

BAXTER & WOODMAN NEWS

Consulting Engineers

Making a positive difference through innovative engineering solutions

TECH SPOTLIGHT

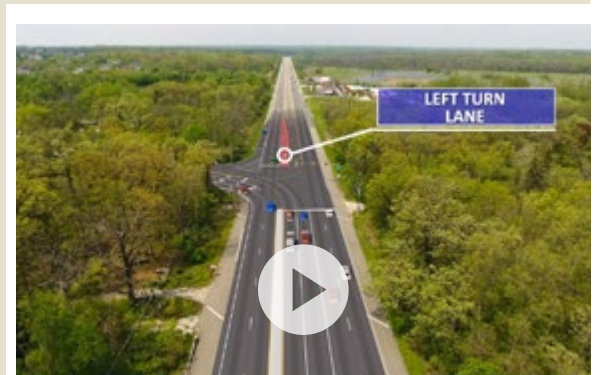
VISUALIZE PROPOSED IMPROVEMENTS BEFORE CONSTRUCTION!

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 be retiring soon 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 with the ISAWWA Operator in Training program. <http://bit.ly/OITprogram>
- 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 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, an EPA 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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Looking to fast track your next project and save some money?

CONSIDER DESIGN-BUILD

The Design-Build project delivery method is when the Owner hires one entity to do both design and construction. Design-Build offers several advantages over traditional delivery methods.

- Owner involvement is optimized in the design of the improvements and selection of materials and equipment, and can be completed quickly
- Single-source responsibility is placed on the design-builder offering a distinct advantage when it comes to responsibility for errors, omissions or mistakes
- Project schedule is reduced from design through completion and project start-up
- Costs are known very early in the process, usually before the design-builder has a contract

Baxter & Woodman regularly teams with Boller Construction to offer this project delivery method. The Boller and B&W team have worked together on many Design-Build projects. We recently partnered on a Design-Build Combined Heat and Power Project for the Glenbard Wastewater Authority. Learn more about this award winning project at <http://bit.ly/Glenbard>. To find out if your next water or wastewater project is a good fit for a design/build approach, contact Derek Wold at dwold@baxterwoodman.com.



John Ambrose, Baxter & Woodman President/CEO and Steve Dalbec, Boller Construction, President surprised each other by wearing the other firm's polo shirt to a meeting both were attending. That's teamwork!