

The Pipeline

Issue 42

Spring/Summer 2018

ACE Yards Warehouse

By: Kody VanFleet, Equipment Manager

The ACE Yards Warehouse is complete! We now have a centralized building to house all of our small tools and materials. The Warehouse features 4,000 Sq. Ft. of storage space including the new “ACE Store” where

jobsite staff may come as they please and take any materials for free for their jobsites. The warehouse also includes 5 offices, and a conference room with a table that rivals Jim Voltz’ design at the main office.

The project started in June of 2017 and was constructed in under 8 months. The Warehouse project was led by General Foreman Kevin Keen. Kevin did an amazing job with the construction, ensuring that it was put up faster than expected and came in way under budget.

The Warehouse was a very unusual project for ACE. With ACE being the GC as well as the owner, with no engineer presence, it allowed us to accelerate construction with no hold ups. The project progressed flawlessly, and we were able to add some personal touches along the way that will help the yard’s productivity, as well as a few aesthetic additions.

Along with the Warehouse construction, there was a good chunk of sitework involved. This included installing a 1700 foot long swale, and also excavating and replacing 500 feet of the



ACE Yards Warehouse

driveway with millings. The driveway replacement included a heavy amount of coordination in order to keep normal yard operations undisturbed. The swale installation required all stored tools and materials along the North side of the property to be relocated or disposed of, which proved to be a monumental task, and kick started an overall cleanup and reorganization of the entire yard.

This project also helped develop several ACE employees' skills. This was Kevin's first project as Site Superintendent, which gave him the knowledge and experience to lead more projects in the future. We also had Ty Teodori, who was a Co-op from Dartmouth. Ty had a crash course in construction during his time helping out with the Warehouse, and after several accusations of sorcery committed by Kevin and myself, finally believes dowsing rods actually work.

In conclusion, this project was great to be a part of. The Warehouse will help the yard grow as all of the other aspects of ACE have grown over the years. We are excited to see how the construction of the Warehouse affects the ways the yard can assist the jobsites.



ACE Yards Warehouse



The Call

By: Siân Campbell, Process Estimator

We sit, gathered together, waiting. Some of us are edgy, we fiddle, check our phones, pull at imagined loose threads. We chat, making small talk; sometimes conversing quietly amongst ourselves, mostly speaking loudly, trying to fill the space. Trying to fill the time. The minutes stretch on. What is taking so long? Others drift in and join us, wondering if we know yet. All of us sitting, standing, speculating, curious, anxious. Waiting for the call.



(Pictured Left to Right: Bhanu Tak, Civil Estimator; Jeff Carr, Vice President of Estimating; Christine Determan, Co-Op Engineer; Colin Snow, Civil Estimating Manager; Siân Campbell, Process Estimator; Mark Montgomery, Pre-Construction Engineer)

Have you ever felt the urge to sneeze, felt it creeping up your nose, waited, squeezed your eyes closed and then looked at the sun or a bright light, only to have the feeling fade and disappear? Bid day can be like that – like a sneeze. Sometimes the excitement builds as the numbers of the other bidders are read, and with each one, we know our number is better, until finally the last one is recited and we know we have won. We cheer, the email goes out to the rest of the company, we start planning the job.

The Call

By: Sian Campbell, Process Estimator

That winning moment is great, but it only happens about a third of the time. The other two thirds of the time we are left frustrated, disappointed and wondering what we could have done, if anything, to be low bidder. The losing moment is something the ACE family who don't work at the office rarely get to see or understand. We work for weeks, occasionally months, on a bid. We scour the drawings and specifications, ask questions, look for solutions, take off every cubic yard of concrete and earth, every piece of pipe or valve, every nut, bolt or piece of rebar that goes into the job. We figure out how to keep the station running, what equipment and manpower we need to perform the work, and where to get it. We consider material requirements, such as the Buy American Requirements. Sometimes we must meet DBE, MBE, or other specialty participation requirements. How are we going to work around other contractors at the site? Is the Owner a good one to work for, or are they picky? Does the Owner have their own set of construction documents we must abide by in addition? There are innumerable factors to consider, and we have to figure it all out in an average of three weeks.

Estimating has a much shorter timeline than working on an active job, but during that time, there is also a heightened focus. We are immersed in it until bid day. By the time an estimate is complete we are invested. We know every nook and cranny of the job. We want it. The feeling of a loss is terrible. All the work we have put in over the last few weeks, and especially the last crazy bid day, results in nothing. The drawings go in the garbage. Quotes and estimates get filed away. We take away the lessons learned, and often don't mention it again, even moments after the bid. It just goes away, like a sneeze unfulfilled. A close loss, and we've had a few VERY close ones, are even worse. It means we had a good estimate; it means somebody else saw what we saw; somebody else planned what we planned, and for just a fraction less. We wonder "what if?" Could we have cut a price somewhere? Cut back on equipment or labor? Did we overestimate something? It can nag at you. It can be a huge source of stress. The company depends on us to keep everyone working.

On to the next one.

We say that a lot after a losing bid. We can't keep dwelling on what we didn't win. We focus on the next bid. The next potential project for our crews and management. Sometimes it's hard to get the momentum rolling again after a loss, but we focus on providing our ACE family the most accurate and detailed estimates we can by honing our skills and doing quality work.

The phone rings shrilly, jangling and buzzing on the table. We startle. "This is it." Announces Jeff, and picks up the phone. He says to the voice on the other end "So.....how'd we do?"

"Remember that guy who gave up? Neither does anyone else."

— *Author Unknown*

Poplar Point Pump Station

By: Wendy Barry, Project Manager

Poplar Point Pump Station is a new construction, 55 MGD pumping station, located on the corner of 295 and South Capitol Street in Southeast Washington DC. The new Pumping Station will replace the original Poplar Point Pumping Station which has served the District since 1915. The PP-PS will handle sewage flows from much of southeast DC. Sewage will flow by gravity to the PP-PS through the existing Anacostia Main Interceptor, where it will be "lifted" and discharged into the major sewers that deliver flow to Blue Plains Advanced Wastewater Treatment Plant. At that point, sewage collected from this area of the District will be treated and discharged to the Potomac River. The PP-PS incorporates green design elements such as photovoltaic solar panels, an extensive green roof and green infrastructure incorporated into the landscape.

The general contract for this work was awarded to EE Cruz Co., Inc. in the spring of 2015. American Contracting negotiated a subcontract with EE Cruz to furnish and install the heavy mechanical, plumbing, HVAC, major equipment and associated testing and start up. ACE also provided EE Cruz with the Operational Demonstration of this work, which included 24-hour monitoring and operation of the new pump station.

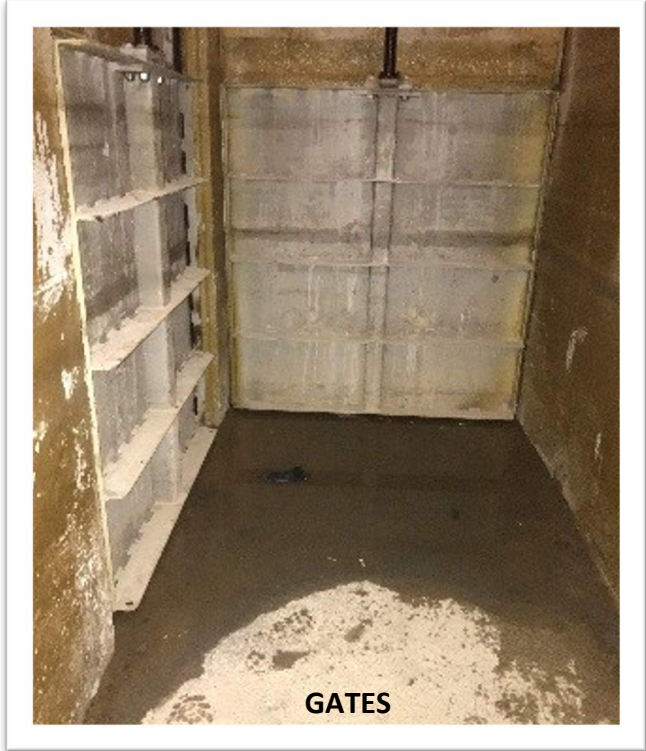
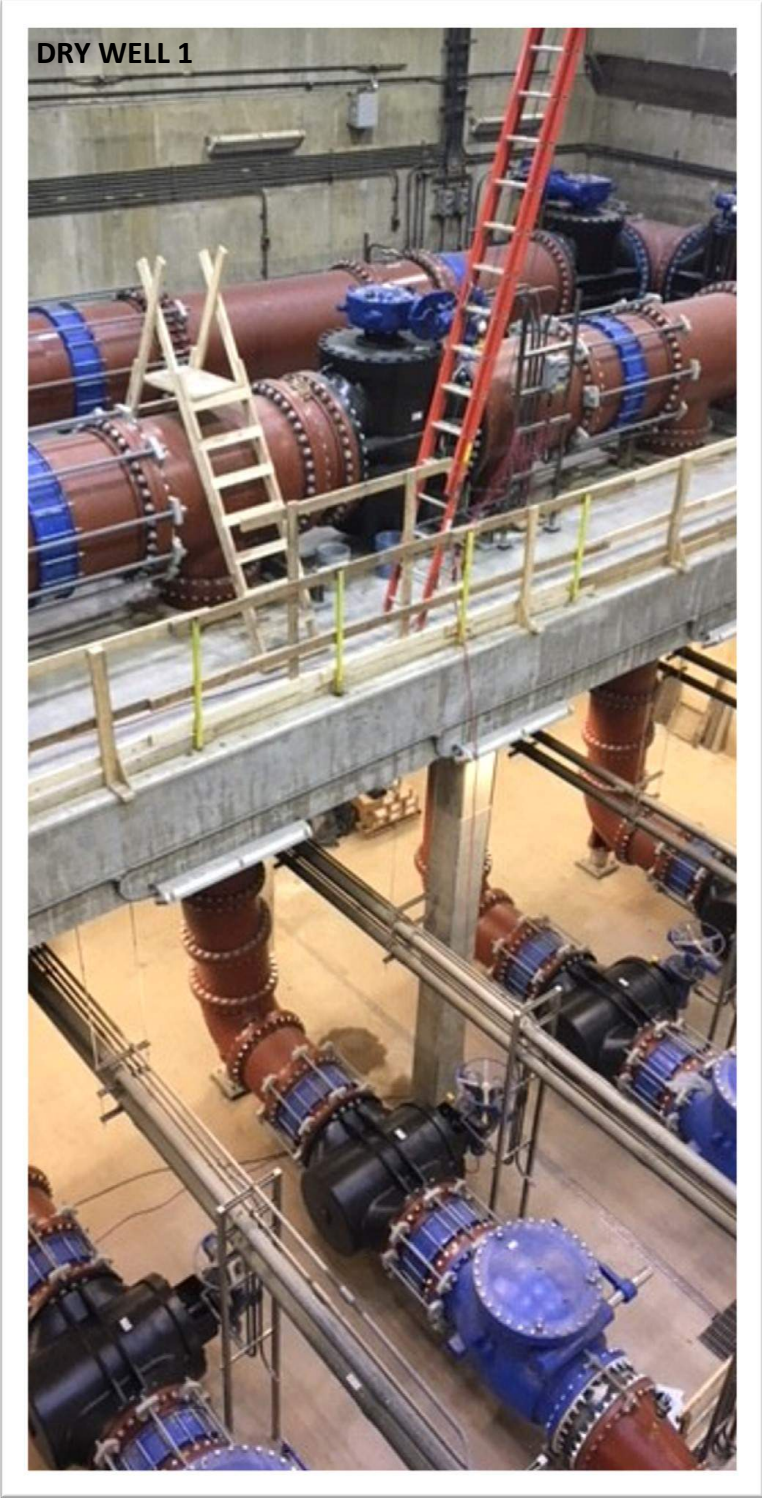


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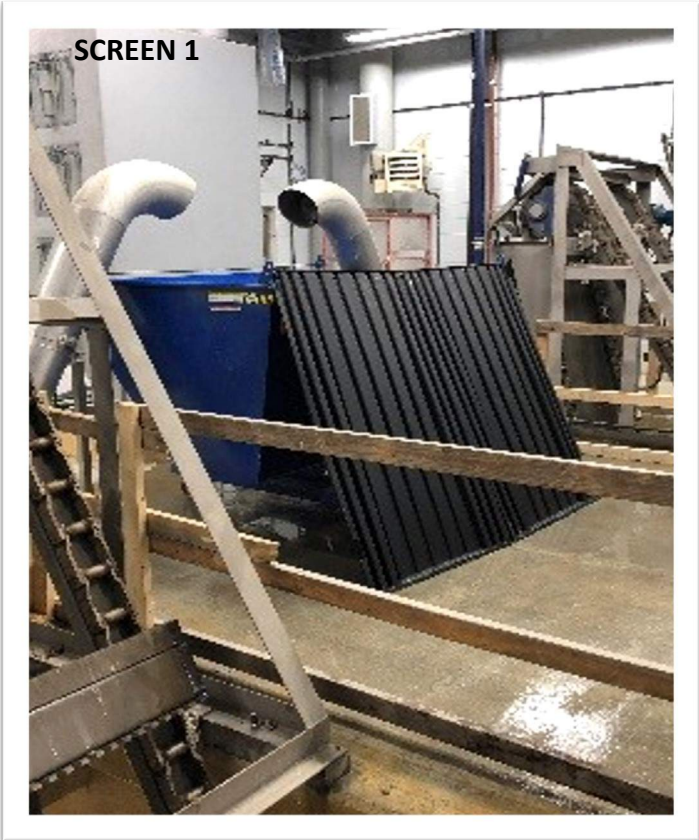
ACE started out the project with installing all of the embed items related to our work in order for the general contractor to make the needed concrete pours. Once the concrete pours were completed, ACE got to work installing all of the large diameter suction and discharge lines which included 30", 36" and 42" pipe, valves and fittings. Next to be installed were four, 550 RPM 175 HP Dry Pit Submersible Pumps in the 50-foot deep dry well. ACE also installed two mechanical bar screens and washer compactors in the newly poured influent channels. There were seven stainless steel electrically actuated slide gates that were installed at various locations within the pump station. ACE installed a robust HVAC system to protect DC Water operations personnel while operating the pump station. This system included outdoor air handling cooling units, outdoor make up air heating units and a 30,000 CFM Activated Carbon Absorption Odor Control unit the size of a city bus! While there were many challenges on this project, ACE crews were able to provide quality workmanship while simultaneously strengthening our relationship with DC Water. Superintendent Charles Mann, Foreman Dennys Villatoro and our field crews were instrumental in completing this difficult work under an accelerated timeline.

Poplar Point Pump Station

American Contracting is currently in the “punch list” phase of this project. The station has been successfully started up and has passed the Operational Demonstration period required by DC Water.



Poplar Point Pump Station



ODOR CONTROL UNIT 3



Current Projects

CURRENT PROJECTS

Potomac Pumping Station

DC Water
\$12,730,593

Poplar Point PS Mechanical

DC Water/EE Cruz
\$3,918,572

Divinity Cove SPS

Anne Arundel County, MD
\$915,891

UV Disinfection System Upgrade

Alexandria Renew Enterprises
\$4,177,458

Mayo Pump Station & Annapolis WRF Influent

Anne Arundel County, MD
\$4,592,068

Patapsco WWTP Residual Transfer Station

Baltimore City, MD
\$2,928,000

DC Water Raw WWPS 2 Upgrades

DC Water
\$19,628,497

Loch Raven Dam Facilities

Baltimore City, MD
\$10,049,206

Blue Plains MFU Phase 5

DC Water
\$28,580,367

Annapolis WRF Dewatering II Facilities

Anne Arundel County, MD
\$13,420,817

ACE Yards Warehouse

\$1,425,000

Broadwater WRF Headworks

Anne Arundel County, MD
\$1,621,910

Mattawoman WWTP Closed Loop Improv

Charles County, MD
\$15,519,600

UOSA Lime Slurry Room

UOSA
\$1,040,000

Annapolis WRF Influent Pump Station

Anne Arundel County, MD
\$241,950

Dalecarlia West Filter Bldg Valves

USACE
\$3,893,000

Eastern Correctional Institution WWTP

MES
\$17,000,000

Cox Creek O&M Complex Containment Facility

MES
\$5,387,000

Olney Federal Support Center WWTP

FEMA
\$1,193,000

Dorsey Run Pumping Station

Howard County, MD
\$3,102,000

On the Horizon

Patuxent WRF Dewatering

Anne Arundel County, MD
Bids 4/17/2018



ACE Adds Industry Leader in Business Development

By: Reg Godin, Talent Director

American Contracting is pleased to announce the addition of Mike Cecil to the company's team. Mike will serve as Director of Business Development and help accelerate the company as the premier builder of water and wastewater treatment facilities in the Mid-Atlantic region. Mike will provide the leadership needed for ACE to offer its clients collaborative project delivery methods such as Construction Manager at Risk (CMAR) and Design-Build.

Cecil is a native of Saint Mary's County, MD and has worked for over 35 years in the mechanical, heavy civil and water & wastewater construction fields. He has worked for some of the most successful architectural and engineering contractors in the construction industry, such as Haskell, Black and Veatch, and PC Construction. Working for these firms gives Mike a unique national and international construction background and expertise focused on delivering collaborative CMAR and Design-Build projects. Cecil will be a valuable addition to ACE and asset to its Mid-Atlantic clients.

In addition to his professional experience, Mike holds numerous certifications and licenses. He is designated as a design build professional by the Design Build Institute of America (DBIA) Professional and sits on the DBIA Water & Wastewater Education and Conference Committees. He holds master licenses in plumbing and HVAC, as well as a licensed General Contractor in several states.



"We are pleased to welcome Mike to the ACE team," said Executive President, Jim Voltz. "He has over 36 years of experience building every facet of a wastewater construction project, giving him extensive knowledge on how to deliver for public and private clients. He is recognized as a leader in collaborative delivery projects and enhances our team as we add CMAR and Design-Build to our tool belt."

ACE is coming off its most successful year on record, recording over \$40 million in total revenue, and garnering industry recognition for its work. ACE was named the #150 Environmental firm by Engineering-News Record (ENR) and ENR also awarded ACE's Greensboro Wastewater Treatment Plant the Environmental Award of Merit project in the Mid-Atlantic region. In addition, ACE was a significant subcontractor for CHA Consulting on their Monogram Clean Energy Plant American Biogas Council 2017 Project of the Year.

"This is a substantial hire for our company," said Executive Vice President Joe Godin "Over the last 15 years we have built ACE to be the best Design-Bid-Build contractor in the Mid-Atlantic's water and wastewater industries. Mike's incredible industry knowledge will provide the leadership we need to offer our existing client base alternate delivery methods of construction, bringing our business to the next phase of growth."



Nuts and Bolts — Welcome Co-Op Engineers

Christine Determan, Co-Op Engineer
ACE Home Office, Columbia, MD



The transition from living in Pittsburgh to living at home with my parents was a bigger change than I expected. I'm originally from Ellicott City, Maryland (just 15 minutes away from the office in Columbia) but I attend school at the University of Pittsburgh. Pittsburgh is an amazing city with so many activities to do and places to discover; including trying frog legs and alligator in Market Square or ordering authentic Polish and Asian food in the Strip District. With unlimited bus access, you can literally go anywhere in the city for free, the only limitations being the bus schedule and Google Maps crashing when it's needed most. When I'm not exploring the streets of Pittsburgh, I'm studying for a degree in Materials Science and Engineering with a minor in Mechanical Engineering. What drew me to Materials Science and Engineering was the unique combination of chemistry, physics, and mechanical engineering concepts. Based on the one semester of practical engineering classes I've had so far, Materials Science seems

to be my perfect niche within the world of engineering. Since there is so much overlap between materials science and mechanical engineering, I thought having a minor would supplement and enhance my overall engineering knowledge. Having a major and a minor gave me a jam-packed schedule up until I graduate. To manage all my classes with my other activities and friends, I developed a strong work ethic. I brought this same work ethic to ACE. I aim to finish all my assignments on time or early, because "to be early is to be on time, and to be on time is to be late" (something that was instilled in me by an old coach). This is the attitude I bring to any assignment, whether it be calling a few hundred dry wall contractors, assembling an office chair, or formatting and printing budgets.



Nuts and Bolts — Welcome Co-Op Engineers

Kaylee Levine , Co-Op Engineer Annapolis WRF Dewatering II Project

Walking into the construction trailer on the first day of work, armed with just five semesters of mechanical engineering classes under my belt, all of which were concerning short in applicable lessons in construction, I was basically a blank slate. Somehow, between learning about Euler's formula and Castigliano's theorem, anything pertaining to how to actually get something built appears to have eluded my education. None of my textbooks mentioned so much as the difference between a coupling and a bushing, leaving me equally clueless.

A corollary thought to my initial impressionable state was the infinite potential for learning that it provided. I am amazed at the rate at which my store of knowledge has expanded, affording me a new understanding of the construction world. From pointing out pipe fittings with the superintendent to conversations about phone etiquette with the project manager, every moment in the construction trailer and in the field has been an opportunity to learn. And as my experiences have grown, so has my confidence. Seeing my projects come to fruition as permanent components of the Annapolis Water Reclamation Facility has been a gratifying result of so many hours of product research, conversations with vendors, submittal writing, and takeoffs and serves as the physical manifestation of my contribution to the job as well as the encouragement to keep going.

As much as I have learned since I started, it has only become more apparent how far I have to go. Thanks to my coworkers and supervisors, who each contribute their own wisdom to my stock while valuing my input along the way, I am well-equipped to continue my construction education and am excited to make my mark as a member of the ACE family. As for the mark that my experience has had on me, at the very least, I will never look at a run of pipe the same.





Nuts and Bolts — Welcome Co-Op Engineers

Luke Kreider, Co-Op Engineer Annapolis WRF Dewatering II Project



Over the past 3 months I have learned more from my Co-op than I could have ever anticipated. My experiences at the Annapolis WRF Dewatering project have not only furthered my education in engineering and taught me applicable skills and knowledge for a future career in engineering, but have also forced me to better myself as an engaged learner and efficient worker. My experiences have also enlightened me to what construction and engineering are really like. Outside of all the knowledge that I have obtained

while working with ACE, the single most important thing that I have taken from this Co-op is that I want to stick with a career in engineering.

I will say that the transition from student to working in construction was a challenge that I knew I would face as I had no previous classes or work experience in construction. Like most other Co-ops, I had to learn and pick up the trade as efficiently as possible. My management team was an amazing resource in not only teaching me but not “holding my hand” through the process so that I had the resources to accomplish a task but still had to work it out on my own. For their help, guidance, and patience, I thank my management team of Tyrus Hunter, JR Speigle, Chris Wolfenden, and Nicholas Heath. They have taught me how to do the paperwork side of engineering on a jobsite with submittals to purchase orders. They have taught me how to keep a jobsite up and running with ordering materials, designing work-packs, and taking care of the day to day issues that arise on the site. They have even given me insight to how the work is done, how meetings are held, and how to coordinate with everyone so that the job gets completed in an efficient manner. Throughout my Co-op, one of the things I found most helpful and motivating was being able to tie my classes and studies into what I was doing or working with on the job. This has caused me to look forward to heading back to class, so that I can further my studies and bring that new knowledge back and tie it into its applications.

As previously stated, I am looking forward to heading back to the University of Pittsburgh where I am a Mechanical Engineering student. In my spare time I am a gear-head with a love for all things motorized. I enjoy both learning about and working on cars at any available chance.

In conclusion, I am incredibly thankful for the opportunity I was given by ACE to work at the Annapolis WRF Dewatering jobsite. I have learned so much and bettered myself through this experience.



Nuts and Bolts — Welcome Co-Op Engineers

Shaun Blake, Co-Op Engineer DC Water Miscellaneous Facilities 5

MY ADVENTURE DOWN THE POOP SHOOT:

I can remember the moment that I got curious about poop. It was my second semester of graduate school and professor Moser gave us a mission: Visit a local body of water and come up with a resolution that improves the surrounding area.

I researched the Anacostia River, mostly because it was the closest body of water to my house. The information proved to be interesting and I learned about a slew of technologies that harnessed natural resources while mitigating the negative outfall from processing waste. Of those technologies, the CAMBi system seemed to pique my interest the most. I was so impacted by what I found that I submitted my original thesis topic as “A study of wastewater processing and the development of low maintenance treatment systems.” (uber boring to the masses, but I am sure you guys would have found it riveting.)

So, what does this have to do with my experience as a co-op with ACE?

Fast forward a couple of years.

I would find myself standing in front of the CAMBi system, staring at the huge tanks while I reflected on the idea that I had somehow closed a loop that started during that second semester.

I remember looking towards the sky thinking “I better stop staring at these tanks and catch up with Jason before he thinks I’m strange.”

It was my first day as a co-op engineer and I was in the middle of an introductory tour by Jason Clopper who was also giving me the rundown on how the work flows on the site. He showed me the various construction zones and explained the varied nature of each of the projects. Jason let me know that my role on this site was to support the team’s efforts to close out previously completed tasks while providing assistance as we onboard new tasks that come from DC Water.

Over the next few hours I would learn how dynamic this team was by observing Sean Howrigan, Grant Pierce, Todd Ritenour, Jose Rivas and the small group of craftsmen that actually execute the myriad projects that come from DC Water.

Within the months that followed: I watched the team go from repairing filter units to building a state-of-the-art greenhouse; I listened to debates as the team learned new skills in order to prepare for tasks that were in the pipeline; I worked with DC Water to archive and handoff project documentation; and I even got to design a small kitchen.

I found that this onsite work supplemented my earlier experience as a member of ACE’s estimation team by allowing me to put eyes on many of the concepts that I had seen in the contract drawings. It also allowed me to garner a better understanding of how pre-construction value engineering can affect the efforts of a team.

Having had the opportunity to play in both worlds in such a short period of time has also helped add perspective to my thoughts on the role of a designer as a project manager.

As this opportunity comes to an end I find myself feeling satisfied and lucky to have been able to spend the past few months developing skills that I didn’t often get to work on. I feel confident that the time spent here will prove valuable. I am quite honored that I got to work on projects that connected to my personal journey.

Hakuna Matata.



We All Play a Role in Tool Safety

Hand and power tools are such a common part of construction work that many of us tend to brush off safety procedures, assuming that the tools are not that dangerous. But, the truth is, hand and power tools can be hazardous, making tool safety a very important issue — not something that we can afford to ignore.

One of the most basic rules of tool safety is to use the correct tool for the job. For example, you should never use a screwdriver or chisel in the place of a crowbar. Using the correct tool for the job can save time and effort, as well as prevent injuries.

Another important safety rule is to inspect your tools before using them. If they are broken or in poor condition, don't use them. A dull saw or a hammer with a broken handle is an accident waiting to happen.

Other safety precautions include:

- If you are using hand and power tools and are exposed to hazards related to falling, flying, abrasive and splashing objects, or exposed to harmful dusts, fumes, mists, vapors or gases, you must use appropriate personal protective equipment.
- Never use wrenches, including adjustable, pipe, end and socket wrenches, when the jaws are sprung to the point that slippage occurs.
- Impact tools, such as drift pins, wedges and chisels, must be kept free of mushroomed heads.
- The wooden handles of tools must be kept free of splinters or cracks and must remain tight in the tool.
- Electric power-operated tools must either be of the approved double-insulated type or be properly grounded.
- Never use electric cords to hoist or lower tools.
- Stop fuel-powered tools while they are being refueled, serviced or maintained.
- If you discover a tool that is not in proper working order, or that develops a defect during use, immediately remove it from service and do not use it until it has been repaired.
- Never load tools until just prior to the intended firing time.
- Never point loaded or empty tools at co-workers. Keep your hands clear of the open barrel end.
- Never leave loaded tools unattended.
- Do not drive fasteners into very hard or brittle materials, such as cast iron, glazed tile, surface-hardened steel or glass block.

These are just a few of the countless tool safety tips. It is virtually impossible to cover everything. The important thing is to keep safety in mind when using tools. It will keep you and your co-workers safe on the job site. Thanks for your attention!





Welcome New Employees

Jose Parada Garay (Skilled Laborer)
September 13, 2017

Moises Arias (Crew Leader)
September 20, 2017

Manuel Ramiro Nivicela (Trade Foreman)
October 6, 2017

Milton Lopez Torres (Skilled Laborer)
October 11, 2017

Mike Cecil (Director of Business Development)
January 8, 2018

Kalyan Jakka (Project Engineer)
January 15, 2018

David Phillips (Project Engineer)
February 2, 2018



“If you are working on something that you really care about, you don’t have to be pushed.
The vision pulls you.”

—Steve Jobs

HOWARD COUNTY REBUILDING TOGETHER 2018

Rebuilding Day is Saturday, April 28th.

Please remember to dress appropriately and do not wear clothes or shoes that you wouldn’t want to get dirty.

If you have any questions please contact our

Ambassador, Linda Hamm at

410-255-2793 or email:

linda.hamm@aceservinc.com.

Thank you for volunteering!



ACE HOLIDAY CLOSINGS

Monday, May 28th (Memorial Day)

Wednesday, July 4th
(Independence Day)

Monday, September 3rd (Labor Day)

Dig a little deeper!

Two brothers were determined to strike it rich during the gold rush. They staked out a claim and began a small mining operation that seemed promising.

After extracting a small amount of gold, the vein no longer yielded them anything other than rocks and dirt. Their dreams were a bust. They sold off their equipment and the rights to their claim and returned home, defeated.

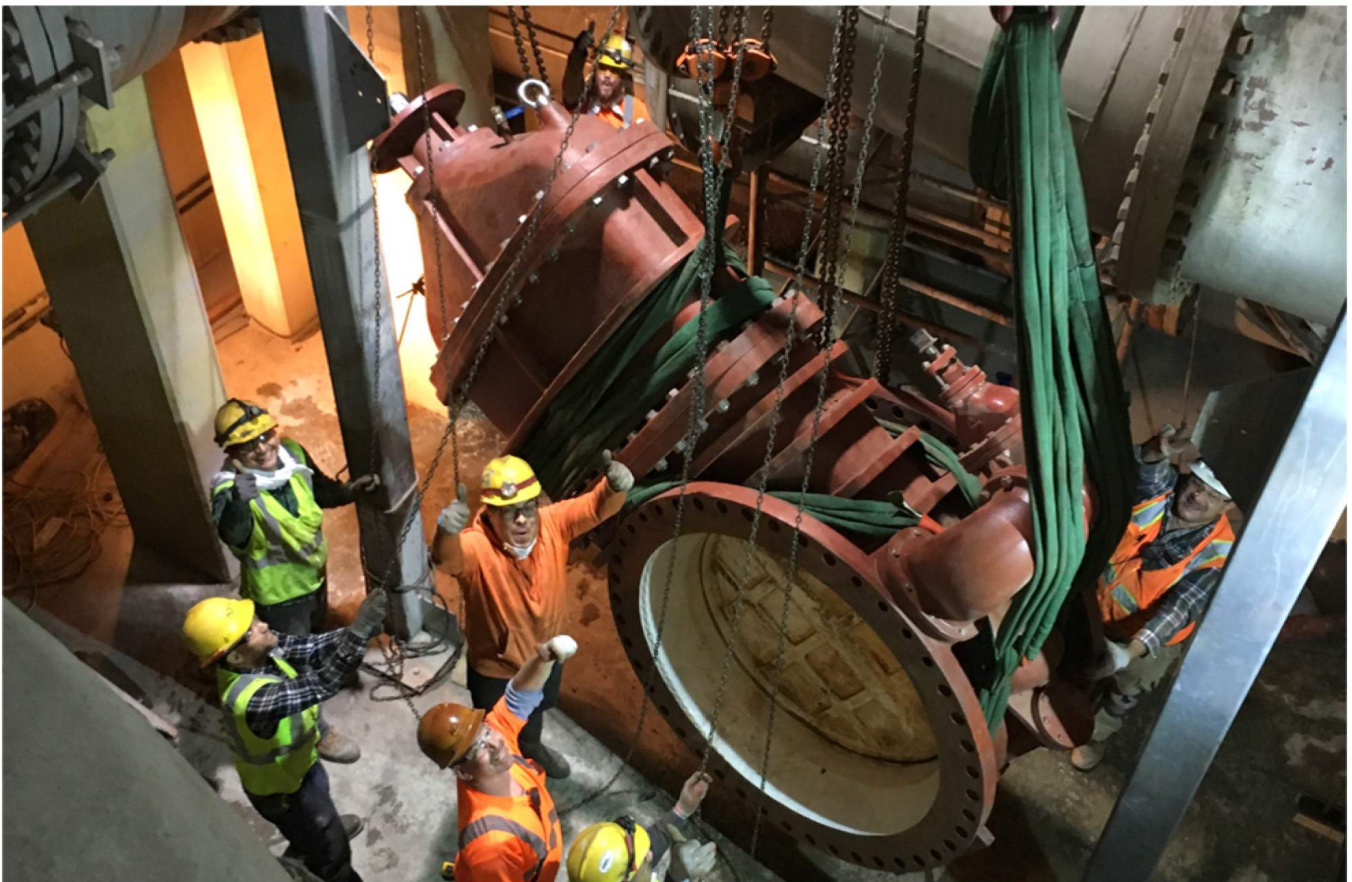
The man who now owned the claim consulted with an engineer. After a thorough survey, the engineer advised the prospector to continue digging in the same area where the brothers had been working, but to go a few feet deeper. The prospector followed the advice, struck gold, and became a very wealthy man.

Potomac Pump Station Project Featured in ENR Best Construction Photos of 2017

By Joe Godin, Executive Vice President

One thing I have learned after nearly 25 years in the industry is that we do some pretty cool work. From installing huge items of process equipment with custom design gantry cranes to performing critical plant shutdowns and tie-ins, virtually all of our projects involve some complex and intriguing work. Unfortunately, there is rarely a professional photographer standing around when the fun stuff goes down, so we don't always have great photos of everything that we do.

With the advent of more sophisticated smart phone cameras, the game is changing. We are now able to take high quality photos on the jobsite capturing images of daily work activities. One of these photos was recently featured in the 2017 ENR Year in Construction Images issue. Superintendent Russ Chunn snapped a picture of the ACE team rigging and installing a 54" gate valve at the Potomac Pumping Station in Washington, DC. The picture really demonstrates the massive size of the valve in comparison to the men standing nearby as well as shows our crew working together with smiles on their faces. Talent Director Reg Godin, always with a sharp eye for quality, submitted the photo to ENR and it was selected for publication in the magazine. Over 750 photos were submitted nationwide and this was one of only 33 selected by the judges.



Potomac Pump Station Project Featured in ENR Best Construction Photos of 2017

By Joe Godin, Executive Vice President

Looking back over the years, I can think of many more times that we could have been featured in this issue had we only taken the photo at the right time or simply submitted one of our great photos into the contest. Not only is this a reminder of the challenging work we do every day but also that you have to be in the game to have a chance to win. I encourage all ACE team members to be on the lookout for these types of images so we can continue to be included in future ENR publications.

The entire sequence of photos of the valve installation taken by Russ is featured below, which really shows the great planning and execution of our team at Potomac. Thanks to Russ, Reg and the entire Potomac team for showing the country what ACE can do!



Potomac Pump Station Project Featured in ENR
Best Construction Photos of 2017

