

BAXTER & WOODMAN NEWS

Consulting Engineers

Making a positive difference through innovative engineering solutions

TECH SPOTLIGHT

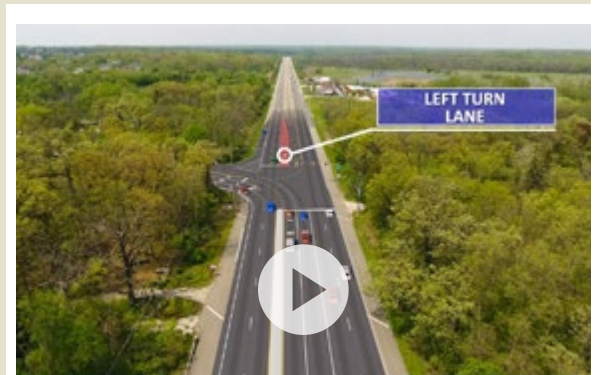
VISUALIZE PROPOSED IMPROVEMENTS BEFORE CONSTRUCTION!

3D Renderings & Video Visualization

Ever wish you could see what that project will look like even before construction is underway? Baxter & Woodman is capable of developing 3D renderings and video visualization of proposed improvements to let you do just that. These pictures and videos can be useful tools at public outreach meetings for stakeholders to better visualize abstract and concrete alternatives.

HOW DOES IT WORK? Videos showcasing site concerns and project alternatives are overlaid on top of drone footage captured by Baxter & Woodman's certified drone pilots, effectively bringing a project and the potential improvements to life!

Contact Peter Ferretti at pferretti@baxterwoodman.com to find out if your next project might benefit from using 3D renderings or Video Visualization.



Lake County Division of Transportation, Stearns School and US Route 41 Phase I Intersection Study Proposed Improvements Video.
View the video at: http://bit.ly/LC DOT_Stearns



Virtual reality goggles provide a "real life" experience for the viewer.

3D Visualization & Virtual Reality

Baxter & Woodman uses state-of-the-art software to turn designs into interactive 3D visual reality models. This allows your staff to review life-like project renderings during the design process. These representations can help you make meaningful decisions or changes before the project starts construction. This attention to detail can save you money by allowing for easy identification of conflicts and elimination of potential change orders.

HOW DOES IT WORK? Virtual Reality Goggles are worn to view the 3D renderings. This gives the viewer a "real life" sensation of the image they are viewing. Reach out and "touch a control panel", "walk through a treatment plant", and more.

Contact Brent Perz at bperz@baxterwoodman.com to find out if your next project might benefit from using virtual reality.

Q4 2019

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THE SILVER TSUNAMI TAKES AIM AT THE WATER INDUSTRY

Silver Tsunami – What is it? *The Silver Tsunami* is a metaphor used to describe the expected increase in the number of people that will soon be retiring from the water and wastewater industry.

WHAT DOES THE SILVER TSUNAMI MEAN FOR THE WATER INDUSTRY/WATER UTILITIES?

As the Silver Tsunami progresses forward, utilities will need to find more people to enter into the water and wastewater industry. In addition, capturing the institutional knowledge of senior staff is a challenge that the industry will face. Embracing technology solutions will be key to riding out the Silver Tsunami.

SHOW ME THE STATS.

AWWA (American Water Works Association) anticipates that nearly 1/3 of the Water and Wastewater workforce will be at or near retirement-eligible age in the next three years.

WHAT CAN YOU DO TO PREPARE?

- Start outreach efforts with local colleges, high schools, and local Veterans' organizations.
- Host student tours and site visits at your water and wastewater facilities.
- Provide internship opportunities for students taking water/wastewater technology courses.
- Consider getting involved in Wisconsin Section of AWWA by joining a committee and/or attending any of the numerous seminars held throughout the state each year.
- Document historical system information from your retirement-ready staff.
- Consider implementing GIS or an Asset Management program to capture your utility inventory, system operation and maintenance records, and condition assessment data.

1 in 3

Water and Wastewater workers who will be at or near retirement-eligible age in the next three years



Continued on next page

The Silver Tsunami *continued*

WHAT ARE OTHER UTILITIES DOING TO GET READY?

Q&A with Allen Persons, Director of Public Works, Village of Plainfield

B&W: *What is the biggest challenge for your Utility with anticipated retirements?*

AP: The loss of institutional knowledge. While we have made great strides in collecting data related to our distribution and treatment systems, each system is unique and a bit quirky. The actual experience of having to deal with low water storage on a hot summer day, a compliance issue, or a natural disaster cannot be taught in a classroom.

B&W: *What are you doing to prepare?*

AP: We continue to update the GIS database regarding the distribution system. We have developed some easy to understand operations manuals for our pumping stations and the SCADA system. These manuals are in three ring binders with copies of computer screenshots displaying some of our more common alarms and how they should be addressed.

AP: We send employees for training and have regular in-house training sessions. Keeping employees informed and getting the newer employees involved helping resolve some of the difficult challenges is important. We focus on developing a culture of promoting people from within and talk about succession planning.

HOW CAN B&W HELP?

Baxter & Woodman can help your utility implement asset management software and build or expand your GIS tools to help capture historical information from your retirement ready staff.

On a positive note, while the people in my generation are getting ready for retirement within the next five years or so, most of us still want to be involved. We want to help and support the next generation of young professionals.”

Allen Persons,
Director of Public Works
Village of Plainfield



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JOINT MUNICIPAL BIDDING CAN SAVE MONEY

Looking to save some money on your next infrastructure project? Consider joint municipal bidding. Joint municipal bidding involves grouping projects together with neighboring communities with the goal to reduce costs.

POTENTIAL BENEFITS

- Lower construction costs through economies of scale
- Reduced design engineering effort
- Reduced upfront project administration
- Opportunity to learn new best practices from your neighboring communities

BIDDING POTENTIAL PITFALLS

- Bid specification and standards differences between joint bidders
- Construction scheduling constraints between joint bidders

Baxter & Woodman has successfully facilitated joint municipal bidding projects for multiple communities. Contact Lou Haussmann at lhaussmann@baxterwoodman.com for additional information and to discuss if joint municipal bidding is an option for your upcoming projects.

