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Ditchdigger of the year

Ryan Kinning, Penro Construction

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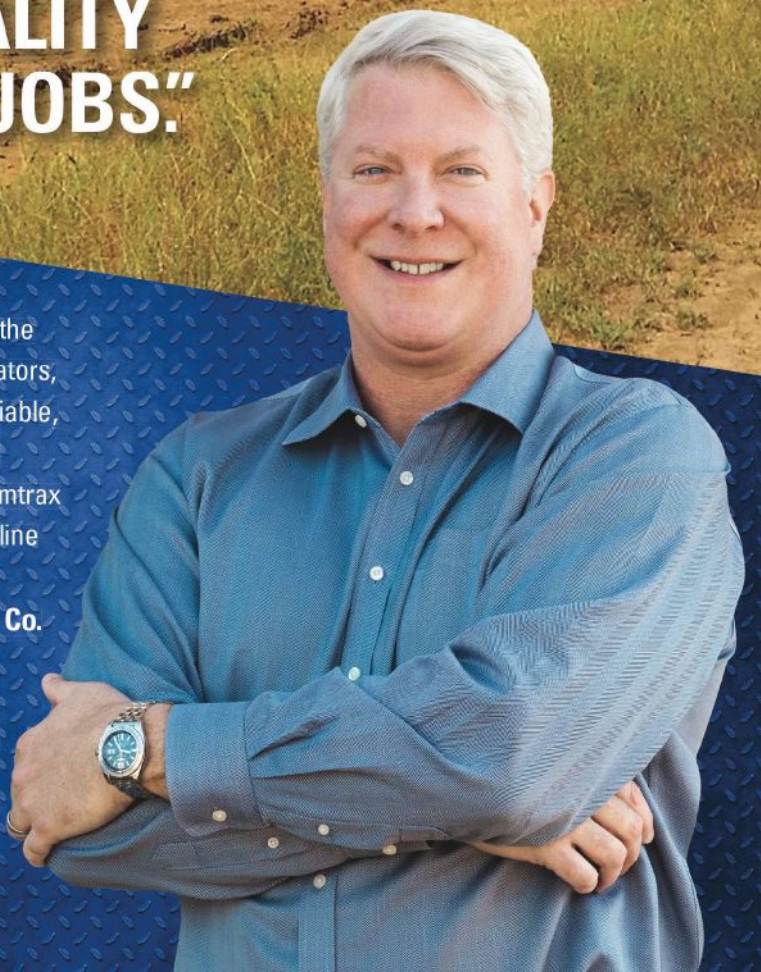

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TAKE THE TIME. KEEP THEM SAFE

I am generally not a person who gets on soapbox. But I can't help but think that our industry is failing miserably at protecting our workers from dying in our trenches. If you read George Kennedy's Safety Management column last month, you know what I am talking about. Too many workers are needlessly getting killed, buried alive, in unprotected trenches. And it has to stop.

The majority of NUCA contractors have safety as the number one priority. However, as leaders in this industry, it is our responsibility to share and promote safe working methods with all who call themselves "Utility" contractors. That is why NUCA, in partnership with NAXSA and with the full endorsement of OSHA, will hold a Trench Safety Stand Down Week, June 18-23, and I urge everyone reading this to participate.

NUCA's VP of Safety George Kennedy recently shared some startling numbers with me. In 2016, 23 workers were killed while working in trenches (double that of '14 and '15 combined). The numbers were just as bad in 2017, and fatalities this year are already halfway to last year's total — and we are just closing out the first quarter. By anybody's standards, these deaths are unacceptable.

It is hard for me to imagine that any utility contractor would put their employees in such danger. But incredibly, there are still employers who choose to risk the lives of their employees to save a buck, or they believe the excavation does not require trench protection, or they hope the short-term operation will go undetected by OSHA.

In the last 25 years, NUCA has spent hundreds of thousands of dollars ensuring members are educated and or trained on many safety issues. But protecting workers in the trench (and offering training to ensure that happens) has by far been NUCA's biggest safety focus. I believe the vast majority of contractors, members or not, do their best to protect workers, but the numbers speak for themselves.

It is up to us to keep our workers safe and to show non-NUCA members the importance of having well-trained and educated crews on every jobsite, which brings me back to our TSSD.

Last year contractors, municipalities, engineering firms, and the military from all over the country participated in TSSD week and educated more than 11,000 workers. A great reach, but this is a very small percent of workers who need this safety message. Hopefully the press will cover this event, and our message will get to a contractor or crew who is lacking in this training and will reach out to us for help.

I would like to ask everyone reading this magazine to commit participating. If you are pressed for time, you can hold 20-minute trench safety Toolbox Talk with your crews. Last year, some companies held company-wide training, some showed trench safety videos, some did onsite demonstrations. It doesn't matter what you do. Just get the information to your employees so it is always in the front of their minds.

You can download lots of materials for your TSSD from the NUCA website, including last month's Safety Management article, "Buried Alive." The first paragraph describes what it is like for a worker buried in a trench collapse. It is not for the faint of heart, but I am sure your employees will remember it.

As I step down from my soapbox, I want to thank everyone who attended NUCA's recent convention in San Antonio and extend my congratulations to all the award winners, including Ryan Kinning, Ditchdigger of the Year, and Gary Lawson, Associate Member of the Year, two well deserving recipients.

The success of the convention is largely due to the volunteers who took time to participate in convention-planning conference calls. Thank you to the NUCA staff and all the ED's for your input and assistance. Thank you to this year's chairpersons: Alex Kocher, Penny Danielecki, Andy Williams and John Davis. These are all unsung heroes who put together another excellent convention. Thank you all for your hard work.

Having the opportunity to see what happens behind the curtain this year, I can assure you that every last one of these individuals was committed to ensuring the customer satisfaction of all attendees. The staff, in particular, remind me of the calm-and-collected duck above the water, but below, they are paddling hard. Thank you all for your hard work

Lastly, please take a little time to help our association become stronger: recruit and new member, join a committee or volunteer, help grow the NUCA PAC. We are all at the busiest time of the year, but just a five-minute phone call can help.

Have a safe and profitable summer.
Mark Fuglevand
NUCA Chairman of the Board
KBA Inc.

May/June 2018 Volume 42, Number 3, *Utility Contractor* (ISSN 1098-0342) publishes 6 issues per year (bi-monthly) for the National Utility Contractors Association by Benjamin Media Inc., 10050 Brecksville Rd., Brecksville, OH 44141. Periodicals postage paid at Cleveland, OH and additional office. One year subscription rates: Complimentary in the USA & Canada and $99 in foreign countries. Single copy rate: $10.00.

Subscription Info. / Address Changes (Postmaster):
Utility Contractor Magazine,
10050 Brecksville Road,
Brecksville, OH 44141
330-467-7588
subscriptions@benjaminmedia.com

Canadian Subscriptions: Canada Post Agreement Number 40830553. Send change of address information and blocks of undeliverable copies to:
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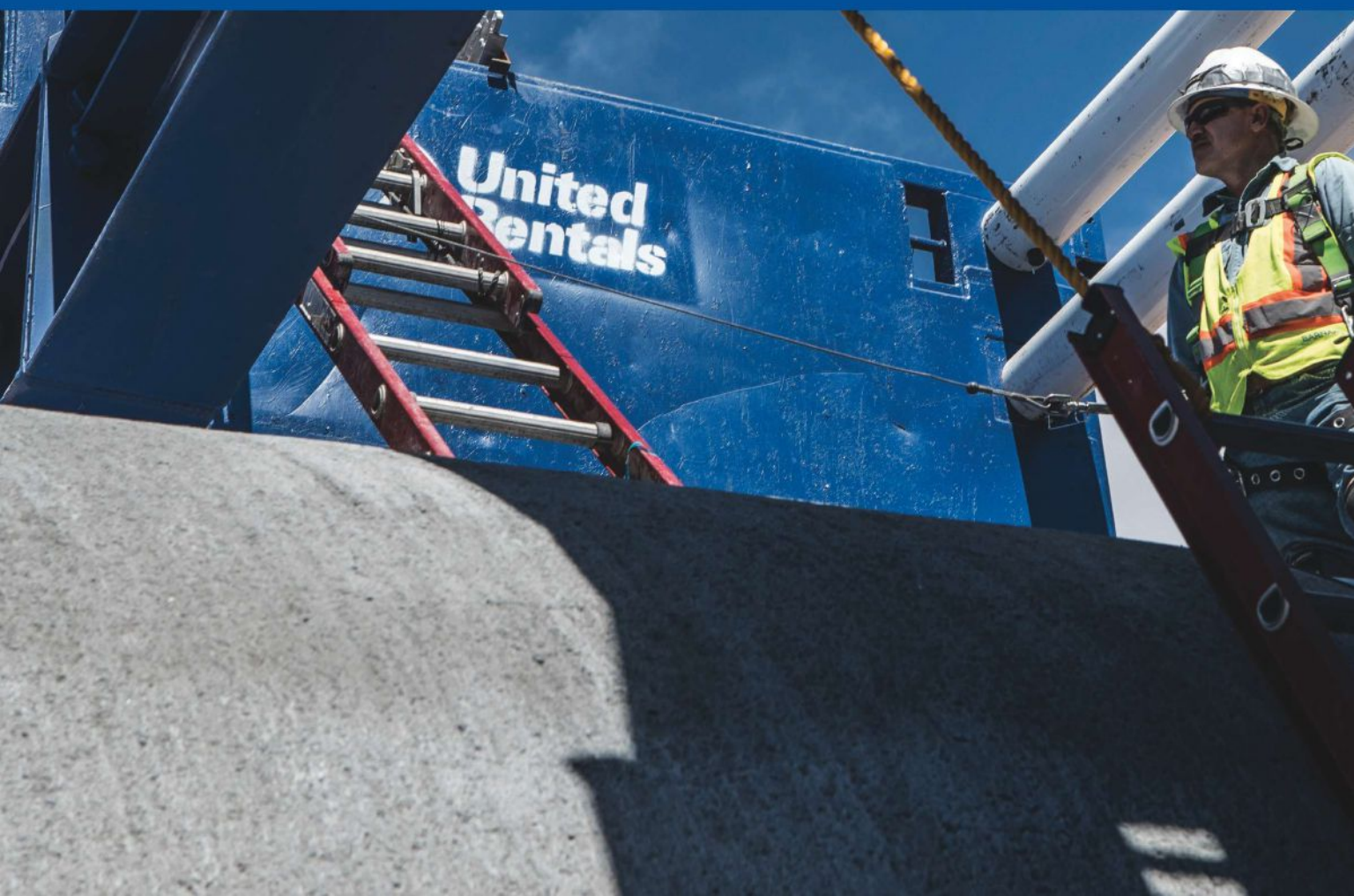

Ditch Witch Partners with Vacuworx, Vacuum Lifting Equipment Manufacturer

Vacuum lifting technology offers an effective approach to moving materials on tough concrete demolition and construction, road and landscaping projects. Ditch Witch, a Charles Machine Works Company, has partnered with Tulsa-based Vacuworx to bring the benefits of vacuum lifting technology to an expanded network of underground construction contractors, landscapers, municipalities and utilities.

Vacuum lifting systems are designed to use constant vacuum pressure to handle heavy loads, such as steel road plates and concrete slabs. The proven technology eliminates the need for conventional lifting mechanisms that may damage materials. The Vacuworx systems handle up to 10 times more material than conventional methods in half the man hours, allowing contractors and landscapers to spend less time loading materials and more time focused on the job. Vacuworx compact equipment attachments are designed to work with the full line of construction-grade Ditch Witch mini skid steers.

"Our partnership with Vacuworx will enable our line of mini skid steers to do what others can't, allowing us to continue offering our customers advanced innovation and expanded versatility," said Randy Rupp, Ditch Witch vice president of product strategy. "The vacuum lifting attachments help meet the growing challenges and needs of contractors and municipalities in the underground construction space."

"We're thrilled to partner with the Ditch Witch organization," said Bill Solomon, Vacuworx president. "It allows us to expand the distribution of our vacuum lifting technology and reach new markets. We're dedicated to offering our customers innovative, cost-effective, safer solutions and this partnership enables us to further honor and fulfill that commitment."

The Vacuworx PS 1 Portable and SL 2 Subcompact Vacuum Lifting Systems are compatible with the full line of Ditch Witch mini skid steers (the SK600, SK800, SK1050 and SK1550). The PS 1 can lift up to 1,700 lbs and is an ideal solution for lighter and smaller lift loads on compact jobsites that require the SK600 unit. The SL 2 weighs just 98 lbs and can lift up to 2,700 lbs. It is also compatible with the full mini skid steer line, but to get the most out of its lifting capabilities the SL 2 must be used in tandem with the SK1550 unit.

United Rentals Richard Overman (left) and Blake Smith (right) hosted many guests from the convention, including new NUCA Chairman Mark Fuglevand.

United Rentals Welcomes Guests on the Riverwalk

As part of the NUCA Convention in San Antonio, Texas, March 6-9, NUCA Silver Partner United Rentals hosted a reception for attendees along the city's famous Riverwalk. The event was held March 8 at Iron Cactus Mexican Restaurant and Margarita Bar in the heart of the Riverwalk's entertainment district. United Rentals hosted the party on the outdoor patio, where guests enjoyed drinks and hors d'oeuvres just steps from the San Antonio River. As an added bonus, guests were treated to modern classics performed live in traditional Mexican style.

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Eye on the Future

Iowa Trenchless president Jason Clark is helping school children in his area learn and have fun – while perhaps sparking an interest in construction – purchasing a bulk subscription of Jobsite Juniors for students at Panorama Elementary in Panora, Iowa. Clark purchased 40 subscriptions for the school's first grade class.

Jobsite Juniors is published by Utility Contractor publisher Benjamin Media Inc. Jobsite Juniors was launched in 2017 and is intended for kids 5 to 8 years of age. The pages of Jobsite Juniors are packed full of education, games and cool pictures of trucks, bulldozers and other equipment. A sample issue is available online at jobsitejuniors.com.

Despite the fact that the construction industry offers high-paying jobs with good benefits, attracting workers to the industry has been a challenge. Jobsite Juniors helps instill an interest in construction that perhaps may lead to a career in the industry.

RIGHT: Iowa Trenchless president Jason Clark and Panorama Elementary Principal & School Improvement Coordinator Liz Ratcliff.

Wacker Neuson Celebrates 60 years in the United States

In 1957, Wacker Corp. began its journey into the US construction market with a single product, the company's signature vibratory rammer. The merger between Wacker Construction Equipment AG and Neuson Kramer Baumaschinen in 2007 (10 years ago) created a new Wacker Neuson brand along with one of the largest equipment portfolios in the world.

The company's roots date back to 1848 in a blacksmith shop in Dresden, Germany. The opening of the U.S. operation for the family-owned manufacturer was a true milestone. Brothers Peter and Hermann Wacker had the foresight to bring a growing German construction equipment business to the community of Hartford, Wisconsin. The brothers' hard work and dedication did not go unnoticed by contractors and equipment distributors. The rammer's reputation as a revolutionary compaction machine quickly skyrocketed and in 1958 a new office, warehouse and production facility was built on Wacker Drive in Hartford.

The company's growth and light equipment product line continued to expand, resulting in the company's relocation closer to Milwaukee, Wisconsin, in 1986. Today, the company's U.S. headquarters in Menomonee Falls and is home to research and development, engineering, manufacturing, sales, marketing, aftermarket services and an extensive training academy. Additional facilities include a manufacturing plant located in Norton Shores, Michigan, which was a result of the 2006 acquisition of Ground Heaters Inc., and a full logistics and warehouse facility located in Germantown, Wisconsin.

While the company is often known as the "rammer company," it goes well beyond that single product mentality. Wacker Neuson's U.S. operation is responsible for the manufacturing of walk-behind and ride-on rollers, trash pumps, portable and mobile generators, walk-behind and ride-on trowels, light towers, heaters, and most recently skid steers and compact track loaders. These products are among the more than 300 available under the Wacker Neuson brand, which also includes wheel loaders, telehandlers, excavators, dumpers, vibratory plates, internal and external vibrators and saws.

Wacker Neuson is now defined as a leading global manufacturer of high quality light and compact equipment used in construction, landscape, agriculture, utility, residential, municipal and industrial markets. The company's long tradition of countless innovations has changed the way customers work, build and transport goods all over the world.

Charles Machine Works' Johnson Tapped as ICUEE 2019 Show Chair

ICUEE-The Demo Expo announces Rick Johnson, CEO of Charles Machine Works, has been named 2019 show chair. He leads the exhibition's management committee, a volunteer group of utility construction industry executives responsible for overall show planning.

ICUEE, the International Construction and Utility Equipment Exposition, will take place Oct. 1-3, 2019 at the Kentucky Exposition Center in Louisville, Kentucky. The biennial show is known as The Demo Expo for its extensive equipment test drives and interactive product demonstrations.

"AEM welcomes the knowledge, experience and active participation of Rick and all the management committee members. We are fortunate to have such a strong group of leaders providing strategic guidance as we also develop the longer-term vision for ICUEE into the next decade to meet industry needs," said ICUEE Show Director John Rozum.

Johnson joined Charles Machine Works in 1987, holding positions with increasing responsibilities, including chief financial officer.

Flannery Appointed President of United Rentals

United Rentals, Inc. announced March 8 that its Board of Directors has appointed Matthew Flannery as president of the company, in addition to his responsibilities as chief operating officer. Michael Kneeland, who became president and chief executive officer of United Rentals in 2008, will continue to lead the company as its CEO.

Kneeland said, "Matt Flannery is ideally qualified to serve in this expanded role. He is an engaging leader with a talent for inspiring our organization. As president, he will ensure that our company remains at the forefront of innovation, customer service and operational excellence."

Flannery joined United Rentals in 1998. He has over 25 years of sales, management and operations experience in the equipment rental industry, including extensive experience in all areas of the company's operations. In addition to chief operating officer, he previously served as United Rentals' executive vice president—operations and sales, and in various field management roles at senior, regional, district and branch levels.

CASE Construction Equipment Names Marchand VP-North America

CASE Construction Equipment has named Michel Marchand as vice president for North America, replacing Scott Harris who has taken a similar role at CASE IH. Marchand, who previously served as the regional sales director for Canada, will now oversee all CASE Construction operations in North America.

"He has both comprehensive knowledge of the construction equipment business and a passion for the CASE brand," says Leandro Lecheta, chief operating officer — NAFTA, CNH Industrial. "Throughout his career, Michel has consistently developed strong partnerships with our dealers in order to maximize growth and seize all the opportunities that the market has to offer."

"The CASE Construction brand is strong throughout North America, and we have a real opportunity now, with the advances made across the breadth of our product lines and the development of our dealer network, to make an even greater impact for our customers and compete in new ways across all markets," says Marchand. "I am very proud to be a part of the future here at CASE."

Marchand left the automotive industry and first joined CASE as a business manager in 2009, and then took on the role of regional sales director in 2011. He is married to his wife, Sylvia, with whom he has two children — Luc and Anna.

Core & Main Names Jeff Giles VP-Corporate Development

Core & Main, a company with a longstanding history as one of the largest distributors of water, sewer, storm and fire protection products in the nation, has appointed Jeff Giles as its new vice president of corporate development.

Giles has more than 15 years of experience in business and corporate development and has led or participated in more than 20 transactions totaling nearly $1 billion. Most recently, he served as director of corporate development for Barry-Wehmiller Group, a St. Louis-based global supplier of engineering consulting and manufacturing technology, where he was instrumental in the company's acquisition-driven growth.

As vice president of corporate development for Core & Main, Giles will lead the mergers and acquisitions (M&A) and corporate development functions, including strategy and inorganic growth initiatives, pipeline development, strategic evaluation, deal structure, valuation, due diligence and negotiation.

"Jeff's skills and expertise will be extremely beneficial to our growth plan for 2018, especially as we work to expand our services across markets," said Core & Main CEO Steve LeClair.

McLaughlin Welcomes East Coast Representative

McLaughlin announced the addition of Tim Ross, regional sales manager for its East Coast territory. In his new role, Ross will provide sales support and expert advice for McLaughlin equipment dealers and contractors throughout the region.

For the past 17 years, Ross has served the construction and utilities industries, working in various positions including sales support for contractors running vacuum excavation equipment in the Central and Southeastern regions of the United States. He has also served as the production manager for a vacuum excavation manufacturer, office manager and information technology manager.

"Tim's entire career has been focused on helping with the needs of contractors serving the utility industry," said Jake Jeffords, McLaughlin director of sales and marketing. "He has a passion for the industry, knowledgeable about machinery and focused giving customers the support they need to be successful. We are thrilled to have him on our team."

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DITCHDIGGER

OF THE YEAR

Ryan Kinning, Penro Construction

By Jim Rush

Reflecting on his career path to date, Ryan Kinning, vice president at Penro Construction Co., points to his involvement with NUCA as being instrumental in his professional and personal development. And, fortunately for NUCA, that involvement has helped expand the association's chapter footprint and member benefits.

In recognition of Kinning's tireless efforts to strengthen and promote the association, he was named the 2017 Ditchdigger of the Year Award during NUCA's Convention, March 9, 2018, in San Antonio. Presented annually to a contractor member who has made a significant contribution to NUCA and the underground utility construction and excavation industry, the Ditchdigger of the Year is NUCA's most prestigious award.

Kinning acknowledges that he isn't a typical candidate for an award like this considering that Penro is an 18-person company based in Pender, Nebraska – population of just over 1,000. The fact that Kinning was able to make a difference on the national stage comes down to one word: involvement.

"You don't have to be from a $100 million company to make a difference," Kinning said. "By getting involved in committees and local chapters, you can make a difference in the industry. And you can make a difference right away. I encourage everyone to pick a committee that they are interested in and participate."

A Leap of Faith

Kinning is a second-generation contractor whose father, Arlis (Bud) Kinning Jr., was a founding partner in Penro Construction. The company was incorporated in 1971 by three original partners in northeastern Nebraska. Christiansen Construction Co. of Pender, Kinning of Rosalie, and Cliff Albin of Oakland, joined together to form an underground utility construction company. The three partners combined the names of their home towns to come up with the name "Penro."

Albin sold his shares to the other two partners in the mid-1970s, and Christiansen sold all of its shares to Kinning in 1986, making him the sole owner. Kinning would remain the sole owner until his son, Mark, started buying into the company in 1997. Upon Bud's retirement in January 2000, brothers Mark and Ryan purchased all stocks of Penro from their father and remain equal partners in the business today.

Ryan grew up in the construction industry but wasn't always sure that construction would be his career path. "I was exposed to construction at an early age and I knew the opportunity was there, but it wasn't something that I was planning on," he said. "Then I started working for the company during the summers as I got older, and I found that I liked it a lot better than I thought I would and decided to make a career out of it."

Ryan began his career as a laborer and served in several capacities in the field before returning to the office. The pivotal moment came in 2000, when Ryan and Mark bought out their father's shares to become company co-owners. "That was a leap of faith, and I jumped in head first," said Ryan, who was 23 years old at the time.

The 2000s proved to be a challenging time for utility contractors in the area, as well as nationally. "After we bought the company in 2000, we were able to grow the business steadily, even though we faced a very difficult market," Ryan said. "There were times that there were 15 bidders for every job and the margins were very tight. You had to bid just about every job that came out to make sure you had work. Now we are starting to see better margins and contractors are able to be more selective on the jobs they bid."

Penro's bread-and-butter is competitively bid municipal projects that involve pipe installation or replacement. "We build treatment plants, well houses, and lift stations but there has to be pipe on the job to get us interested."

As he approaches his 20th anniversary as co-owner, and the business' 50th anniversary, Ryan says his outlook has evolved along with the company. "When I first started, I thought owning a construction business would be a good way to provide for my family," said Ryan, who has two children, Max and Corinne, with his wife, Holly. "But the more time you put into the company and the bigger it gets, your perspective changes. You are no longer providing for just your family, but you are helping your employees provide for theirs as well. There's a lot of responsibility with that and your decisions affect a lot of people. Construction gives you a chance to make a difference in the community also."

Workforce development is key for the future of the industry. "Hiring employees is the No. 1 challenge we face," Ryan said. "It is especially difficult for us being in a rural area with a

limited pool of prospects and the task of attracting people not only to the industry but to a town of 1,000 people. We have been fortunate to have a great core group of employees, but finding enough people to take us to the next level is difficult. And once you get those employees you have to work hard to retain them."

NUCA Connection

Ryan attended his first NUCA Convention as a fourth-grader, as Bud and his wife, Charlene, regularly attended the event, occasionally bringing family along. "The thing we really enjoyed about NUCA was the Annual Convention," Bud said. "My wife and I went nearly every year through the 80s and mid 90s. The classes and the equipment shows were great but we really enjoyed the networking with other contractors from around the country the most. I learned a lot talking to them."

While Penro has been a NUCA member for 40 years, Ryan didn't begin his association involvement until relatively recently.

In 2009, Ryan, believing there was adequate interest, called NUCA to inquire about starting a Nebraska State Chapter. He was a vital member of the initial contractor champions group in Nebraska. Due to their efforts, NUCA of Nebraska was presented a NUCA chapter charter in 2010. Ryan was the chapter's second president and his vision and early leadership laid the foundation that has guided the chapter through growth and change. He continues to serve and actively participate in the chapter, which has grown to become a strong, active, and effective NUCA-affiliated chapter.

Ryan credits his involvement with the association in helping shape him professionally as well. "Getting involved with NUCA as an officer was an eye opener," he said. "You learn the difference between being a leader and being a boss pretty quickly when you are in a room full of bosses. You have to take a different approach, and that has impacted how I do things within my own company. "

Another benefit is interacting with peers who you would otherwise only see sitting across the table at bid lettings. "When the only time you see your competitors is in a competitive environment you tend to not make an effort to get to know them. Once you do you are surprised just how much we are all alike. I've met some of my best friends through working within NUCA and our chapter."

Serving three terms on NUCA National's Board of Directors, Ryan readily shared ideas, asked tough questions and challenged the status quo. He naturally fell into the Chairmanship of NUCA's Chapter Development Subcommittee and has strategically worked to widen and strengthen NUCA's reach by using a bordering states model that uses existing chapters to help develop neighboring regions. The accelerated formation of NUCA of Greater Kansas City Region was largely the result of Ryan visiting or calling prospective members in neighboring Missouri and Kansas developing a group of contractor champions, who now comprise one of NUCA's largest chapters.

Ryan's most recent work has been in North Dakota, where in just a few days he garnered enough contractor interest to hold a successful "kickoff" meeting this past January. Ryan continues to advise, encourage and help NUCA National develop chapters in other states, including Arkansas, Arizona and Maryland. And he shows no signs of slowing down.

(L-r) Holly, Ryan, Bud and Charlene Kinning after the awards presentation.

Ryan is a top-notch recruiter and believes that solid member benefits help him recruit. He believes more members means a stronger organization, which makes a stronger industry, which helps everyone. You will often hear Ryan say, "a high tide raises all boats."

Ryan was instrumental in developing the new NUCA Advantage benefit for members. This program works with members to find their best alternatives in health insurance, life insurance, and 401k retirement plans, and uses creative tools to help members retain their key employees. "We rolled out the health insurance last fall and there has been an overwhelming response to that. We are rolling out the rest of the program now and we expect that to be well received also. Our members are saving money on the products that they need and this program will serve as a source of much needed non-dues revenue for NUCA and its chapters. It's really a win-win for everyone."

"Ryan Kinning is not just an ambassador for NUCA, he is a soldier," said NUCA past chair Kara Habrock. "His boots are on the ground and he keeps charging. He plants the NUCA flag wherever he goes—representing our industry with pride and passion, while truly relating the contractor experience to the advantages of NUCA membership. He is a true believer in 'NUCA first.' "

Jim Rush is editor of *Utility Contractor.*

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Associate of the Year

Gary Lawson, Ditch Witch

By Jim Rush

Sometimes in life, a simple confluence of circumstances can shape one's future forever. Call it coincidence, fate or destiny, an impromptu decision 38 years ago led to Gary Lawson joining the Ditch Witch® organization, where he has devoted his career to serving customers across the country and internationally.

Lawson began his career as a salesman in the floor-covering industry, but when his employer was involved in a buyout, he began exploring other opportunities. One day while driving back from a job interview in Wichita, Kansas, to his home in Stillwater, Oklahoma, Lawson found himself driving by Perry, home of the Ditch Witch headquarters. At the suggestion of an

acquaintance, he decided to stop in and apply for a job. And the rest, as they say, is history.

"I knew a guy, named Burl Carrier, who was an excavating contractor in Stillwater," Lawson said. "When I mentioned that I was looking for a new job, he told me to stop in at the Ditch Witch factory. He said that it seemed like it would be a good fit. Well, when I was traveling back from Wichita and saw the sign for Perry, I figured I had my suit on and resumes in my briefcase, so I might as well give it a shot!"

Lawson's background in business and sales, as well as his interest in equipment, have led to a successful run with the Ditch Witch organization. It was through Ditch Witch that he began his involvement with NUCA in the early 2000s, and since that time he has grown into leadership roles with the association, including his current role on the board of directors. In recognition of his contributions to the association and the industry, Lawson was presented with the 2017 Associate of the Year award at the NUCA Convention, March 9, 2018, in San Antonio.

Life of a Salesman

Lawson grew up in Tulsa, Oklahoma, the son of a salesman in the steel industry. Lawson knew early on that he would follow in his father's footsteps. "I always knew what I wanted to do," Lawson said. "I enjoyed meeting people and talking to people, and I just knew that I wanted to be in sales."

While Lawson's father passed away when he was a teenager, his grandparents had an influence on him and his future career. Hismaternal grandfather was an automobile mechanic who ran his own repair shop in Tulsa for about 50 years. It was there that Lawson developed an interest in machinery. In fact, he rebuilt the first vehicle he bought under the tutelage of his grandfather. His paternal grandparents, meanwhile, owned a farm in nearby Claremore, Oklahoma, where Lawson got exposed to tractors and farm equipment at an early age.

Lawson graduated from Oklahoma State University with a business degree and worked for nearly six years in the floor-covering industry prior to joining Ditch Witch, where he went to work in the sales department as a factory representative, supporting Ditch Witch dealers. After working for a time in sales training, he began representing Ditch Witch as an international sales representative covering the Middle East and South Africa in the mid-1980s.

"That was a pretty eye-opening experience," Lawson said. "Here in the United States, you are just a phone call away if you need help or need information quickly. That was not the case when you are traveling internationally with time difference sometimes of 12 hours. In those cases, you are everything for the client – sales, product support, marketing. You need to be able to meet all their needs."

Lawson came back to the United States full-time in the late 1980s and served in various sales roles before becoming a Global Account Manager in 2001, a position he holds today. When asked what keeps him motivated after nearly 40 years with the Ditch Witch organization, Lawson points to the relationships with customers he has developed over the years.

"There are a lot of people that I have known for many, many years and have become very good friends with," he said. "I really enjoy going out and seeing them. Of course, sometimes it is tough being on the road and away from family, but when you are doing what you love, you are able to work through those issues."

Moving Forward

Lawson also says that working for the Ditch Witch organization has been instrumental to his longevity. The Ditch Witch brand's roots go back to the establishment of a blacksmith shop in Perry, Oklahoma, by Carl Malzahn and his sons Charlie and Gus. Eventually, the business shifted toward machining as the oilfield industry began to be more active in the area. The business would become Charlie's Machine Shop and eventually The Charles Machine Works, Inc.

The company direction took a turn in the 1940s when Ed Malzahn, Charlie's son, developed the first mechanized, compact service-line trencher that helped revolutionize the utility construction market. Since the development of that first trencher, dubbed the Ditch Witch model DWP, the company would expand its product range under the Malzahn's leadership.

"Ed was a tremendous individual," Lawson said. "Not only did he drive innovation in the products we offer, but he looked out for his employees. He was adamant about employees saving money and created a trust and profit sharing fund, which then led to an employee stock ownership plan (ESOP). The combination of being a family-led business with employees

who have a vested interest results in an atmosphere where people want to perform and take care of the customers."

The company today is led by Tiffany Sewell-Howard, Ed's granddaughter and the fifth generation of the family to lead the organization. Under her leadership the company has expanded in the underground market by acquiring related products and product lines, leaving it well positioned in an emerging market.

"Right now the market is very strong, and indications are that it will continue to be strong at least through 2019 and into 2020," Lawson said. "But, we need to find people to be able to do the work, notably at the operator level. The fiber market and the pipeline market have high demand, but contractors are limited because they can't find people to do the work."

Getting Involved

During his tenure at Ditch Witch, Lawson has become active in various trade organizations and events covering a variety of industries. In addition to NUCA, Lawson is active in the Distribution Contractors Association and the Electric Utility Fleet Managers Conference.

Lawson got involved in NUCA beginning in 2001 and currently serves on the Board of Directors. He has also participated with various committees, including HDD, government relations and workforce development.

"It really pays off to get involved," Lawson said. "By getting involved you learn the ins and outs of the organization and the full breadth of what if offers and what it takes to run. Plus, it gives you an opportunity to have your voice heard to help shape the association and add value."

When he is not volunteering his time, Lawson enjoys his family, wife Michelle and daughters Becky Helscel and Megan Lawson, and also enjoys golf and is a regular fixture at NUCA golf outings. He has also retained his interest in automobiles. "I would like to have more time to work on vehicles when I retire – that interest is still there," he said.

Lawson says winning the Associate of the Year is humbling, and he credits several individuals who have helped him along the way, from his family to countless people at the Ditch Witch factory and Ditch Witch dealers who helped him along the way.

In the end, Lawson says, the key to success is simple: "When you find your passion in your work, enjoy it to its fullest and you will be rewarded with a great career as I have."

Jim Rush is editor of *Utility Contractor.*

NUCA AWARDS OF EXCELLENCE

Ditchdigger of the Year

Presented annually at NUCA's Convention to a contractor member who has made a significant contribution to NUCA and the underground utility construction and excavation industry.

Associate Member of the Year

Presented annually at NUCA's Convention to an associate member who has made a significant contribution to NUCA and the underground utility construction and excavation industry.

We Dig America Award

This award is presented to a non-NUCA member who has made a significant contribution to NUCA and the underground utility construction and excavation industry. The achievement must have national impact and the recipient must have national stature.

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Networking & Fun
at NUCA's 2018 Convention

Members from all over the country gathered in San Antonio, Texas, for NUCA's 2018 Convention and Exhibit. The event featured four full days of networking, education, guest speakers, recognition, and of course, fun! Whether it was taking in the sights of San Antonio, participating in one of the many educational opportunities, or taking the time to chat with fellow NUCA members, members took full advantage of the locale. To download these or other pictures free of charge, visit nuca.smugmug.com.












Attendees took advantage of every opportunity to discuss critical business issues with fellow contractors. NUCA's National Partners were on hand to chat with contractor members who explored the impressive exhibit.





Exhibitors at NUCA's 2018 Convention

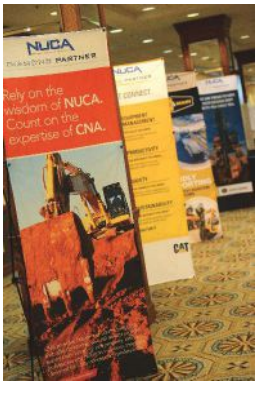








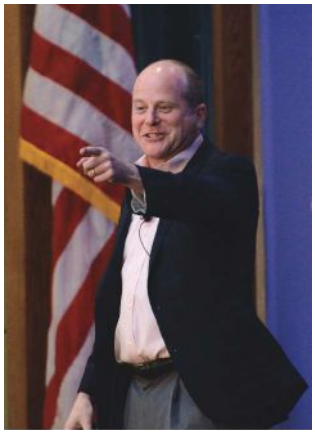
Exhibitors, including NUCA's National Partners, the finest vendors in the utility construction industry, shared their knowledge and expertise and listened to attendees' company needs. Exhibitors displayed a wide array of innovative technologies, products, and services.



Speakers

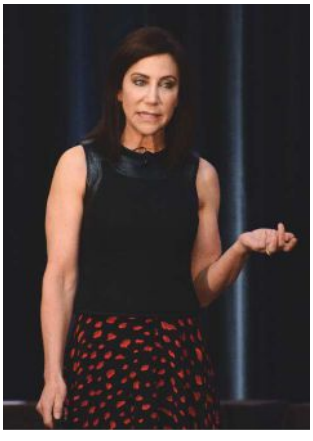
Both keynote speakers were sponsored by Core & Main and introduced by Vice President of Market Development Yvonne Bland.

Mark Bridgers led an in-depth discussion about the current state of the economy for the construction industry and his expectations over the next few years.



During a high energy presentation, Gene Marks kept attendees engaged as he discussed the latest and greatest technologies and trends affecting the industry.

Celebrity chef and author Jeff Henderson shared his poignant story of overcoming the hardships of his youth, discovering the passion that lead to his success, and the leadership lessons he has learned to a captivated crowd.



Drawing from her experiences climbing Mount Everest and as a West Point faculty member, Alison Levine discussed what it takes to be an effective leader, emphasizing that progress can come when you least expect it.

Educational Breakouts











Attendees took advantage of the full range of educational programming with topics including safety management, employee retention, and more. Additionally, the convention included two in depth sessions, Best in Class Project Management and Geotech Essentials for the Trenchless Professional.

Team Building: Chili Cookoff

After Scott Knoblauch from Caterpillar kicked off the festivites, attendees, with the help of Chef Jeff Henderson, took part in a hot competition to see which group could make the tastiest chili. The groups sliced and diced, browned and seared, but in the end, only one chili could reign supreme!

Installing Board Members and Officers

Newly Elected 2018-2019 officers and Board of Directors are installed.

Outgoing Chairwoman Kara Habrock presented incoming Chairman Mark Fuglevand with the Silver Chairperson's Shovel.

Outgoing Chairwoman Kara Habrock thanked all the Nucans who cheered her on this year, noting their encouragement was a constant source of motivation.

Newly appointed Chairman Mark Fuglevand talked about his history with NUCA: when he first joined NUCA of Washington, he committed to playing an active role in the chapter. That commitment led him to the national chairmanship. He discussed his vision for the future of NUCA and the industry.

Awards

More than 30 NUCA members and executive directors were recognized for their leadership, commitment to NUCA and the industry, and proven dedication to the safety of their employees in 2016. NUCA and chapter leadership are grateful to these men and women for their efforts to advocate for and protect the integrity of NUCA and the industry as a whole.

Ditchdigger of the Year, Ryan Kinning (R), Penro Construction Company – Presented by Kara Habrock.

Associate Member of the Year, Gary Lawson (R) of Ditch Witch – Presented by Kevin Cripps.

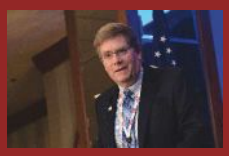
Chapter Merit Awards and Honorable Mentions were presented to NUCA chapters for their dedication to NUCA, their members, and the industry.

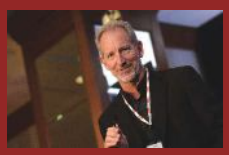
Convention Co-Chair Penny Danielecki (L) presents the Outstanding Leadership by a Chapter President to Jim Kissick of NUCA of the Greater Kansas City Region and Outstanding Contribution by a Chapter Executive Director, Johnna Venuti-Piggee, NUCA of South Florida.

The 2017 William H. Feather Awards Overall Winner, MAC Construction

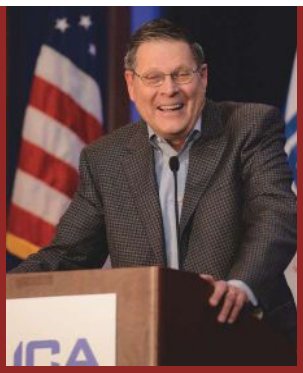
The 2017 Willam H. Feather Award Winners and Honorable Mentions.

Lifetime Achievement Award – Roger Mohr





After Andy Williams from John Deere kicked off the presentation, Chairman Mark Fuglevand, Immediate Past Chairwoman Kara Habrock, and Past Chairmen Jeff Rumer, Ryan Schmitt, and Mike Ellis celebrated their personal and professional experiences with Roger Mohr.



Roger Mohr discussed his fond memories of being a part of NUCA

NUCA Leadership Awards

NUCA Leadership awards were presented to outgoing Committee Chairs [L-R] by NUCA's Bill Hillman (L).

- Kara Habrock, Executive Committee
- Jeff Rumer, Nominating Committee
- Fred Chesney, Budget and Finance Committee
- Karen DeWitt, Executive Directors Council
- Alex Kocher, Chapter Officers Council & Convention Committee Co-Chair
- Mark Fuglevand, Political Action Committee
- Penny Danielecki, Convention Committee Co-Chair
- Andy Williams, Convention Committee Co-Vice Chair
- John Davis, Convention Committee Co-Vice Chair (not pictured)

Top Jobs Awards

NUCA's third annual Top Jobs Awards were presented during convention. The Top Jobs competition recognizes outstanding projects that exhibit innovative solutions to overcome challenging obstacles and produce the highest quality results. Contractors entered the competition in one or more of six categories.

Our Overall Top Jobs Winner was voted for by convention attendees. The overall Top Job Winner for 2017 is Petticoat-Schmitt Civil Contractors

Top Job Winners

(L to R) Electric Power, Petticoat-Schmitt Civil Contractors; Excavation/Site Development, Johnson Davis; Sanitary Sewer Collection / Storm Drains, T.A. Loving; Trenchless Technologies, Underground Infrastructure Technologies; Oil & Gas Pipeline, Barnard Pipeline (not pictured); Water Distribution, Emery Sapp and Sons (not pictured).

Auction & Gala

Our Auction and Awards Gala, sponsored by John Deere, included a silent auction, a live auction, the return of the popular Chapter Gift Basket Raffle, and our brand-new Gold Rush Raffle. Dozer Days stopped by to host a Dig for Real Gems game.

Convention Committee Co-Chair Alex Kocher urges members to dig deep for NUCA.

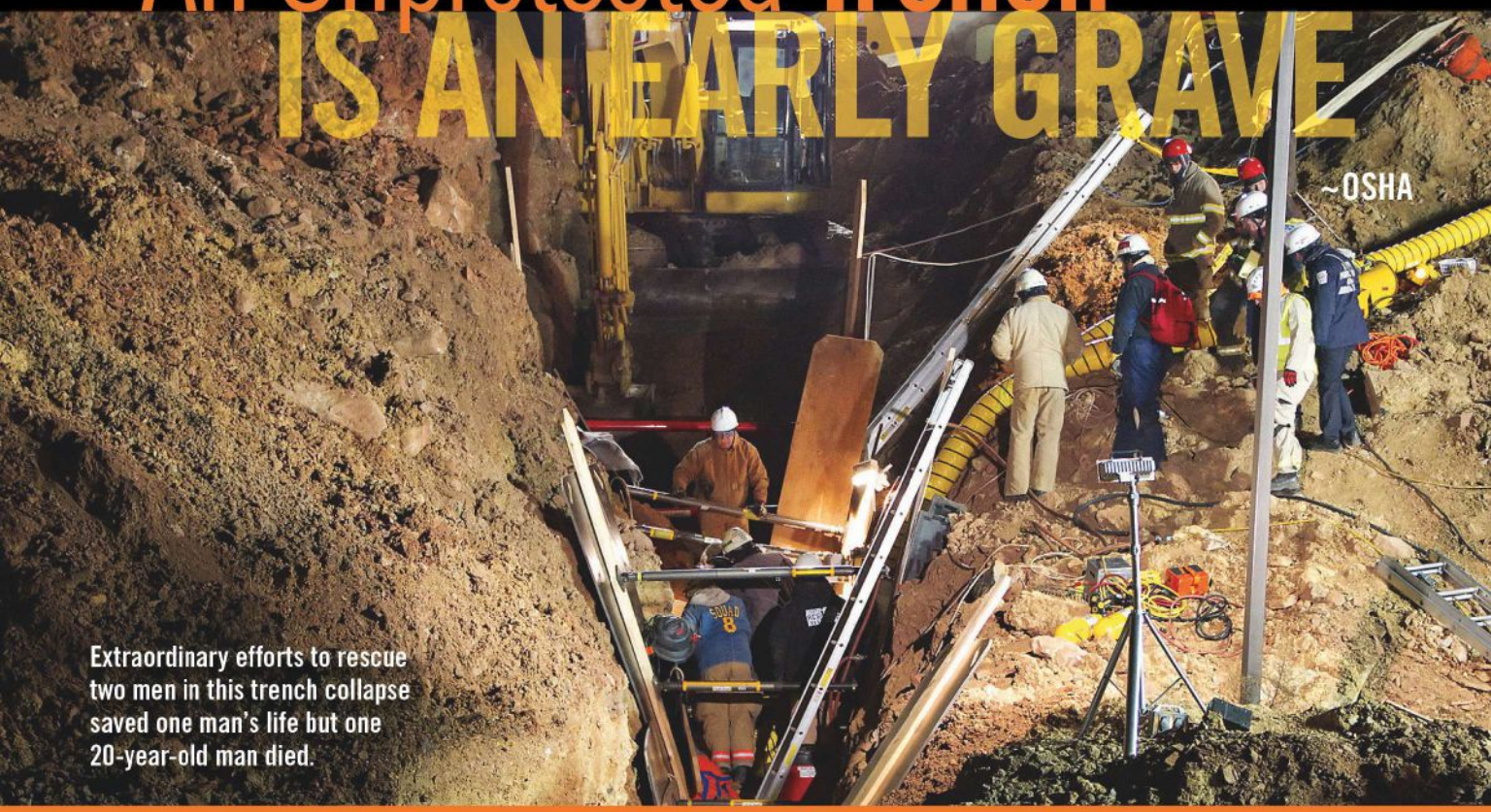
Steve Kriebel from Ritchie Bros. Auctioneers conducted the live auction, firing up the crowd to get bids flying on live items donated by NUCA members and National Partners.

JOHN DEERE

John Deere's Andy Williams kicks off the night's festivities.

An Unprotected Trench IS AN EARLY GRAVE

~OSHA



Extraordinary efforts to rescue two men in this trench collapse saved one man's life but one 20-year-old man died.

National Trench Safety Stand Down Week
June 18-23, 2018

Trench-related fatalities continue trending up. NUCA, OSHA, and NAXSA have teamed up for our 3rd annual Trench Safety Stand Down Week, June 18-23, 2018, to educate workers and reverse this trend.

Who Should Participate

Any construction company that engages in trenching operations, plumbers, military, unions, associations, educational institutions, safety professionals, and safety equipment manufacturers.

How Companies Can Hold A Stand Down

- Hold a 20-minute Toolbox Talk
- Show an Excavation Safety Video
- Hold a Training Class

Recognition

Every company or organization that holds a TSSD will receive a certificate of participation, as well as hard hat stickers for all employees who participated. Recognition will also be given in a press release, and NUCA and NAXSA publications.

TSSD details, as well as Toolbox Talks, fact sheets, and other stand down materials can be found at www.nuca.com/tssd

NUCA We Dig America

OSHA®

NAXSA North American Excavation Shoring Association

Also sponsored by NUCA's Safety Ambassadors Club

Alex E. Paris Contracting
Atlas Excavating
Barber Utilities
Blood Hound
Case Construction Equipment
Caterpillar, Inc.
Cemen Tech, Inc.
COMDATA
Core & Main
CNA
Ditch Witch
Ferguson Waterworks
Greg Strudwick & Associates
HCSS
Horizontal Boring & Tunneling
HRP Construction
Hymax by Krausz
John Deere
Johnson Bros.
Komatsu America
L.G. Roloff Construction
McLaughlin
National Trench Safety
Petticoat-Schmitt Civil Contractors
Safety Management Services
Team Fishel
Team Safety
United Rentals
Xylem
Wacker Neuson Corp.

The auger boring market remains strong with some contractors reporting several months of work backlog.

AUGER BORING MARKET FORGES AHEAD

Despite Being One of The Oldest Trenchless Technology, the Auger Boring Market Is Strong and Continues to Evolve

When it comes to the installation of underground utilities with minimal surface disruption, auger boring has a long track record of success. In fact, auger boring was a proven trenchless method before the term "trenchless" even entered the lexicon.

The process of auger boring involves excavating the face of the tunneling, using flighted augers to carry the spoil back to the launch pit, while simultaneously jacking in casing pipe to support the excavation. Typically, auger boring is used for installing pipes under railways or roads where settlement or upheaval is a concern. Auger boring can used for projects up to about 60 in. and lengths of up to about 600 ft.

Historically, auger boring machines were technically non-steered, but recent advancements have allowed contractors more ability to keep the machine on line and grade. While auger boring may be the oldest of trenchless technology, the auger boring market doesn't stand still. Technology advances and new applications are constantly expanding the market.

To get an understanding of the auger boring market, how it is changing and where it is heading, we talked to three of the leading manufacturers of auger boring equipment: Akkerman Inc., Brownsdale, Minnesota, Barbco Inc., East Canton, Ohio, and Michael Byrne Manufacturing Co. Inc., Mansifeld, Ohio. Providing responses were Jason Holden of Akkerman; Dave Barbera, Tony Barbera and Scott Fisher of Barbco; and Jim Weist of Michael Byrne.

How would you rate the current auger boring and tunneling market? Strong? Stagnant? Weak? Why?

Akkerman – The auger boring market remains strong with some contractors reporting several months of work backlog. The number of auger boring projects that have been put out for public bidding has increased by nearly 10% in the first quarter of 2018 compared to the same timeframe in 2017.

The tunneling market is not as geographically consistent as with auger boring, however it can still be considered strong for many in the industry. As policies unfold with Trump's infrastructure plan, it may become more of the new norm to see shining star regions in the industry as cities and states gravitate towards public-private partnership (PPP) model programs.

Barbco – Barbco views the current auger boring market as very strong. It being one of the oldest modes of trenchless technology, auger boring has only gotten more advanced both in accuracy and efficiency. Safety features and standards have also progressed, greatly making it more appealing to potential auger boring professionals and keep current professionals safe.

Michael Byrne Mfg. – The market is strong – some of this related to the HDD machine problems with frac-outs and the bad press associated with that recently. The cost-effectiveness for the auger boring method compared to other methods for short to medium length bores is still significant.

Which segments of the industry has the most influence on the market? Oil & gas? Water/sewer? Storm water/culverts? Other? What are potential areas of growth?

Akkerman – Currently oil and gas are driving much of the auger boring industry. This situation is expected to remain unchanged well into 2019. Gas distribution is currently the highest performing utility market and is driving demands. However, this trend is going to slowly evaporate in the next four to five years unless users experience rate increases.

Water and sewer have been the lowest-performing utility market since nearly 2012, but capital spending has been increasing. Trump's infrastructure plan to support water and sewer infrastructure is proposed to incorporate a PPP model. This infrastructure plan will require the matching funds from the state level, which will normalize user rates. For states that are in good fiscal health, this funding model will prove very successful and create a bullish tunneling market for those specific regions.

Barbco – Although all of these market sectors have big impressions on the industry, we believe the oil and gas market to be the No. 1 industry segment due to our nation's pursuit of energy independence. An area we feel is already huge and has immense growth potential is in new and rehabilitating infrastructure due to many smaller or under developed countries continuing to modernize and updating of existing infrastructures.

Michael Byrne Mfg. – The oil and gas market have been very strong recently with all the pipeline/energy work that is going on around the country. The water and sewer markets have continued to remain consistent and we anticipate an uptick in this over the next several years if we can get an infrastructure bill in place.

Auger boring has been around for a number of years but it continues to evolve. How has the technology changed over the years? What advances have had the most impact on the market?

Akkerman – The auger boring industry seems to take monumental strides on a yearly basis. Akkerman has been producing Guided Boring System (GBM) to provide straight and accurate alignments for nearly two decades. Early guided boring equipment worked in limited ground conditions with restricted lengths. Advances in technology have allowed contractors to install pilot tubes in a much wider range of ground conditions including rock with distances exceeding 500 lf.

With the ability for longer pilot tube installations, auger boring manufacturers have also increased power and performance requirements, allowing contractors to go bigger, further and faster.

I also should note that one of the best evolutions in the auger boring industry is Jim Wiest's, "Make Boring Great Again" T-shirt from Michel Byrne Manufacturing. It's become iconic!

Barbco – The auger boring industry has come a long way in many aspects; remote controlled equipment, environmentally sensitive tooling and other advances have brought the industry a long way. We at Barbco feel that the biggest advancement that has been made in this field has been the integration of guided boring. This innovation has not only led to higher accuracy in the field but also higher efficiency and an overall safer bore.

Michael Byrne Mfg. – The advent of guided boring systems and guided auxiliary components has been a technology that continues to be evolving into a more sizeable portion of the auger boring methodology. Larger and longer bores are also becoming more common in recent years. Cutting tool technology has also progressed to give a longer wear, and more aggressive cutting for harder rock.

Continuing on technology … how do equipment manufacturers develop new technology? How can contractors play a role in equipment development?

Akkerman – It is crucial to develop new technology with the interest of the customer in mind. The learning curve in the trenchless industry is more like an endless loop. It would be foolish to not fully understand both the good and the bad experiences from customers and learn from them. We value the input from our customers and use this information to ensure that our products are ever evolving toward providing the best solutions in the trenchless market.

Barbco – One of the biggest ways we develop new technology is by listening to and actively working with our customers. The field experience they have allows them to know better than most what is needed to get the job done effectively. Technology trade shows for engineers and manufacturers are another way we acquire industry knowledge to incorporate in our processing methods and equipment design.

Michael Byrne Mfg. – Technology is often driven by the contractor and ideas that they present to us as obstacles or examples of what would be a benefit to their operations. The technology is developed by our technicians and engineers in response to contractor's comments.

What about safety advances? What improvements have you seen? Do you ever see examples of older machines that perhaps do not measure up to newer safety standards? Is there a way to upgrade older machines to achieve a similar level of safety?

Akkerman – Safety should always be at the top of everyone's priority list. Owners, engineers, contractors, manufacturers and employees must become accountable for safety. One of the biggest improvements in the industry is the acceptance of necessary training and the organizations such as NUCA that promote safety programs.

On the equipment side, it is great to see the features such as remote control, rollover protection, gas monitoring and electronic fail-safes. Most manufacturers will figure out a price to upgrade your equipment or sell you a new one … trust me!

Barbco – In regards to safety standards, there are a wide range of features on newer machines, from rollover anticipation to remote control options and many others, to ensure a safer boring process and overall jobsite. In regards to older equipment, fortunately in most cases, they can be updated at the manufacturer's facility.

Michael Byrne Mfg. – We have integrated sensors to shut down machines if they tilt out of their axis to help prevent rollovers. The new engines provide a cleaner environment in the pit for operators and laborers. Michael Byrne Mfg. machines meet the CE safety standards and are CE approved.

Are there general guidelines for grade and accuracy that can be achieved by auger boring? Is there an issue with overly high (or low) expectations of what the machines can realistically achieve? What are some common misconceptions you see?

Akkerman – The Guided Auger Boring (GAB) method has significantly improved the accuracy of a conventional jack-and-bore installation. Although even I find myself correcting overzealous engineers of high expectations for the accuracy of GAB, the results from a careful pilot tube installation set-up are remarkably accurate. The overall accuracy is dependent on several factors, such as the subsurface conditions, set-up and transfer of survey points for the guidance system, equipment set-up, drive length, and air quality inside the pilot tube.

One of the biggest misconceptions is the lack of proper planning on the set-up. As with any trenchless project, proper planning is the key to success!

Barbco – With so many obstacles to look after in any boring job, guidelines for grade and accuracy are very high, many times to the point where contractors will call for a microtunneling machine vs. an auger boring machine in these precise jobs. The misconception lies in the thinking that the auger boring machine cannot meet these guidelines and standards. Equipped with guided boring technology and a well-rounded operator, auger boring jobs can be very accurate and also more economical.

Michael Byrne Mfg. – Michael Byrne Mfg. has designed a swivel type cutting head to follow the guided bore system pilots as well as directional drills to open bores to the finished size desired, we have had positive results with this with several contractors.

How would you rate the available training for contractors? Are there ample resources? If not, how can we help ensure that contractors are using the equipment efficiently and safely?

Akkerman – There are not enough resources available for training in the industry. Many contractors are suffering the loss of employees due to retirement or have lost some of their best

talent to the booming oil and gas industry. These loses have driven a serious demand for continued training in all the utility construction sectors.

To advocate industry training, Akkerman has decided to host a free two-day educational forum in conjunction with our 45th anniversary celebration that will include both hands-on technical equipment training as well as a second classroom track geared for owners, engineers and contractors. The training sessions will be led by in-house experts at Akkerman as well as other notable industry professionals.

Barbco – We believe there are plenty of resources to train new and even experienced contractors with offered training upon purchase of new equipment. There are also other resources such as the Auger Boring School at Louisiana Tech so the younger, up-and-coming generation of auger borers can learn the fundamentals in a classroom environment.

Michael Byrne Mfg. – We provide our customers with training and manuals for each machine, the best and sometimes the worst training is with experienced bore operators and crews as they have encountered all kinds of different obstacles on auger bores. We have used experienced operators to assist with new to auger boring customers. The caveat is sometimes the experienced boring contractor has bad habits as well that they translate to the new operators.

What current challenges are you facing as a manufacturer? Finding skilled workers? Material costs/availability? Regulations?

Akkerman – Equipment manufacturers face the same challenges as our contractors. As the trenchless industry advances and companies seek to grow larger, acquiring new and skilled labor talent is a serious investment.

Lead times of purchase components for equipment builds have increased significantly due to a surge in demand from other markets. Many vendors and suppliers of these components maintain a LEAN stocking principle which puts pressure on the manufacturers to carry excessive inventory to meet the tight deadlines of the construction industry.

There are several challenges that all businesses such as Akkerman face on a weekly basis but with strong leaders, dedicated employees and hard work we keep moving forward so that we can do our part in working toward the light at the end of the tunnel.

Barbco - The most difficult obstacles that we at Barbco run into as a manufacturer are material cost and availability due to restrictions and tensions on the issue of importation of materials such as steel or iron ore causing volatility in the steel market. The other issue of a similar degree would be acquiring skilled labor to keep up with today's ever-changing manufacturing scene. As machinery becomes more and more advanced, employees are now required to have some higher forms of education in order to be able to handle new equipment and manufacturing processes.

Michael Byrne Mfg. – The issue of finding new workers to replace existing workers is the challenge that almost every industry is facing in today's environment, the need for trades education is at a critical point. I know some contractors must hire foreign workers to work many of their jobs because the source is dried up for supply required.

What is the market like for auger boring and tunneling equipment as an export? Do you sell equipment overseas? What is the market potential?

Akkerman – Akkerman is proud to say that we are celebrating our 45th year of business and to this day we manufacture each piece of equipment at our factory in Brownsdale, Minnesota. Although we are a global company and have supplied equipment to some of the furthest reaches of the globe, our primary customer base is in the Americas.

Unless a specific overseas market is conducive to technology, quality, safety and performance enhancements of most U.S.-based products, these markets will continue to be difficult to capture due to manufacturing price points.

Barbco – Auger boring as an export is very much a large market and is continually growing. As some countries are taking huge steps in modernizing infrastructure and as some are rehabilitating their current infrastructure, they find that auger boring is an efficient and cost-effective way to modernize without many of the repercussions of older methods such as open-cut. Barbco does sell equipment overseas and we also have dealers in many different areas of the world although we are always looking to grow in this market sector.

Michael Byrne Mfg. – We do sell overseas, and there is a market there. Over the last several years the market has had to deal with a very strong dollar that makes American equipment more expensive (Canadians look at this as 30% tax).

How long has your company been involved with NUCA? How does your company benefit from being a NUCA member? What activities/committees are you involved with?

Akkerman – Belonging to NUCA allows not only provides us with more exposure in the market, it allows me as an individual to grow through advocacy groups. As a part of the Trenchless Committee, I am hoping to assist with the Trenchless Manual that is currently in process, as well participate in the Washington Summit.

Barbco – Barbco has been affiliated with NUCA somewhat off and on for over 20 years. We stay involved in many NUCA events and see great benefits from events such as trade shows or forums that allow us to network and further our industry knowledge. We are currently members of NUCA's Ohio chapter and in addition to NUCA's national chapter.

Michael Byrne Mfg. – We have been a NUCA member for about 12 years now, and we find it to be a very helpful organization to be associated with. NUCA is a thorough source for education, safety and networking with our industry as a whole. NUCA also provides discounts with various suppliers that often makes the dues cost neutral.

TRENCHLESS METHODS CAN REDUCE COST OF UTILITY INSTALLATIONS

By Mike Ellis

In the late 1980s a good friend and competitor was awarded a large 18-in. sewer project near a lake. The soils were a silty sand with a high water table that made excavation in the quicksand conditions very difficult. In the end he was unable to complete the project and as a result lost his business. Had my friend been able to use the latest trenchless technology available today he would have rescued his company and most likely made a decent profit on the project.

An ongoing project near the same lake with similar soil conditions illustrates the advances that trenchless technology has made in becoming a very cost-competitive alternative to open-cut sewer installations. The project is the first phase of a large sewer system expansion by the City of Provo, Utah, to service an area of rapid development.

Bids received for 15- and 18-in. sewer mains ranged from $2 million to $2.5 million with the low bidder 25% lower than the next bidder. A proposal for trenchless installation of the sewer was discussed with the low bidder, which would reduce his bid by over $200,000. Because this phase of the project was required to start and finish with very tight deadlines, the lead time required for the trenchless option made it impractical for use on this first section. Here are the original bid results and comparative bid results had the trenchless option be available to each bidder.

Why is the open cut option so much more expensive?

Over the last two decades the cost of open-cut sewer projects has increased significantly. Factors that have caused the increases relate to more stringent design, environmental, safety and public nuisance issues:

• **Public nuisance issues** – Work hour limitations; Increased traffic control; Increased truck traffic issues; Work hour restrictions during high traffic volumes and special events; Night work only with noise limitations; Winter and weather shutdown requirements.

• **Environmental Requirements** – Noise mitigation; Storm water runoff restrictions; Equipment pollution such as mud on roads; Strict dewatering, treatment and disposal requirements; Wetlands or animal disturbance issues.

• **Design Requirements** – Off haul of all excavation; Imported gravel for all backfill; Increased pavement restoration to entire lane or road width; Existing utility damage prevention.

• **Increased Safety Requirements** – More robust trench shoring requirements; Increased OSHA requirements such as dust disturbance mitigation.

The cumulative effect of these more stringent requirements results in substantially increased costs and risk to the contractor. Overruns on gravel backfill alone, due to sloughing soil conditions, can cause an otherwise profitable project to suffer substantial losses.

Why is the trenchless option so much less expensive?

With the relatively small footprint at manhole locations, the trenchless technologies eliminate 95% of the issues with the open-cut work mentioned above. The cost of compliance with these issues is simply not incurred. The attractive advantages of trenchless methods result in less cost, safer projects with less risk and more profit for the contractor and less cost to the project owner:

• **Public nuisance issues** – Work around the clock is normally permitted with a noise attenuated generator as the main power source; Work can proceed during inclement weather and cold winter conditions; Public inconvenience and traffic control are minimal; No truck traffic except for excavation and backfill of shafts at manhole locations.

Bid Results

	Engineer	Bidder 1	Bidder 2	Bidder 3
Open Cut Bid	$2,482,354	$2,500,000	$2,434,286	$1,960,069
Trenchless Bid	$1,875,646	$1,799,421	$1,818,246	$1,727,315
Trenchless Savings	$606,708	$700,579	$616,040	$232,754

• **Environmental** – No dewatering of the soil is required therefore no water treatment and disposal issues arise; Storm water mitigation is limited to manhole locations; Equipment pollution is limited to off haul of excavation at manhole/shaft locations; Environmental disturbance is eliminated by tunneling under sensitive areas.

• **Design Requirements** – Imported gravel backfill is limited to manhole locations; Surface restoration is eliminated and limited to manhole locations; Existing utility damage from exposure during excavation is eliminated by tunneling under or over the utility.

• **Safety** – Trenchless methods are inherently safe – no trench shoring is required; Shoring is required only at manhole/shaft locations; Safety exposure is limited as crew sizes are commonly 4-6 persons; The presence of water in soils is not a safety issue – water is a benefit providing lubrication and tunnel face stability.

The introduction of new technologies to the U.S. market have made trenchless installations much more competitive. Until recently, trenchless technologies for gravity sewers such as pilot tube, slurry and auger microtunneling methods have been more expensive than open-cut methods. The high cost of shafts has been a major factor with shafts often costing more than the tunneling itself.

Recently, rapid shaft technology has been introduced in the United States, reducing the cost of shafts substantially. The introduction of pilot tube and auger microtunneling equipment to install PVC and ADS pipes as well as all other sewer pipe types also reduces the cost of trenchless installations. Pilot tube and auger microtunneling systems in the 8- to 30-in. pipe sizes now have a much wider range of soil types where installation is possible.

Where it is impractical to install pipe in fluid soils and hard rock conditions by open-cut, it is well within the capabilities of trenchless methods. Current pilot tube and auger microtunneling systems have been reported to have installed pipe in hard rock of up to 22,000 psi unconfined compressive strength. It is also common to install pipe in very fluid soils with Manning's n-values as low as 1.

The comparison of open cut and trenchless methods for sewer installation confirms the cost, environmental and safety advantages of the trenchless methods, specifically for smaller diameter pipe installations.

The cost reduction of trenchless technologies and the cost increases for open cut methods are expected to continue. The advantages of new and continued improvements in trenchless technology are resulting in less risk, less cost and more profit for contractors.

Mike Ellis is owner of Trenchless Equipment Co. (TEC) based in Orem, Utah. For information visit trenchless.net.

With the most recent availability of Easilift, a set of two lifting handles that lock into the LowPro 23-05, installation of the 23-05 is easier and more ergonomic

FINDING A BETTER WAY

Oxford Plastics Offers Versatile Trench Cover Solutions

For more than a decade, Oxford Plastics has been providing solutions to the recurring problems inherent within the underground utility construction industry, namely slow and expensive trench cover installations, health and safety liability, and several other issues regarding steel plates.

And then there's the compliance issues with city, state and federal authorities that should be adhered to. Beyond safety issues, not being in compliance can add considerable cost to a contractor. To address these issues, Oxford Plastics has developed the Oxford LowPro 23-05 Composite Road Plate, which was a finalist in the NASTT Innovation Award this spring. It's understandable as to why Oxford Plastics was a qualifier for this distinction. Oxford Plastics has been collaborating with the utilities and utility contractors for years.

One contractor using the product is Joseph L. Balkan Sewer & Water Main Specialists, based in New York City. David Balkan, CEO, says that the product has helped the company in many ways. Recently, it helped the company stay in compliance and avoid a $1,200 fine.

Balkan received notice from New York City Department of Transportation one rainy late Sunday evening, regarding a 28-in. deep washout at the edge of a roadway where Balkan had worked. If they didn't respond within three hours, there would be a $1,200 fine. Balkan recalls, "There was virtually no time to fill the hole, tamp, and blacktop with specialized equipment, within three hours. However, one employee, picking up the Oxford trench cover, placing it in his vehicle, delivering it and putting it in place, took under an hour. The site was safe, there was no summons issued, and no more sinking through the very heavy rains overnight. Win, win, win."

Balkan was seeking an alternative to steel plates, frustrated with the handling and placing dangers. Balkan was averaging one to two injuries a year related to their use. A public utility recommended the Oxford alternatives.

"Safety was the No. 1 reason for using Oxford covers, and now every one of our crews use them every single day,"

Balkan said. "Oxford has helped us be safer, more efficient and more profitable."

Over 10 years ago, in the United Kingdom, London was seeking a product that would allow trenches to be covered on their roadways, in compliance, and reduce traffic delays. Working with National Grid UK, Oxford Plastics developed the first LowPro 15-05 composite road plates. Continuing to collaborate with the utilities and contractors in the United States, Oxford Plastics has developed a series of road plates and trench covers designed to address various load rating requirements and applications.

The LowPro 15-05 and LowPro 23-05 are modular systems with interlocking sections, that can be installed by two crew members. This eliminates the need for specialized equipment, and the cost and time required to do so. The modular sections can be put into the back of a crew truck, and installed in minutes. These road plates are HS20-44 load rated.

The difference between the LowPro 15-05 and the Low Pro 23-05 is the trench width they are rated for, covering 27-in. wide and 36-in. wide trenches, respectively, when a load rating of up to the weight of a semi-truck or crane is warranted (up to 97,000 lbs). They are both rated to cover wider trenches, when the load requirement is reduced. The 23-05 can also be used for sidewalk work, safely covering up to a 4-ft wide trench. As the road plates are modular, you can cover any length of trench by interlocking more sections.

Oxford composite road plates are especially popular with utility companies working on gas, water, electricity and fiber-optic services. Contractors are finding Oxford products much easier and safer to lift into place than heavy steel plates – and much more stable and durable than plywood.

Mike Hevey, P.E., of JH Lynch Construction said, "I came across Oxford's composite road plates in an article in a trade publication and thought they would be a great fit for a National Grid project, where we were burying power lines. The project required trenching across driveways and cross streets in a residential development. Because Oxford's plates can be installed with two men, we were able to run smaller machines. Combining that, with how much quicker and safer Oxford plates are to set, we ended up with huge cost savings."

With the most recent availability of Easilift, a set of two lifting handles that lock into the LowPro 23-05, installation of the 23-05 is easier and more ergonomic. In varying parts of the United States, requirements for a trench cover differ. For safety reasons, in most states, ramping to a trench cover is required, often done with cold patch. The Oxford road plates and several of their trench covers have a chamfered Flexi-Edge, eliminating the need to ramp with cold patch.

Neighborhoods appreciate the noise reduction from Oxford's pliable Flexi-Edge. When vehicles are traversing steel plates, noise echoes within the streets. The Flexi-Edge can reduce this soundtrack of urban noise, eliminating complaints. Oxford's patented Flexi-Edge grip technology also greatly reduces unwanted movement.

Additionally, underside pins within the road plate drop into the trench when installed to prevent lateral movement. In most states, to reduce slips and trips, an anti-skid surface is required. Some require the cover be painted or taped yellow for safety.

Dan Buckley, Senior Vice President of Anchor Construction and NUCA Chairman-Elect, remarked: "The Oxford products have the high-visibility yellow and the anti-skid surface molded within the cover, eliminating the need to reapply anti-skid paint or tape." This usually is an ongoing maintenance cost for other covers.

Buckley has used Oxford trench covers for the past few years in the Washington, D.C., area. "When addressing safety, traffic and DOT requirements, Oxford covers solve almost every one of my problems. Safety is No. 1, and No. 2 is the increased production we get from these plates. Every day, each work crew is gaining 45 minutes to an hour and 15 minutes, by using Oxford products; that is pure money."

This article was contributed by **Oxford Plastics.** Web: *oxfordplasticsusa.com.*

BUILDING THE BACKBONE

SHELLY & SANDS Installs Deep Sewer as Part of Major Highway Project in Ohio

By James McRay

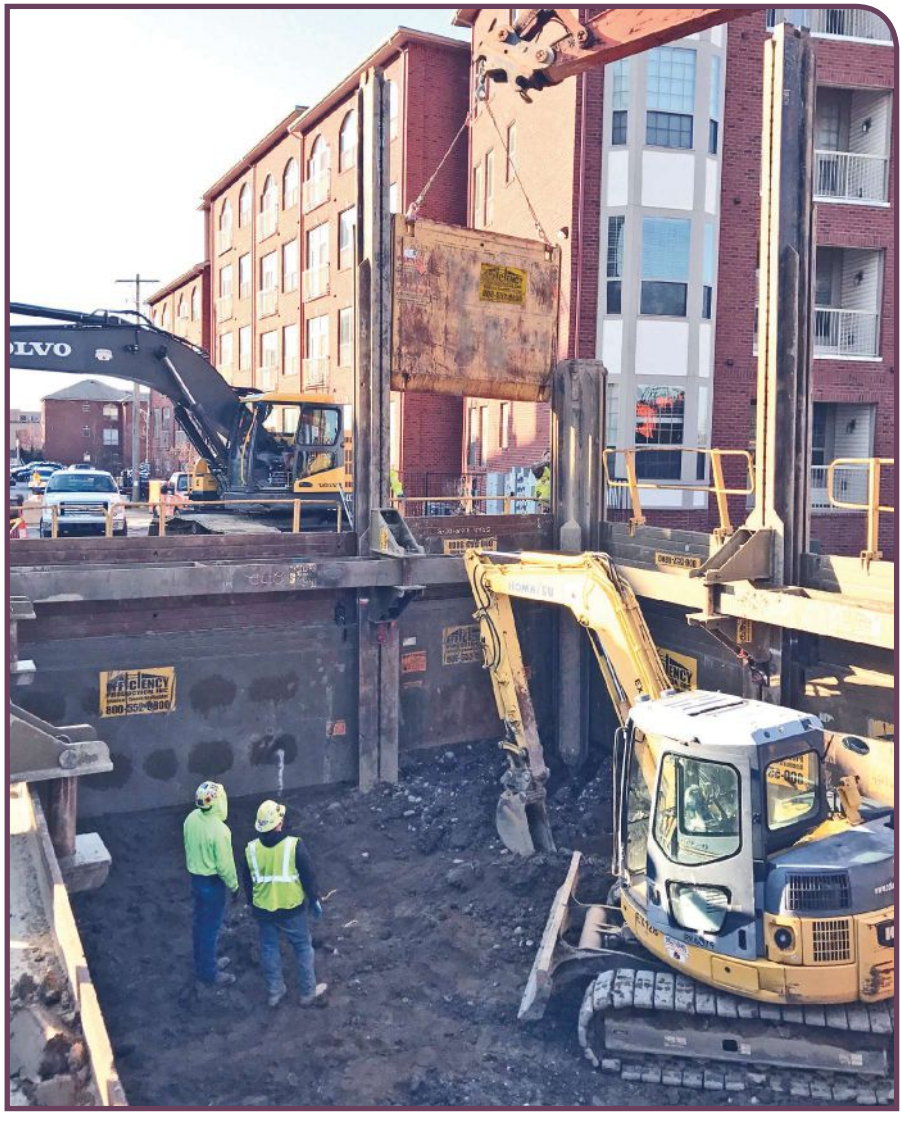
Construction, construction, construction. Road construction as far as the eye can see. This is what residents in Columbus, Ohio, think when they travel practically anywhere. And due to the multi-year Interstates 70/71 Columbus Crossroads project, many freeways downtown will be under construction into the next decade.

With a civil project as large as the 70/71, a lot of the construction is not just road paving and bridge reconstruction; it is the installation or rehabilitation of underground utilities such as the miles of pipes for gas, water and sewers. Though perhaps a little less high-profile, these out-of-sight infrastructure projects are just as important.

Taking on one of these behind-the-scenes — though no less extraordinary — infrastructure projects was SHELLY & SANDS Inc. (SSI), based in Zanesville, Ohio. Founded in 1944, SSI serves eight major markets in three states and paves more roads in Ohio than any other company. Additionally, SSI has nine aggregate operations with extensive reserves numbering in the thousands of acres.

SSI was low-bidder on an ODOT project to install a sewer system that diverts water from a large existing sewer line through four hydrodynamic separators that clean storm-water runoff before it is discharged into the Scioto River.

This was not an easy excavation project. It was in fact, four different excavation projects; each a different depth; some with different soil conditions; some with existing crossing utilities to navigate; and each having different sized pipes, structures, and/or manholes to install within. Complicating matters further was that the Best Management Practices (BMP) sewer project needed to be installed over a length of one block that was bordered narrowly between a western section of the I-70/71 corridor and an apartment building.



Zanesville, Ohio's SHELLY & SANDS Inc. recently completed a Best Management Practices infrastructure project for the multi-year Columbus (Ohio) Crossroads I-70/71.

No Easy Solution

All four excavation points were deeper than 5 ft and required a trench protection system per OSHA regulations. "The first thing we considered were trench boxes; possibly using the equipment that we had in our fleet or we could easily rent," said Brian Snode, SHELLY & SANDS' Project Superintendent. "But we realized with the soil conditions and the existing utilities that were in the ground, plus the surround-

ing buildings; dropping in a box just wasn't going to work," he said.

"Also, with the highway and the apartment on each side, we realized we couldn't vibrate in any sheeting or drive-in a lag wall," Snode continued. "So, when we got down to it, really the only thing that would facilitate our need was a dig-and-push shoring system," he said.

"Dig and Push" is a process most commonly associated with installing a Slide Rail System. Slide Rail is installed by sliding steel panels (similar to trench shield sidewalls) into integrated rails on vertical steel posts – an outside slotted rail first, then an open-face rail on the inside – then pushing the panels and posts incrementally down to grade as the pit is dug.

Overseeing the design and installation of the Slide Rail System are (left to right): Baker Corp's Jeff Riddle; SHELLY & SANDS' Brian Snode; and Efficiency Production's Senior Slide Rail Installer, Dan Meredith.

Calling for Reinforcements

Snode, however, had little experience with Slide Rail Systems. Needing help, he contacted his friend Jeff Riddle at Baker Corp. for some ideas. With over 20 years of shoring experience, Baker Corp. carries a full line of shoring equipment, including: Slide Rail shoring, steel and aluminum trench shields, hydraulic shoring, and road plate.

"We've worked with SSI many times before, and have a good relationship with the company and with their personnel," said Riddle, Baker Corp.'s Branch Operations Manager. "So after looking at Brian's project parameters, I knew that an Efficiency Production (manufactured) Slide Rail System would work; maybe the only thing that was going to work."

Efficiency Production, a Trinity Shoring Products company, offers versatile trench shielding and shoring systems that are designed for safe and cost-effective installation of utility systems and infrastructure improvements.

Added Snode, "When Jeff started showing us how Efficiency's Slide Rail System works, and the versatility of the system to change depending on ground conditions, well it was refreshing to see that they had a different shoring option for us," he said.

However, it wasn't just the contractor that had to be convinced on the effectiveness of the Slide Rail System. Snode and Riddle also needed to convince ODOT that it would work in the difficult site conditions, and meet their safety requirements. "We went over the entire installation and removal process with ODOT; how Slide Rail actually works and how it meets their safety guidelines for underground construction," said Riddle.

Slide Rail is considered a positive shoring system. It maintains constant pressure against the sides of the excavation and requires no over-digging. This

prevents possibly undermining or disturbing the surrounding foundations of buildings, roads, or other structures. A positive shoring system is a critical requirement for approval from most states' Department of Transportation — including Ohio's — for any underground construction.

Getting Started

Sufficiently assured that Slide Rail met all safety requirements, ODOT gave SSI the green light to begin work on the new gravity-flow sewer. They started from bottom to top; or downstream to upstream; or literally from the bottom of the hill at Short Street to the top of the hill at 2nd Street.

Pit 1 reached down 32 ft to uncover and reroute an existing sewer line. Utilizing the same Slide Rail components from the first excavation, Pit 2 was dug and shored for the installation of the four deep precast sump manholes which contain the hydrodynamic separators.

Pit 3 widened and lengthened the shored space just by adding a few more Slide Rail components, which allowed SSI to install inflow and outflow vaults and four 18-in. intake/outtake lines. "That's where the manifold separates the water through the four deep sump manholes and through the screening process to clean it before it reenters the new piping that we built into Short Street," Snode explained.

Lastly, Pit 4 was excavated for an 18 x 11 x 28 ft tall precast chamber which intersects a 96-in. existing storm sewer and diverts the flow through a more conventional 42-in. line down to the treatment structures. The fourth pit — the largest of the four excavations — was shored with a 29 x 38 x 32 ft deep ClearSpan configured Slide Rail System.

"Jeff and I looked at the ClearSpan pit at least eight times and actually had to redesign it on the fly," said Snode. "Because the big 96-in. line was not in the exact location indicated in the plan, plus everything was right in the middle of the street. It was a challenge," Snode conceded. "But we were able to overcome all of that because of the flexibility of Efficiency's Slide Rail System."

James McRay is the Director of Marketing & Media for Efficiency Production – A Trinity Shoring Products company.

Site-Specific Engineering for Unique Pipe Casing Installation

A Northwest Florida contractor was tasked to install 180 lf of a 60-in. pipe casing via boring. The storm water project required a linear run of 60-ft with a width of 20-ft and a depth of 16-ft in a sandy clay mixture that the competent person classified as Type-C-60.

The project site presented several challenges that could negatively impact the integrity of the adjacent structures. The excavation was located in line to a highway overpass involving a high traffic roadway and several highway overpass columns. The project would require a protective system that could properly accommodate a bore pit with a desired 41-ft open span work area for a 60-inch bore casing pipe running between the overpass support columns. Additionally, the protective system would need to address the possibility of dewatering the open trench and dealing with a deflection of the internal bracing.

The contractor called NTS to discuss a few protective options and after carefully reviewing some of the challenges, the contractor selected a site-specific slide rail and a hydraulic excavation brace combination system. Site specific engineered systems are designed for those unique and large-scale projects where poor soil conditions and adjacent structures are present. Site specific engineered systems offer a high degree of customization that allows for certain protective devices to be customized for unique applications. For the boring pit, it was determined that a slide rail system would be the most optimal solution that could provide a large open span work area if supported by an excavation brace. A slide rail system is a versatile protective underground system that can be used for a wide range of applications and paired with several modular components. A hydraulic excavation brace can be used as a four-sided application composed of adjustable hydraulic brace legs designed to support rectangular and square underground excavations. For those complex jobs, braces can be used in additional polygons such as 5 sided or 6 sided excavations. The contractor was extremely satisfied with the safety provided by the site specific engineered system, as it provided a practical solution during the pipe casing installation.

The excavation was located in line to a highway overpass involving a high traffic roadway and several highway overpass columns.

ADDRESSING INSURANCE
During the Contract Development Stage

By Barry Fleishman

During a recent presentation at a conference of underground construction professionals, I started by asking the following two questions: (i) "How many of you are involved in claims resolution either with insurance companies or with contractors when something goes wrong during or after construction?" (ii) "How many of you are involved in the construction contract formation phase and have input into issues of insurance and allocation of liability before the deal is signed?"

You already have guessed the answers that I received. Almost all of the attendees dealt with the problems after the fact; almost none dealt with the contracts and insurance before the fact.

Therein lies the problem.

Let's review some of the reasons why the above situation is so perilous:

Insurance structure decisions. The first, and most important, issue regarding insurance coverage for any construction project is how to structure the insurance. Put most simply, are all the parties – owner, contractor, subcontractor, architect, engineer, etc. – going to be responsible for their own insurance, or is the project going to be covered universally for all through an owner-controlled ("OCIP") or contractor controlled ("CCIP") insurance program. The decision whether to go to a project-based insurance program is a complex one that raises issues of cost, administration and historical comfort. Project-based programs offer several advantages, such as (i) reduced disputes among insurance companies over allocation issues, (ii) reduced disputes over responsibility for and cause of loss, and (iii) close relationship between scope of project and scope of coverage. However, parties may not feel comfortable losing total control over the administration of the insurance, and these policies potentially add cost to the project. It is a decision that should be discussed among the dealmakers and those responsible for implementing the deal before the deal is signed.

Lack of conformity between insurance and construction contract. Insurance can only be beneficial if it corresponds with the risks that the parties assess need to have addressed. Thus, the scope of insurance must match the scope of the project, the limits of insurance must bear reasonable relation to the value of potential loss, and the types of insurance purchased must match the areas of potential exposure. Equally important, the technical aspects of the insurance contracts must match the construction contracts regarding such things as (i) who specifically are the insured parties, (ii) how are risks allocated among parties to the contracts, (iii) how are different sources of insurance ranked for purposes of responding to claims (e.g., primary vs. additional insurance).

Types of coverage to be purchased. No one likes surprises. For this reason, it is crucial to consider all potentials areas of loss at the deal-making stage and determine what coverage should be purchased. Ordinary general liability, builder's risk and first-party property coverages, for example, typically do not cover environmental damage, cyber-related loss, and professional liability, and there may be restrictions on loss resulting from flood, mold, defects, or workmanship, among others. Therefore, it is important to review policies and coverage at the deal-formation stage to assure that all appropriate insurance has been considered. One important issue is the decision whether to purchase coverage for "business interruption," an increasingly costly result of property damage at a project.

Taking care of potential claim problems before they arise. Those of you who have been through construction dispute resolution that involves insurance understand the complex, burdensome and time-consuming process that often needs to be undertaken. Tasks that appear to be simple often turn into frustratingly challenging problems. Take, for example, the simple process of placing an insurance carrier on notice of a loss. Seems simple, right? Well, answer these questions: (i) Do you have up-to-date copies of all insurance policies with respect to which your company is a named insured; and (ii) Are you aware of all insurance policies of contractors upon which your company is an additional insured, and do you have copies of those policies. If the answer to these questions is not an emphatic "Yes," providing notice may be difficult, and as we all know, providing late notice may be fatal to your claim.

This issue is easy to resolve in the contract-formation stage through a requirement that applicable insurance policies be produced by the parties. In an age of easy access to information, there is little reason to risk having insurance claim notification difficulties because of a lack of knowledge of the insurance requirements.

These are but a few of the issues that should be considered before construction contracts are finalized and before insurance considerations are deemed closed. They are issues that require the combined input and experience of both dealmakers/contract writers and those responsible for implementing the deal and handling any resulting claims. In the case of insurance, an ounce of prevention – in this case prior review and attention – is worth well more than a pound of cure.

Barry Fleishman is a partner at the firm Shapiro, Lifschitz & Schram based in Washington, D.C.

2017 Overall Winner

St. Johns River Power Park Blowdown Piping Replacement

PETTICOAT-SCHMITT CIVIL CONTRACTORS, INC.

TOP JOBS

[EDITOR'S NOTE: In each issue, Utility Contractor will profile the projects of NUCA's Top Job Competition winners. These projects highlight NUCA members' best and most innovative work that keep our country's utility networks operating at peak performance. For information about entering your projects in the competition, visit *nuca.com/topjobs*.]

St. Johns River Power Park (SJRPP) consists of two pulverized bituminous coal-fired steam electric generating units (SJRPP 1 and 2), interconnected with the JEA (Jacksonville Electric Authority) transmission system. Both units are provided with natural draft cooling towers that maintain their proper water chemistry by controlled blowdown from the respective cooling tower basins.

The blowdown streams from each of the two cooling towers are combined into one common underground blowdown pipe that runs from the cooling towers at SJRPP to the waterfront area of the adjacent JEA Northside Generating Station (NGS). Currently, the NGS waterfront portion of the existing 42-in. diameter fiberglass reinforced pipe (FRP) cooling tower blowdown line is located on top of the outer walls of the makeup water intake structure and the south wall of the NGS circulating water discharge structure.

The structure, however, was in need of repair. It was necessary for the existing 42-in. diameter blowdown line to be relocated in order for the structural repairs to be made. In order to maintain plant operation, it was necessary to install a new pipe section approximately 720 ft in length to replace a portion of the existing cooling tower blowdown line. The preferred routing for the new pipe section was to run the new section of 42-in. FRP piping along the north side of the NGS discharge structure, which is a sheet pile wall with concrete cap. The new pipe section then terminated near the NGS Unit 1 discharge flume.

To complicate matters, the project had to be completed with an accelerated schedule for environmental reasons. With man-

atees migrating to the river beginning in the fall, the project needed to be completed in the summer to avoid impacts.

Petticoat Schmitt of Jacksonville, Florida, was awarded the $1.7 million project and mobilized to the site in January 2017.

Challenges and Innovative Solutions

The new 42-in. line was to be installed along an existing sheet pile wall, which is installed approximately 100 ft offshore in the St. John's River, thus surrounded by water. Conveying materials, including 40-ft lengths of large diameter piping, to that area presented considerable logistical challenges.

The reach from a barge mounted crane, floated in via the river, was determined to be too far for the weight of the materials; meaning the size of crane typically on barges may not be able to handle the loads at the required distance. Also, Petticoat Schmitt initially determined that conveying material from shore could not be accomplished because of a high power electrical line parallel to the work, and unknown utilities and structures underground that could be damaged by the crane's bearing pressure.

After study and discussion with its crane subcontractor, Beyel Bros., Petticoat Schmitt decided to locate the crane on shore but closer to the water. This alleviated the potential hazard from an existing power line.

Also, Petticoat Schmitt surveyed the underground utilities and structures using ground penetrating radar (GPR) in order to position the crane so that it did not cause damage. Lastly, as an additional safeguard, Petticoat Schmitt used crane matting to distribute the load across a broader area. Utilizing these strategies, and relying on expert crane operators, mitigated the logistics challenge.

Safely conveying crew to the area, and providing safe working conditions while there, presented an access challenge. The solution to this problem ended up being simple, but implementation was not. Petticoat Schmitt hired a scaffolding subcontractor, Safway, to erect a work platform along the entire 720-ft length, providing room along the top of the sheet pile wall for crew members to receive materials and install them.

Following the installation of the new pipe, Petticoat Schmitt faced further challenges in the demolition of the old pipe. Demolition needed to be done from a working barge, which could only be floated to the work site during low tide due to existing structures at the plant. Additionally, crab traps are common in the area and needed to be avoided.

Petticoat Schmitt finished the project in June 2017 to the satisfaction of the owner. "With all of the difficulties on this project, the key really came down to proper planning," said Aaron Browning, project manager for Petticoat Schmitt. "We used GPR to identify any potential utilities in the area. In addition, we surveyed the entire wall and then designed our pipe run based on the survey to make sure that there were no hiccups. Fortunately, the project went well with few hiccups along the way."

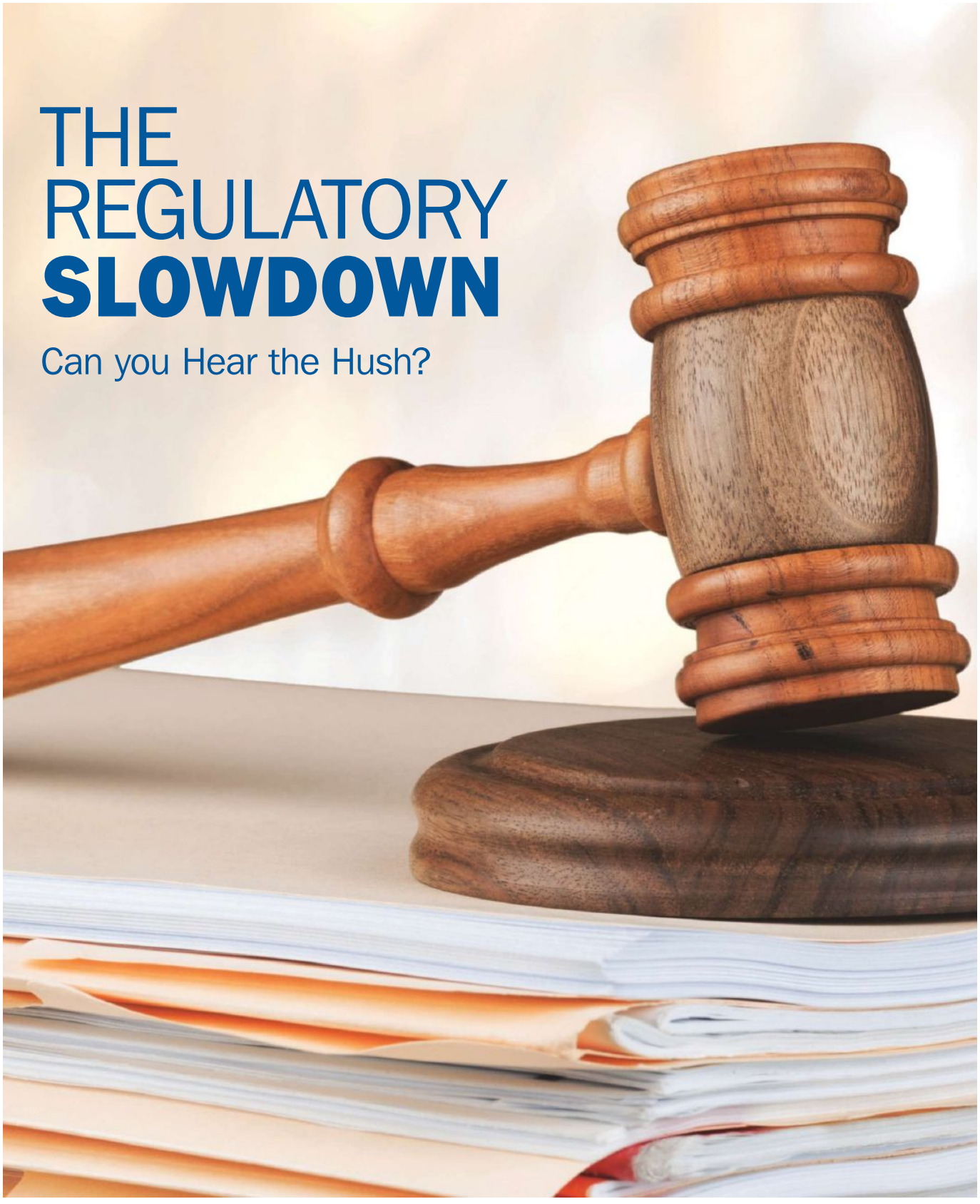
An aerial of the work site following installation of the new pipe.

New pipe sections are loaded from the land-based barge to the scaffold work deck.

Scaffolding provided a safe working area for the crew.

THE REGULATORY **SLOWDOWN**

Can you Hear the Hush?



By Bob Dunlevey

In the last year or so, has your business seen fewer regulations being foisted upon it? Are there fewer government agencies knocking at your doors these days? The answer is probably "yes" to both. It is almost as if a hush has come over the arena of federal agencies that played such a significant role in your day-to-day operations just a few years ago. The reasons for this are many.

Of course, the Trump administration continues with its 2:1 "regulatory rollback initiative" to offset the more than 22,700 regulations of the Obama administration, which had an estimated cost of $120 billion per year. But what is even more significant are the agency hiring freezes, reductions in governmental staffing primarily through attrition, and budget cutbacks. And, of course, federal regulatory agencies are simply becoming less aggressive than in the recent past. President Trump touts that:

- The administration has cut 22 regulations for every new rule introduced – far exceeding his 2:1 initiative.
- Agencies and departments issued 67 deregulatory actions and imposed only three new rules in FY 2017.
- 1,579 planned regulatory actions have been withdrawn or delayed.
- Congress has used an obscure 1996 law – the Congressional Review Act – to rescind 14 regulations enacted late in the Obama administration – a law used only once before.

The White House has approved less than 200 regulations since inauguration day compared to 510 promulgated in President Obama's first year. All of these actions by the Trump administration have been done in response to the Federal Register of regulations which today has swollen to 185,000 pages from just 20,000 in 1960.

Far more significant than the regulatory rollback, however, is how the agencies have appeared to curtail their activities. Here are just a few examples:

- The Department of Labor Wage-Hour Division has not actively pursued the Obama administration's overtime pay regulations, which originally caused most employers to revisit the exemptions of their employees and caused much time to be spent dealing with the anticipated regulations that got put on hold by a federal court at the last moment.
- OSHA has delayed its new beryllium general safety standard until May 2018 and its ranks of field investigators known as compliance officers has been reduced through attrition by about 4%. One OSHA Area Director even purchased his own photocopy paper recently to keep things running.
- The Department of Transportation has pulled back a 2016 proposed regulation for heavy trucks to electronically limit speed – in addition, a dozen transportation safety rules under development or adopted have been repealed, withdrawn or delayed.
- The Office of Federal Contract Compliance is rolling back the Vietnam Era Veterans' Readjustment Assistance Act veterans hiring quotas from 6.7% to 6.4% for affirmative action plans.
- The National Labor Relations Board is considering cutting in half the number of regional offices it has and decreasing the authority of its Regional Directors in making case decisions – the NLRB's budget has been shaved to the lowest level since 2009.
- The Environmental Protection Agency is considering rolling back 67 environmental rules including clean air and water rules – the most recent being greenhouse gas emissions and fuel economy standards for automobiles. More than 700 employees have left the EPA in the last year.

While agency enforcement activities have declined, private attorneys representing claimants in civil court actions are filing more actions than ever before. And, the damages sought in these types of cases far exceed what most agencies would demand for resolution. Therefore, businesses must not get a false sense of security over this regulatory rollback – stay vigilant about compliance.

Of course, the "vote is still out" on this "deconstruction of the administrative state." After all, the regulatory maze in Washington is hard to understand and evaluate. Moreover, midterm elections are coming and this could cause a possible Democrat majority which could rejuvenate regulatory initiatives. But for now, it appears that a hush has come over the arena of federal agencies – much appreciated by businesses battered by a barrage of regulations in recent years.

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One Roll of the Dice Could Cost a Worker's Life

Our industry is making progress, but workers are still being fatally injured by trench cave-ins. The No. 1 rule of excavation safety is to use a trench protective system: sloping, shoring or shield (trench box). We call them the "Three S's of Trench Safety."

When it comes to providing protective systems, OSHA is not pulling any punches. The violations are considered willful because OSHA officials believe that contractors who dig trenches know protective systems are required. They are especially concerned about trench safety because the last couple of years the number of workers who have been buried by a cave-in has almost doubled. As for this year, the construction industry is off to a poor start and it needs to stop.

Though trenches and excavations on most jobs do not cave-in, there is no way of telling when it will happen. A cave-in may occur while your crew digs the trench, an hour or two after the trench is dug, the next day, or even a week later.

No worker should ever be permitted or expected to enter into a trench more than 5-ft (4-ft in some states) deep that is not equipped with a protective system. Placing a worker in this type of situation, even for a minute, risks the worker's life and well-being because you cannot predict when a trench wall is going to fail.

The threat of large penalties and criminal action should not be the only reason a contractor should comply with OSHA trenching rules. Workers' lives are on the line whenever they enter an unprotected trench, even for a moment. Working in a trench without a protective system is a crap shoot: one roll of the dice could cost a worker's life.

There have been too many cave-ins that have killed or seriously injured workers already this year. Many of these workers are under the age of 30, not that it really matters how old a person is when buried alive in a trench. The only way this is going to stop is if contractors, municipalities and other employers whose workers must enter a trench provide and insist on the use of shoring, shields or sloping before workers enter into the trench.

As leaders in underground construction, NUCA members must recognize the importance of protecting workers in the trenches. Protective systems are readily available all over the country. They are available for purchase or rental, and OSHA knows it. Workers are still being killed or seriously injured and the sad part is these accidents are preventable. However, some contractors, municipalities and other employers still fail to heed the warnings.

Manufacturers of trench shoring and shields have stepped-up and engineered protective systems to handle even the toughest trenching operations. The equipment is lightweight,

By George Kennedy

The No. 1 rule of excavation safety is to use a trench protective system: sloping, shoring or shield (trench box).

easy to use, easy to transport, adaptable to different trench depths and widths, and budget friendly. There are systems for almost every situation, and if you don't need to purchase a system you can rent one. If you need help, contact the manufacturer or rental company and they will help you find what you need.

Statistics show that workers are killed more often on jobsites where there is no competent person (CP), which is an OSHA requirement for all trench jobs. The competent person must have the necessary training about the OSHA Excavation Standard – Subpart P and how to identify and control hazardous conditions. NUCA's competent person training program provides this information and a lot more. However, the competent person needs the right equipment to provide a safe place to work and must have the authority to take immediate corrective action to make the job safe. Otherwise, OSHA will not consider him or her competent. Failure to take corrective action when a hazard exists can result in severe OSHA penalties – as much as $123K per willful violation. More importantly, when a hazardous situation exists, like an unprotected trench, workers are in danger and could be buried alive.

Don't just train the competent person(s), train workers too. Many NUCA members are not only sending their competent persons to NUCA's Excavation Safety and Competent Person training, they are sending all their workers. Why? Because they are supposed to provide trench safety training for workers too and they realize the benefits of workers knowing what the competent person knows. Sure, the average laborer or pipe layer may not need as much training as the CP but employers know that if a worker completes a NUCA course, he or she will walk away with a solid understanding of what OSHA requires employers to do and the CP's responsibility, in addition to the potential hazards and how to protect themselves and their co-workers. Bottom line, everyone is reading from the same page.

From June 18-23, NUCA will be holding its third annual Trench Safety Stand Down. During this week we are asking all contractors and employers who have any involvement with digging trenches or excavations to hold a TSSD. During the stand-down we are asking employers to remind and educate their workers about the dangers of entering an unprotected trench. We are also asking NUCA members and their chapters to reach out to their friends, subcontractors, municipalities, other contractors who dig, and other associations asking them to hold a TSSD. Our goal is to educate workers and to save some lives.

OSHA has informed me that they will be updating and re-emphasizing their high emphasis program for excavations this year, which means they will continue to show up at any trench or excavation job site at any time without a warrant. If OSHA shows up at your jobsite and sees an unprotected trench, there will be no excuses and very possibly willful citations.

Even more important, there is no reason workers should have to put their lives on the line by entering an unprotected trench. Let's continue to take the lead and protect workers. Promote trench safety, pass the word to those who think that providing a protective system is not necessary or too expensive to protect the lives of workers. Let's continue to live up to our slogan: We Dig America Safely.

For more information on NUCA's Trench Safety Stand Down got to www.nuca.com/tssd

George Kennedy is NUCA's vice president of safety.

NUCA Safety and Damage Prevention Committee

By George Kennedy

One of the most important aspects of being a successful underground utility contractor is ensuring that all jobsites are safe. In addition, contractors must also be in compliance with federal safety and damage prevention rules and regulations. Therefore, the primary missions of the NUCA Safety and Damage Prevention Committee has been to create and provide contractors with information, educational materials, and compliance assistance. The committee also discusses new proposed rules and regulations to help NUCA's Safety Director prepare and submit comments to government agencies and the Common Ground Alliance.

George Kennedy, NUCA's Vice President of Safety, and the Safety and Damage Prevention Committee members help ensure that NUCA members are the best and most successful underground contractors in the country.

NUCA and the safety committee have been involved with submitting comments and testimony in reference to OSHA regulations starting with the OSHA Excavation Standard, Confined Space Standard and more recently the Respirable Crystalline Silica Standard. When new rules and regulations are first proposed, many of these standards need to be reviewed and comments need to be submitted. With the help of the safety committee, NUCA reviews the standards and submits comments in hope of making the standards more practical.

In addition, NUCA participates in the Common Ground Alliance, which deals with dig safe/one call best practices. When necessary the committee also reviews CGA recommendations and makes suggestions to help NUCA representatives express concerns about proposed best practices.

Over the years the committee has helped to create materials for training and educating the work force. According to George Kennedy, NUCA's Vice President of Safety, safety committee members are a valuable resource that he has relied upon to obtain information, including pictures that he has used to create training programs and educational materials such as the Competent Person and Safety Training Program, Confined Space Entry Program, Rigging Program, and Silica Program in addition to videos and other materials. He has also utilized information and pictures obtained from committee members when writing the Safety Management column in Utility Contractor magazine and NUCA Safety Newsletter. NUCA's Safety and Damage Prevention Committee also contributes to the NUCA Safety Directors Forum by suggesting topics and speakers. He considers the committee to be a valuable resource.

The committee meets approximately six times per year, either in person or via conference calls. The Current committee chairman Warren Graves and Kennedy are currently working on a plan to schedule meetings. According to Kennedy, all members, including safety directors and workforce members, are welcome to participate in the meetings. Meeting dates and times will be posted on the NUCA website and in the normal NUCA news feeds.

Most importantly the committee is about helping companies improve their safety programs and activities. By implementing successful safety programs, companies can prevent accidents, which cause injuries and/or damages. By participating in the Safety and Damage Prevention Committee you can help to ensure that NUCA members are the best and most successful underground contractors in the country.

Mark Your Calendars

George Kennedy would like to remind all Safety and Damage Prevention Committee members that the NUCA Trench Safety Stand Down is scheduled for June 18-23, 2018. We hope that each and every member of the committee will participate and help us spread the word to NUCA members and to any other contractor, municipality or anyone else they know who is involved with working in or around excavations and trenches.

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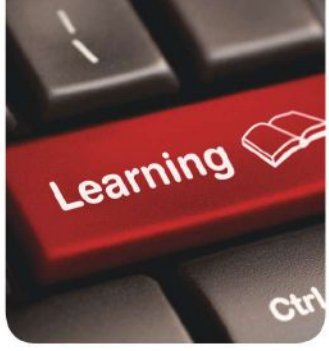

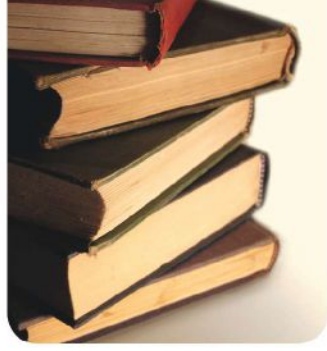

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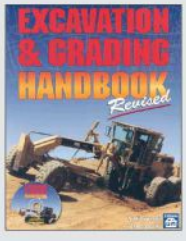

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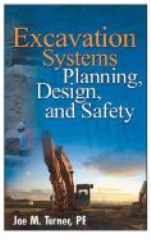

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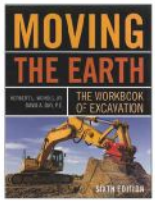

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MORE THAN A REPUTATION ON THE LINE

IN AN INSTANT, JUSTIN DAVIDSON AVERTED A COSTLY AND DANGEROUS MISTAKE

Before initiating the city's new fiber network project, Justin Davidson contacted his state one-call center. That commitment to safety uncovered an unmarked gas line, saving a costly error and maybe the lives of some of his crew. For 25 years, our partnership with NUCA, construction experts and independent agents has helped create coverages and risk control programs, such as the CNA Contractor Utility Disruption Course, that keep companies safer and premiums to a minimum.

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