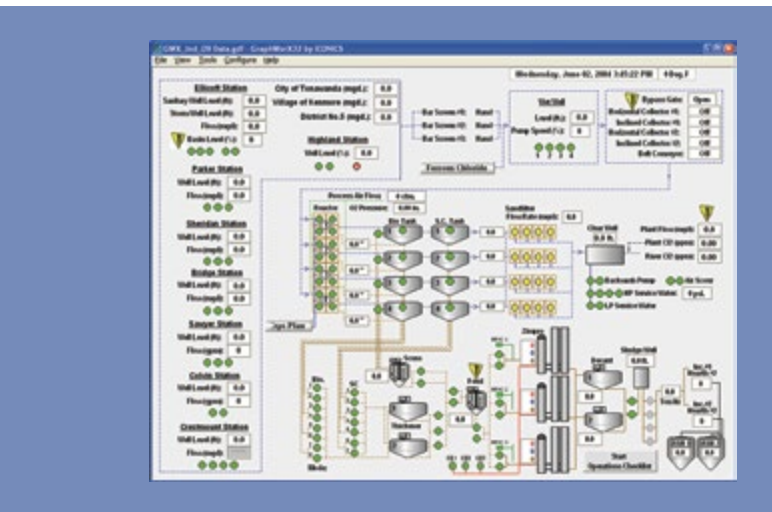


Water Tower in Tonawanda, NY



Customer Success Story

# Tonawanda Water Resource Department Tonawanda, NY



Wastewater System Overview Screen

*“ICONICS was able to reduce our operational cost while providing us with technology we can grow with.”*

**Ed Rick**  
System Manager  
Town Of Tonawanda Water Resource Dept.

## About Tonawanda Water Resource Dept.

The Town of Tonawanda, formed in 1836, is located north of Buffalo, with a population of approximately 80,000. The Water Resource Department operates and maintains hundreds of miles of water and sewer lines. Each year billions of gallons of water drawn from the Niagara River are treated, distributed, collected and cleaned in order to serve their residents. The name Tonawanda, or “Swift Waters,” was given to the area by the original Native American inhabitants.

## ICONICS Software Deployed

GENESIS32™ Enterprise Edition and WebHMI™ are deployed at both the Water and the Wastewater Treatment Facilities. Between both locations there are five

GENESIS32 servers, five WebHMI servers, and numerous dedicated and browser-based clients. DataWorX™32 plays an important role in the application, allowing the Water Treatment Facility’s server to act as the backup server for the Wastewater Treatment Facility, and visa versa. Both applications take full advantage of the power of GraphWorX™32, providing rich and informative operator screens. TrendWorX™32 is deployed, providing operators with real-time trending. AlarmWorX™32 Multimedia is used to distribute alarms and events to the appropriate people. ICONICS software is also deployed at 13 remote pumping stations connected over leased lines back to the control room.

## Project Summary

ICONICS software replaced a legacy competitor HMI/SCADA application when the price for support became too high. The Town of Tonawanda was paying high support cost for the HMI/SCADA package and other third-party applications such as reporting solutions. Switching to ICONICS paid for itself in the first year. For the price

of one year of support, GENESIS32 and WebHMI were installed on a 32-bit platform at a lower cost, providing more technology such as the ability to have true thin-client viewing via Internet Explorer Web browsers.

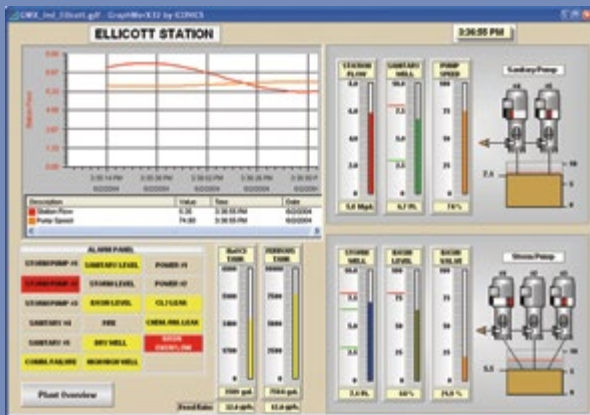
The system was installed by town employees, with sales and technical support from BCS in Buffalo, NY. OPC technology and redundancy both play a significant role in the application. KEPCO OPC drivers are used to connect GENESIS32 to Modicon PLCs and Industrial Control Links Devices. The system has approximately 4,000 I/O points in total. Redundancy is performed at three levels. There are redundant Enterprise servers in each location, and each location works as a backup for the other.

phones, and more. In addition to lowering their support cost for the maintenance contracts, time spent supporting the system internally is now minimal.

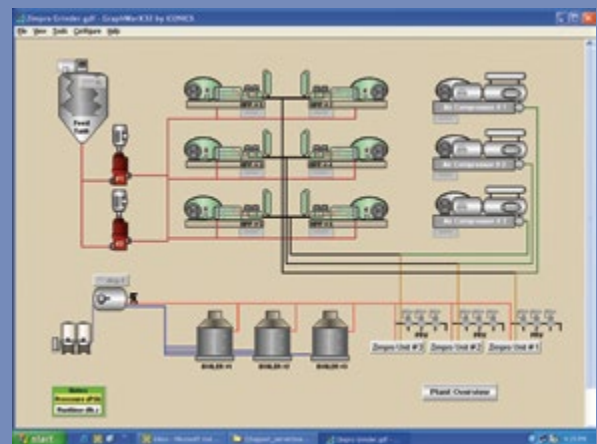
WebHMI is a true thin-client solution with all the administration and licensing done on the server. With client-side licensing, staying connected to the plant can be done anywhere, anytime. All that is needed are a user name and password.

**Conclusion**

The Town of Tonawanda is continuing to retrofit ICONICS software solutions and soon will deploy ReportWorX™ as their reporting standard.



*Ellicott Station Monitoring Control at Tonawanda Water Resource Department*



*Zimpro Flow Screen*

There is a wireless Ethernet between the locations running over a Cisco backbone. DataWorX32 Redundancy is used to keep the plants in sync. There are redundant OPC drivers in use, as well as redundant Ethernet with a recovery time of less than 300 milliseconds.

**Benefits of the System**

Deploying ICONICS software lowered the expensive support costs to keep the legacy systems running. The upgrade also gave the Town of Tonawanda a system they can expand on for years. They have the architecture that supports additional functionality, such as wireless operator stations, the ability to stay connected via mobile

**Solutions Highlighted**



**WebHMI**

Web-Based Real-Time Automation Software

**DataWorX**

OPC Data Aggregation, Bridging, Redundancy and Tunneling

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