

Abington Sewer Achieves A+ Service with Asset Management

'A-Plus Service' could be the motto of the Town of Abington, Massachusetts Sewer Department. Located within 10.2 square miles 20 miles southeast of Boston, Abington is auspiciously first among Massachusetts towns when alphabetically listed, thanks to its first governor Joseph Dudley, who named the town in tribute to the Countess of Abington, England, who helped him secure his appointment from the English Crown. During its Civil War heyday the town manufactured nearly half of all the Union Army's footwear, and led Plymouth County in population, business and wealth.

Abington's Sewer Department takes good care of its 5,500 residences and businesses, managing and maintaining approximately 90 miles of sewer pipes, 2,000 manholes, and 13 satellite pump stations. One small office serves as 'Command Central', managing wastewater collection, inspecting/cleaning/repairing sewer assets, issues connection permits, answers billing inquiries, assists other departments, and must be ready to respond to emergencies 24/7. Assisting the sewer department is S E A Consultants (now The Kleinfelder Group, Inc.), a multi-disciplinary, full-service engineering, architecture, and planning firm that for 35 years has partnered with Abington to create state-of-the-art infrastructure.

In 2004 the town hired S E A to create a GIS map of the community with ESRI ArcGIS. According to John Stone, Superintendent of Abington Sewer, GIS definitely made it easier to locate its physical assets. All maintenance and record-keeping were still paper-based, however, making it difficult to find essential information needed to make timely decisions. Maintenance was performed reactively based on asset failure, and the department struggled with GASB 34 compliance and accurately budgeting for Capital Improvements.

Abington decided to implement a web-based GIS-integrated Asset Management solution that would build on the information and value contained in their GIS investment. They chose VUEWorks® based on a recommendation by S E A Consultants. Abington Sewer has moved 100% of its work orders, maintenance and record-keeping to VUEWorks. The result, according to Mr. Stone, is that Abington has eliminated inefficiencies, is providing higher-quality service to citizens, and achieved the accounting transparency required for GASB 34 compliance. The town is now using VUEWorks for general maintenance prioritization of its physical assets and fleet inventory. Abington is able to document a maintenance history and condition for individual assets by linking work orders, images and CCTV video captured during pipe inspections. The town also uses VUEWorks to comply with 'Dig Safe' calls and can quickly furnish a map documenting buried sewer assets on a property. "VUEWorks allows us to deliver Grade 'A-Plus' quality service to our residents, and manage maintenance proactively," commented John Stone. "I love the fact that whenever we perform maintenance, we can add value to the asset in VUEWorks, which automatically calculates the value of our assets for GASB 34 compliance."

The next step for Abington Sewer is to use the information in VUEWorks to create a Condition and Risk matrix, to be used for Capital Improvement Planning. According to Mark Thompson, P.E., of S E A: “One of the unique capabilities of VUEWorks is the ability to rate and assign risk of failure to individual assets. Municipalities can create Capital Improvement Plans that not only look at condition, but in the long term, consequences of failure for pipelines and pump stations. If you combine risk and condition, you know best where to spend your money.”

The town is also looking to expand infrastructure asset management to other departments. “The town manager has seen the positive results we’ve had with VUEWorks. We’re looking at managing maintenance and tracking condition for other systems, such as drainage and street light inventory. Even fire hydrants – we could tag hydrants with information like pressure and available flow.”