

Patti Perspective

April 30, 2014

Has your town or city gone green yet? Conserving natural resources and saving energy is certainly on the global radar in today's world. Beyond the benefits to our environment, the good news is that going green can mean saving money, and who doesn't want to save money?

How? Technology is opening the door to sustainable solutions, which are environmentally, operationally and monetarily friendly. Is your budget strapped with no money for those capital improvements and investment in technology? Not a problem, Siemens Performance-based Contracting guarantees success and covers the upfront cost. Read our article for the details of a Siemens water and wastewater infrastructure improvement project Patti Engineering is supporting.

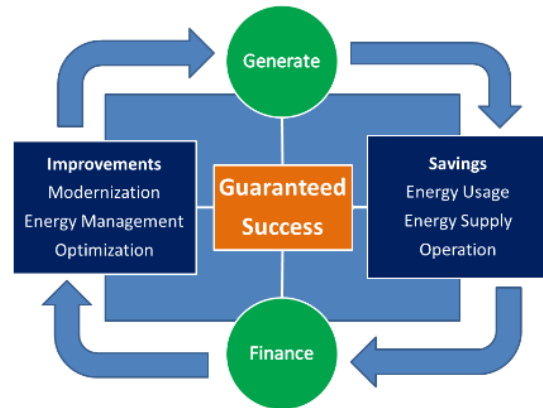
This Patti Personnel Spotlight is on Logan Wohlford, whose engineering talent, work ethic, and great attitude have earned him this month's spotlight!

Going Green - Siemens and Patti Engineering Creating Sustainable Water Solutions

Going green and identifying energy-efficient sustainable solutions is a hot topic of conversation across the globe. Advances in technologies are driving sustainable city development. Today, city governments are recognizing that using technology to build and improve infrastructure efficiency and effectiveness contributes to future economic prosperity and improving quality of life.

Our partner, Siemens, has the technology portfolio and consulting expertise to make cities more livable, competitive, and sustainable. In addition, Siemens offers the ability for budget strapped cities to make infrastructure improvements with alternative funding methods. Siemens Performance-based Contracts allow municipalities to pay for their capital and energy improvements through their guaranteed energy, labor and cost savings.

One of the most important and costly aspects of city management is water and wastewater. Municipalities are responsible for drawing water from the source; treating, distributing and delivering drinking water; collecting and treating wastewater; and returning high quality reclaimed water back into the watershed. Many cities have water and wastewater treatment facilities that are aging and inefficient.



With the assistance of Siemens Industry's Infrastructure & Cities Sector, the City of Fair Oaks Ranch in Texas recognized the need to modernize and improve its water and wastewater infrastructure. Funded by Siemens Performance-based Contract, the City contracted Siemens to make the improvements. The anticipated payback period for the City of Fair Oaks is approximately fourteen years.

Siemens selected Patti Engineering to support the integration of this project. Planned improvements will save energy and conserve water through investment in new, energy-efficient, environmentally responsible technology and equipment. Using automation and wireless Ethernet technology, the city's water and wastewater management systems, currently utilizing mostly manual systems, will be upgraded to a reliable state-of-the-art energy and resource efficient system.

Patti Engineering will be designing and implementing a new supervisory control and data acquisition (SCADA) system and Human Machine Interfaces (HMI's) to allow for central control and management of equipment. Installation of the latest generation Siemens Programmable Logic Controllers (PLCs) on equipment at the city's wells, lift stations, and elevated storage tanks will ensure communications to the new SCADA system. Wireless communication will be established to replace auto-dialers eliminating the high cost of phone lines.

The city's twenty eight wells, seven lift stations, and eight elevated storage tanks will wirelessly communicate information and alarming directly through the new user-friendly SCADA system to provide pertinent valve position, tank level, pressure, and pump information on desktop and mobile devices in real-time. Authorized City workers will now have the ability to monitor and control the City's wells, lift stations, and elevated storage tank equipment without having to spend hours driving around town to each station and tank.

"It was a pleasure working with Patti Engineering on the development of a SCADA system to be incorporated into our Performance Contract with the City of Fair Oaks Ranch. Their local support and technical expertise helped our team develop a solution for our customer's needs. The proposed SCADA system will help the City of Fair Oaks Ranch save energy and operational cost

associated with their water and wastewater infrastructure and backup power needs," explains Chad Nobles, Executive Accounts, EES, Siemens Industry's Infrastructure & Cities Sector. "Patti Engineering's ability to create a flexible and cost effective solution met our standards and criteria, as well as our customers."

And for those of you interested in reading the remainder of the story, check out the full blog post by clicking on the blog button:



Patti Personnel - Logan Wohlford



Our April Spotlight is on Controls Engineer, Logan Wohlford. "Logan is very focused, dedicated and hard working," commented Patti Engineering's Vice President of Operations, Ken Kutchek. "He is very smart and has an amazing work ethic and attitude."

Early in his career, Logan learned the importance of working diligently to get the job done right. While serving in the military in Iraq, part of Logan's responsibilities included fixing vehicle components and/or auxiliary systems. After he fixed a vehicle he always took it on an extended test drive

to ensure that his buddies would not be put in more danger due to vehicle related issues or system failures while on a mission. As Logan puts it, "there's no room for error when your buddies are out on a military mission."

After his service in the U.S. Army, his passion for making things work drove him to seek a career in Industrial Automation because it offers an infinite number of opportunities to learn new things. "It is always challenging, and dull moments are few and far between," explained Logan. "Relentless pursuit of resolution and the ability to thrive on change are two abilities that enabled me to enter this field."



Prior to joining Patti Engineering Logan worked at Maple Leaf Foods where he was solely responsible for all automation systems in the largest frozen bakery in North America - 3 plus million pounds of flour used per week, operating 24/7. "What led me to Patti Engineering was its reputation, its partnerships (especially with Siemens), its leadership, the talent pool, the company's values, and mission statement," commented Logan.

Since joining Patti Engineering in December 2013, Logan has already been involved in some very intense and challenging projects including the Caterpillar shut down over Christmas when it was 'all hands on deck' to make an automation project successful on a very tight timeframe. Currently, he is putting in overtime hours alongside his Patti Engineering colleagues to ensure the success of our team on a Weigh In Motion scale installation.

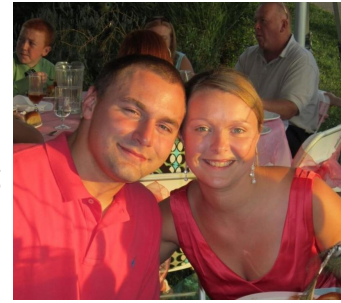
Originally from Roanoke VA, Logan currently lives in Auburn Hills, MI. When Logan's not hard at

work at Patti Engineering, he enjoys time with his girlfriend of three years, Amanda Akers, and their three dogs. And no big surprise here, Logan enjoys a little adventure with his hobbies: hiking, fishing, camping, mountain biking, and recreational shooting. The picture to



the left is of Logan and his dog 'Chief' wading through a trout stream in the Jefferson National forest Wilderness

area. Apparently, Chief likes to chase bullfrogs in the brush and this one practically jumped into Logan's hands!



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We work as partners to our clients. When you need an expert to help solve automation challenges, we are here to add value to your solution - enhance efficiency, increase productivity, and work with your team as a trusted resource. Visit our **website** for more information on our areas of expertise, or call us (248)364-3200 for a free initial consultation.

Thank you for your interest in Patti Engineering.

Best regards,

Georgia H. Whalen
Director of Marketing
Patti Engineering



Did you see our article in the February's issue of *Control Engineering Magazine*? While the concept and movement toward standardization is not new, we have seen an 'up-tick' in manufacturers requesting assistance with standardizing operator interfaces with human machine interfaces (HMIs).

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