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# 2024 NUCA Convention PREVIEW





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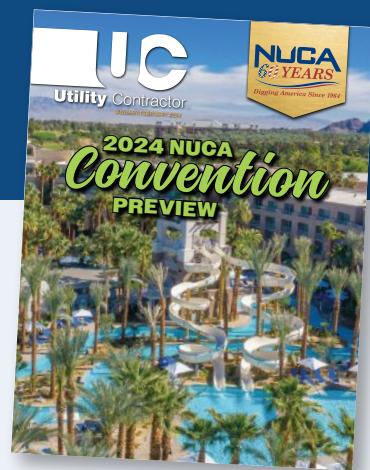
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NUCA's 2024 Convention & Exhibit will take place March 20-23 at the Hyatt Regency Indian Wells Resort & Spa in Palm Springs, California. The Indian Wells water park features dueling 30-ft water slides, a winding 450-ft lazy river, and many more fun water features for our guests.



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# NUCA



## Chairman's Message

### Keep Making NUCA Yours

Being NUCA Chairman is an honor, but it has one drawback: it's only a year long. And at the end of every term, those of us entrusted with this honor write this final column in our association's membership magazine. It's the last chance I have to share with you as Chairman my thoughts about our industry and NUCA's achievements completed for all of us to share.

Looking back over the last 11 months, I can write that many of you took my slogan to heart and "Made NUCA Yours."

This year, we finally achieved 2,000 members on our national rolls. Over 83% of NUCA members renewed their memberships, showing our industry that NUCA continues to fill several responsibilities that other organizations just can't fulfill.

It's been a busy year for NUCA. We've added two new chapters—NUCA Austin and NUCA of Oklahoma. We added two new safety courses—Advanced Crew Leader Course and the Damage Prevention Train-the-Trainer—and continue to expand industry use of our existing Train-the-Trainer and Crew Leader programs. NUCA-STAR continues to evaluate more member's safety programs. We added two new business insurance benefits—NUCA Assurance and NUCA Choice—and are in the final stages of securing more business benefits in 2024 for our members to use for their operations.

On the advocacy front, NUCA worked with Congress to pass the first real steps of permitting reform, including streamlining the National Environmental Policy Act review process, and designating a single lead federal agency to supervise the permitting process. We fought to ensure "Build America, Buy America" regulations are administered fairly. We pushed back against several harmful Biden Administration regulations, including their distorted interpretation of the "Waters of the U.S." regs. And while the FY2024 State Revolving Fund appropriations issue remains unresolved as of today, NUCA and other stakeholders took to the fight early and worked with friendly U.S. Senators to restore almost all SRF funding in their version of the appropriations legislation. We're not giving up on Congress doing the right thing to fully support water and wastewater infrastructure projects in every U.S. state.

"Making NUCA Yours" encouraged many of you to explore what NUCA National and your NUCA Chapter can do for your operations and your employees. NUCA CEO Doug Carlson and I were glad we could talk to many of you in 2023 and hear first-hand your experience with your NUCA membership, using all of these association resources to gain benefits for your company that far outweigh your dues investments. That's what I wanted to achieve with my work over the last year: helping you make NUCA yours.

I leave our fine industry association in great hands and know Tony Privitera's year ahead as Chairman will continue to deliver this association's high level of excellence to our members. I would like to thank you, my fellow NUCA members, our volunteer leadership, and NUCA and Chapter staff for all of the tireless work you've done over the past year to make NUCA a better experience for us all.

Thank you for the honor and opportunity to serve as NUCA's Chairman during the last year. I wish each of you much personal and professional success in the years ahead, as we work to build America's subsurface infrastructure.

Sincerely yours,  
Thomas P. Butler  
NUCA Chairman of the Board / Kimmins Contracting Corp.

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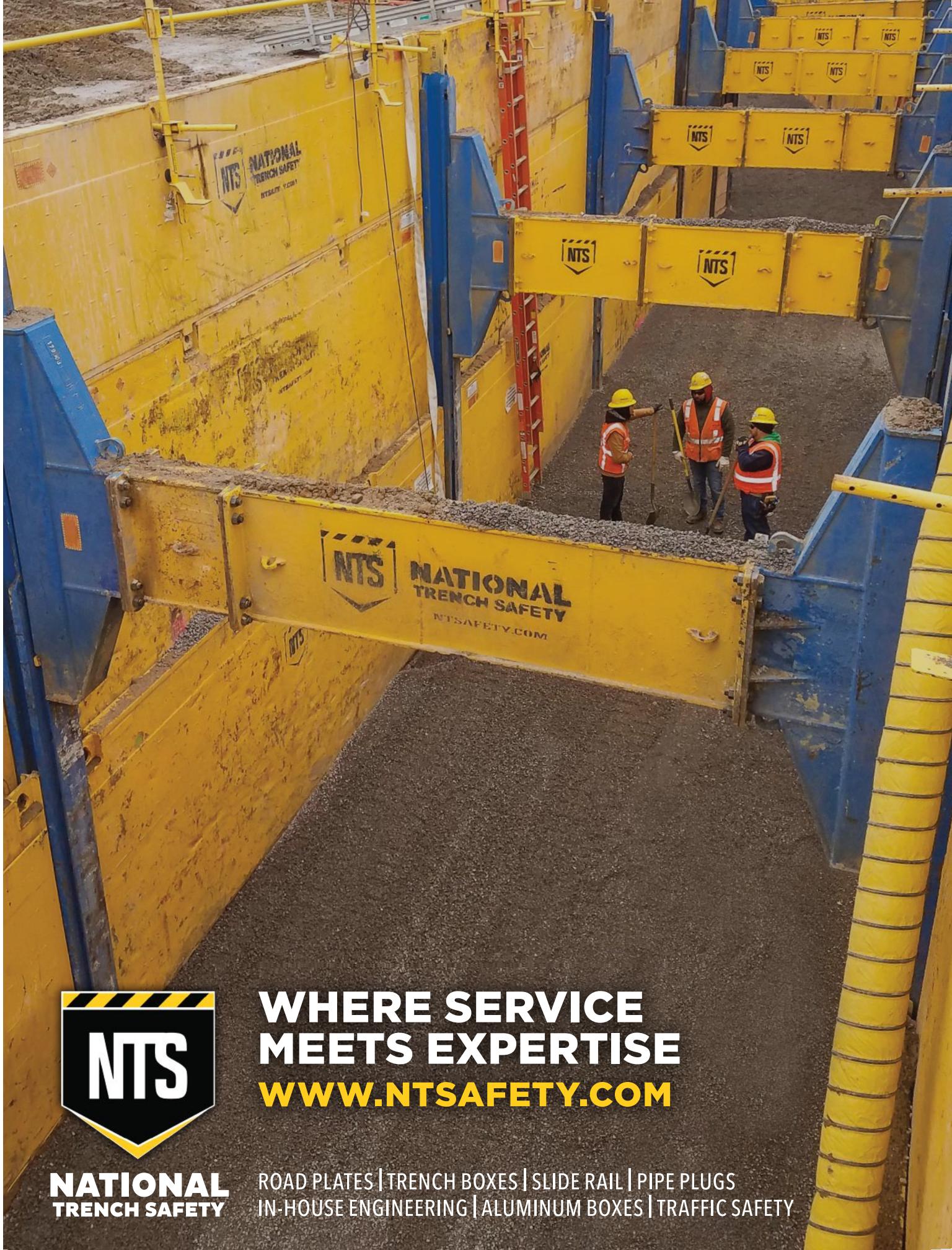
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## Vermeer Midwest Earns Pinnacle Award

Vermeer Midwest celebrated a Vermeer Pinnacle designation in recognition of providing a superior experience for customers. The Pinnacle Award is earned for performance in sales and marketing, providing excellent aftermarket support, as well as for training employees. The Pinnacle Awards are presented annually by Vermeer Corporation.

“As a Vermeer dealer, to win the Pinnacle award truly means that you are among the best of what’s an already fantastic net-

work of global dealers,” said Nathan Guess, vice president of global distribution. “Providing an exceptional customer experience and operating a progressive and expanding business are hallmarks achieved by Pinnacle award winning dealers.”

Vermeer Midwest brings industrial equipment solutions to Illinois, Indiana, western Kentucky, eastern Missouri, and Michigan. To learn more about Vermeer Midwest visit [vermeermidwest.com](http://vermeermidwest.com)

## United Rentals Recognized by Drucker Institute

United Rentals Inc. announced it was selected as one of the U.S. Best Managed Companies in the Drucker Institute’s annual Management Top 250 ranking. The prestigious award, presented by The Wall Street Journal, recognizes well-run companies that deliver value to customers, employees and investors.

The Management Top 250 ranking measures corporate effectiveness by evaluating five categories: customer satisfaction, employee engagement and development, innovation, social responsibility and financial strength. The Drucker Institute uses the principles of its founder, the late management guru Peter Drucker, to identify the most effectively managed companies.

“This recognition reflects how we are dedicated to delivering value every day as we work to provide solutions with a shared commitment to service, safety and sustainability,” said Matthew



Flannery, chief executive officer at United Rentals. “We pride ourselves in doing the right things by all our stakeholders as we endeavor to build a better future together.”

In 2023, United Rentals has received numerous industry awards, including the 2023 HIRE Vets Medallion, 2024 Military Friendly Employer, Forbes America’s Best Employers for Women 2023, Glassdoor Best Places to Work 2023, Top Workplaces USA 2023 and more. Information on career opportunities can be found on the United Rentals Careers website.

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Congratulations to  
Tony Privitera  
2024 NUCA  
Chairman of the Board

## 2023 NUCA National Signing Day Fuels Membership Growth

Beginning on September 25, 2023 and culminating with National Signing Day on October 16, the National Utility Contractors Association (NUCA) and its Chapters gave utility construction business owners a great reason to join the industry's premier association: invest in your business's future success and become part of the association's National Signing Day signing class. What resulted was fifty-two utility industry companies doing just that, and helping NUCA surpass 2,000 total company memberships for the first time in recent history!

"NUCA has been growing steadily over the past few years, and we're attracting new members who want to join in the successes we're helping our industry achieve," said Doug Carlson, NUCA Chief Executive Officer. "Our Chapters did a great job getting the word out to the industry members in their states and regions, held recruiting events, and signed up new members throughout the National Signing Day signing period."

New NUCA members that joined during the National Signing Day campaign credited the following NUCA members as being influential in their decision to join NUCA: Austin Merritt, Ben Arthur, Sawyer Barnard, Tim Butler, Lisa Chowansky, Jason Robertson, Tyler Hardin, Tom Butler, Matt Williams, Greg Wolf, and numerous NUCA Chapter Executive Directors.

NUCA Chapters were recognized at three levels for their National Signing Day successes. Chapters that "signed" more than three new members earned top honors with ★★★★★ Signing Class recognition. Three new members "signed" earned ★★★★ recognition and ★★★ recognition went to chapters that "signed" 1-2 new members. In total,



More  
Members  
More  
Clout

Join  
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Today!



20 NUCA Chapters "signed" at least one new member for National Signing Day!

★★★★★ (5):

NUCA Austin, NUCA of the Carolinas, NUCA of the Greater Kansas City Region, NUCA North Texas, Suncoast Utility Contractors Association (SUCA)

★★★★ (3):

NUCA of East Tennessee, NUCA of Southwest Florida, NUCA of Oklahoma

★★★ (12):

AZUCA Arizona Chapter of NUCA, NUCA of Central Florida, NUCA Gulf Coast, NUCA of Kentucky, NUCA of Metro Washington, DC, NUCA of Middle Tennessee, NUCA of Nebraska, NUCA of New Jersey, NUCA of New York (NUCANY), NUCA of North Florida,

NUCA San Antonio, NUCA of South Florida

The event generated industry excitement for the association, promoted the many benefits enjoyed by NUCA members, and expanded the networking opportunities for the industry and its new members. New members were also enticed by the NUCA's annual 15-for-12 National dues promotion for new members, which kicked off to coincide with the National Signing Day campaign and continued through December 31.

For more information about NUCA membership and our Chapters, visit [www.nuca.com/membership](http://www.nuca.com/membership).

This article was written by **George Hamilton**, NUCA Director of Membership Development.



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## Blueridge, Foremost Pipeline Awarded Top Platinum Level of Utility Construction Industry Safety Program

Safety is a vital component of every utility construction jobsite and employee activity. The National Utility Contractors Association (NUCA) announced that Blueridge Inc. finished the NUCA STAR safety program. The company has completed the association's new safety program enhancing and recognizing this critical aspect of utility construction.

NUCA's STAR (Safety, Training, Awareness and Recognition) Program provides a venue for every company in the utility construction industry to measure the effectiveness of their safety programs and recognize how these important company programs can be improved.

Blueridge Inc. of Upper Marlboro, Maryland, and Foremost Pipeline of Gaston, South Carolina, achieved the STAR Program's top Platinum Level status. Blueridge is both a NUCA National and a NUCA of Metro D.C. association member. Foremost Pipeline is both a NUCA National and a NUCA of the Carolinas association member.

"Our NUCA STAR winners show strong dedication to creating and managing world-class safety programs on their jobsites. Through their commitment to jobsite safety, their leadership ensures that their employees make it home safely when the working day is through," said Mike Flowers, NUCA's director of safety, education, and training.

The STAR Program categories of Bronze, Silver, Gold, and Platinum allow companies to review their processes and evaluate their safety programs' strengths and potential areas of improvement in the critical areas that provide a lasting path to safety success. Evaluation areas are Leadership, Records Management, Culture, and Procedures. Under these four core areas are subsections scored on a point system meeting specific guidelines that a company must meet for each category.

NUCA's website ([www.nuca.com/nucastar](http://www.nuca.com/nucastar)) contains detailed information on NUCA STAR Program guidelines, as well as the application process for NUCA members and non-members. The STAR Program was unveiled in 2022 during June's Trench Safety Month and has already awarded several construction companies industry-wide recognition for their safety programs.

All participants who attain one of the four levels of the STAR Program are recognized as companies who are sincere in their efforts to build effective programs and are to be commended for their participation in ensuring the safety of their employees.

The goal of this program is to help industry members master one of the most essential functions of a successful company—safety—and to help ensure industry employees stay healthy and safe while they build our nation's vital core infrastructure projects. All industry members are encouraged to participate in NUCA STAR.

## Core & Main Completes Acquisition of Granite Water Works Inc., Reaches Agreement to Acquire Lee Supply

Core & Main Inc., a leader in advancing reliable infrastructure with local service, nationwide, on Dec. 6 announced the closing of its previously announced acquisition of substantially all of the assets of Granite Water Works Inc., a provider of water, wastewater and storm drainage products in Minnesota.

Granite Water Works is a leading distributor of high-quality waterworks and subsurface drainage supplies for contractors and municipalities in central Minnesota. Since 1990, their experienced team has consistently delivered high-quality products and service to their customers from their Waite Park, MN, location.

On Nov. 14, Core & Main entered into a definitive agreement to acquire substantially all of the assets of Lee Supply Company Inc. (Lee Supply), a leading specialty distributor and fabricator of high-density polyethylene (HDPE) pipe and other related services, including HDPE fusion equipment rentals and custom fabrication capabilities. Since 1954, Lee Supply has been a preferred supplier and specialty fabricator of engineered HDPE pipe, fittings, pumps and pipe systems, along with providing rental fusion equipment. They have locations in Pennsylvania, South Carolina and West Virginia, primarily serving the Eastern United States.



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## LBX Company Celebrates 25th Anniversary

LBX Company celebrated its 25th anniversary on Sept. 27 with a special event at the LBX Customer Experience Center in Lexington, KY. The event was attended by employees and retirees and featured various activities, including food, music, and outdoor games.

In his opening remarks, LBX Company's CEO Eric Sauvage thanked employees for their hard work and dedication over the past 25 years. He also highlighted the company's commitment to customer service.

"We are very proud to celebrate our Silver Jubilee!" says Sauvage. "We have faced challenges and enjoyed many rewards over the past 25 years. I am truly grateful to all our talented and dedicated employees for their passion for our business. Additionally, on behalf of LBX, I would like to

thank our customers, dealers, and business partners for their business and partnership. We have all the reasons to be excited about our future!"

Link-Belt Excavator Company, alongside its parent corporation, Sumitomo, has launched 6 product series spanning 25 years, including Quantum, LX, X2, X3, X4, and X4S. Additionally, the Forestry 40 Series was launched in 2015, and the 40 B Forestry Series launched this year.

LBX has rapidly grown to provide industry-leading excavators, material handling, and forestry products. As the company continues to expand throughout North America, its subsidiary, LBX do Brasil, follows these same principles as they distribute and support Link-Belt excavators in Latin America and Brazil.

## CNH Completes Purchase of Hemisphere GNSS

CNH Industrial has completed its purchase of the global satellite navigation technology leader Hemisphere GNSS (Hemisphere) for a total consideration of USD \$175 million – as announced on March 30, 2023.

This acquisition solidifies CNH's in-house precision, automation and autonomy technology, enabling it to continue breaking new ground for the agriculture and construction industries. It furthers CNH's

vertical integration efforts to deliver cutting-edge core technologies to customers' fleets for top performance, combined with a smooth and seamless user experience.

With Hemisphere's expertise and network, CNH is accelerating its strategic plan to attain leadership in automation technology, expedite delivery of a fully autonomous farming cycle, and extend and enhance automation and autonomy across a broad range of agriculture and

construction applications.

"Bringing Hemisphere's talent and resources into CNH reflects the energy and momentum of our investments in tech innovation. From 2024 onwards, we will bring notable value to customers through significant advancements in our journey from automating certain tasks to fully autonomous operation," said Marc Kermisch, Chief Digital & Information Officer at CNH.



# Wyo-Ben Acquires Bentonite Operation of M-I Swaco

Wyo-Ben Inc., a leading provider of high-quality drilling fluids and minerals, announced its recent acquisition of the bentonite operation of M-I Swaco, a division of Schlumberger and renowned global leader in drilling fluid systems and services. This strategic move further solidifies Wyo-Ben's position as a leader in the industry and opens up new avenues for growth and innovation.

The acquisition of M-I Swaco bentonite operation located in Greybull, WY, represents a significant milestone for Wyo-Ben, as it brings together two industry powerhouses with complementary strengths and expertise. By combining resources, knowledge and experience, the newly formed entity will offer an enhanced portfolio of products and services to customers worldwide.

Wyo-Ben has built a strong reputation over the years for its commitment to delivering superior drilling fluids, sealants and additives that meet the unique needs of its customers. This addition will further enhance Wyo-Ben's ability to provide tailored solutions for drilling and completion challenges across a wide range of applications.

M-I Swaco's established global presence and extensive customer base will also contribute to the accelerated growth and market expansion of Wyo-Ben. The acquisition will bolster the company's ability to serve its customers on a larger scale, tapping into new markets and providing a broader range of integrated solutions to address the evolving demands of the industry.

"We are thrilled to announce the acquisition of the bentonite operations known as M-I Swaco," said David Brown, CEO of Wyo-Ben. "This acquisition aligns perfectly with our long-term growth strategy and allows us to provide an even more

comprehensive suite of products and services to our valued customers worldwide. By combining our strengths, we will enhance our capabilities and unlock new opportunities for innovation and success. We warmly welcome the employees at M-I Swaco into the Wyo-Ben family."

Both Wyo-Ben and M-I Swaco share a common commitment to excellence, quality, and customer satisfaction. The acquisition will facilitate the exchange of best practices, technical expertise, and operational efficiencies, resulting in improved customer experiences and accelerated innovation.

The transition process will be carried out meticulously, ensuring a seamless integration of operations and minimal disruption to existing customers. Wyo-Ben remains committed to maintaining the highest level of service and support during this transition period.

This acquisition is a clear demonstration of its dedication to driving industry advancement and maintaining its position as a trusted partner for markets we serve. The combined strengths of these two industry leaders will undoubtedly lead to enhanced value creation for customers and shareholders alike.

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# NUCA Celebrates 60 Years of Industry Member Service

The National Utility Contractors Association (NUCA) throughout 2024 will be celebrating its establishment 60 years ago by utility construction contractors seeking a world-class organization to represent its interests in Washington and local communities.

“60 years ago, utility contractors recognized that their business operations would be defended and improved by a strong national organization, and created NUCA,” said Doug Carlson, NUCA chief executive officer. “Our president in 1969, Joseph D’Annunzio, recognized that the problems faced by utility contractors are the same throughout the country. Every industry business has the same issues, proven repeatedly across the decades even as they change to reflect today’s business challenges. With their support, NUCA will be there for our members in this new year and in the decades ahead, as their companies and their employees build and repair America’s infrastructure.”

NUCA was formed on April 11, 1964, when a handful of visionary contractors signed the association’s articles of incorporation in the Washington offices of attorney Joseph Stone. He was joined by Peter J. Ellis (soon to be the first NUCA president) and Pat Marinelli of Glenmar Construction Co., Antonio Marinelli of Intercounty Construction Co., D.A. Foster of D.A. Foster Trenching Co., and Laurence Siebel, Esq.

Stone recognized the need for a unified industry voice after a contentious National Labor Relations Board hearing over subsurface construction being performed at Washington, D.C.’s Andrews AFB, illustrating the need to form an organized effort of utility contractors. Under the direction of Stone, he spent the rest of 1964 organizing the budding association, developing the name and first logo, creating letterhead, launching a newsletter, and announcing NUCA’s statement of purpose to the nation’s many “ditch-digging” industry companies. That November 17, NUCA held its second organizing meeting in New York City, electing a slate of officers and directors and seeking to broaden the membership. NUCA’s first new chapter, the Utility Contractors Association of New Jersey, was created the very next year.

Although strong state and regional industry groups existed at the time, utility contractors had no national voice



until NUCA was formed six decades ago. Since then, NUCA has grown from 150 members to more than 2,000 leading industry companies.

Throughout 2024 NUCA will be remembering our founders’ lasting achievement for this critical national industry.

Our upcoming 2024 Convention and Exhibit being held in Palm Springs, California, will feature several anniversary events, recognizing industry leaders and the new slate of NUCA executive leaders. NUCA’s many safety events in 2024, including the upcoming Safety and Damage Prevention conference held in January in New Orleans, and our nationally recognized Trench Safety Stand Down held annually in June at hundreds of locations, will also recognize this association’s anniversary.

Throughout the year, NUCA will feature our patriotic 60th Anniversary logo on our new website, NUCA.com, on our several social media channels, and within our two membership magazines, Utility Contractor and NUCA Business Journal.

NUCA members consist of utility and excavation contractors who provide the materials and workforce to build and maintain America’s network of subsurface water, sewer, gas, telecommunications, and electric infrastructure. According to the most recently available national economic survey by the U.S. Census Bureau, the utility construction industry performs over \$150 billion in construction work across the nation. This industry employs over 570,000 men and women.

NUCA provides our members with high-quality safety and training education, cost-effective business benefits, exciting industry events, and effective representation on Capitol Hill and in federal regulatory agencies. NUCA is headquartered in the suburbs of Washington, D.C. at its offices in Fairfax, Virginia. NUCA has 36 active chapters across the nation.

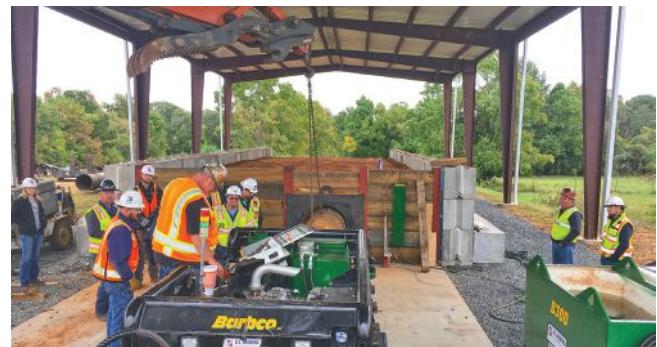
Our chapters provide to our member’s employees a selection of local training programs and networking events, promoting industry safety and workforce development programs, and advocate for more favorable state and municipal laws and regulations impacting the industry. NUCA membership information can be found at [nuca.com/membership](http://nuca.com/membership).

# TTC Set to Host 2024 Auger Boring School in March

The Trenchless Technology Center (TTC) at Louisiana Tech University is ready to welcome attendees to the 6th TTC Auger Boring School (ABS), March 5-7, 2024, in Ruston, Louisiana. This three-day school has been developed to provide attendees with the knowledge and background needed to understand the important components of auger boring and pilot tube operations required to produce successful projects.

In addition to the classroom lectures, practical sessions will be held where participants will be offered hands-on experience with the actual equipment in a field setting. The Auger Boring School will be instructed by the foremost experts in the industry and will cover all aspects of a project from design to construction, with a special focus on safety.

The course takes place at the LA Tech campus with classroom sessions in the university's Integrated Engineering and Science



Education Building and hands-on sessions at the TTC's Barbera Education, Research & Training (BERT) facility.

The three-day course is designed for, contractors, engineers, project superintendents, foremen, crew members, estimators, public officials, educators, state highway department representatives and regulatory agency representatives.

Auger Boring School director is John Kraft, Ph.D., Research Associate, Trenchless Technology Center and Adjunct Professor, CE & CET, Louisiana Tech University.

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Palm springs, CA

2024 Annual Convention & Exhibit

March 20–23, 2024

# NUCA's 2024 Annual *Convention* & EXHIBIT PREVIEW



By NUCA Staff

**N**UCA's 2024 Convention and Exhibit is the big show for in-the-know utility contractors. The 2024 convention is being held at the beautiful Hyatt Regency Indian Wells Resort & Spa. Nestled in Greater Palm Springs, Hyatt Regency Indian Wells Resort & Spa offers a variety of world-class accommodations, total wellness services and outdoor recreation opportunities. Experience the new water park with a lazy river, splash pad, and dueling water slides!

This year's NUCA convention will be an exciting experience for you and your guests, featuring a schedule of great speakers and events, a wealth of networking opportunities, and an exhibit hall featuring the most advanced equipment, products, and services from our industry's top, most innovative companies.

The Convention Committee hopes you make it a priority to come and experience Palm Springs to prepare for the upcoming busy season and take a well-earned break from the everyday routine, especially after a long winter.

On top of the stunning location, NUCA continues to be dedicated to promoting, educating, and investing in our industry's most precious resource: our people. Whether you are a 30-year business owner, or just starting out in this vital American industry, you face a complex business environment every day. We aim to bring you vital content that delivers innovative and thought-provoking ideas you can take back to your company, invigorated and ready to conquer the year ahead and all the upcoming opportunities and challenges that may entail.

## ON TAP THIS YEAR:

- Profit pipeline morning program
- Informative sessions and speakers selected to develop your competitive edge in business
- Cutting-edge technologies, products, and services
- The 5th Annual CEO Bobblehead Golf Tournament to benefit the NUCA Foundation for Education & Research
- Fun-filled events sponsored by our National Partners including our keynote speaker, multiple receptions, team building and our 60th Anniversary Gala!
- Endless opportunities to network with industry peers
- A beautiful resort experience.

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### KEYNOTE SPEAKER: Creative Executive and Comedian Scott Shellstrom

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Start the 2024 NUCA Convention with our keynote speaker and his enthusiastic presentation! Scott Shellstrom has been a creative executive at the world's top agencies working with Fortune 500 companies and their brands. He started his comedy career at Second City in college and has performed on the stages of Caroline's, The Cellar and The Comic Strip. His work on stage got him national TV gigs, including a travel host on the Travel Channel, major commercials, and events. His artwork has been featured at the LA County Museum, Armand Hammer, and many established galleries across America. Today, he is CCO at Integrated Advertising Agency in San Diego and unleashing people's inner da Vinci wherever he goes.



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Finish off the Convention's first day by relaxing with colleagues and catching up with old and new friends alike. Appetizers will be served, and you can visit the well-stocked bar to grab a refreshing beverage. United Rentals happily welcomes you to another great NUCA Convention!



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## 60TH ANNIVERSARY GALA CELEBRATION

We've saved the best for last! The Awards Gala will feature our Awards of Excellence presentations, transition of leadership ceremony, and NUCA's famous live auction. Our event's formal dinner will feature a delicious buffet, good friends, and conclude with plenty of fun.



## LIVE AUCTION

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Generously sponsored by NUCA National Partner John Deere, our Auction features a wide range of exciting items donated by many of NUCA's National Partners, with exciting items and unique experiences long time members have come to demand. And what's better than the excitement of bidding in a live auction? All proceeds go to the NUCA Foundation, so your bids are money well spent!



## UTILITY CONSTRUCTION OUTLOOK Featuring Mark Bridgers

How will the economy influence your business in the next few years? Join us for the return of Mark Bridgers, Principal / Owner of Continuum Capital, as he discusses the economic outlook of the utility construction industry in 2024 and beyond. Don't miss Mr. Bridgers' careful analysis of where our industry is headed this year, and how to make the most of these conditions for your own business success.

## PROFIT PIPELINE MORNING BREAKFAST PROGRAM

This year's discussion will be a great opportunity for member contractors to sit face-to-face with peers to consider and brainstorm on some of the key issues facing the industry today: The Current Construction Market, Young Leaders' Insights, and Workforce Development Challenges and Possible Solutions.

## INDUSTRY HOT TOPIC SESSIONS

This year we have a series of sessions featuring hot topics, covering a variety of subjects of high importance to our industry and association. These topics include Damage Prevention / 811 Study Update, A.I. Applications, and a Utility Leaders Panel.



## NUCA'S EXHIBIT HALL

The 2024 NUCA Convention & Exhibit in Palm Springs will feature an exhibit hall filled with the newest and most innovative technologies, products, and services for utility and excavation contractors. Our National Partners and Exhibitors will be on hand to listen to your needs – whether on the jobsite, in the shop, or in the back office. They will demonstrate how their products and services can improve company and project efficiency and reduce downtime and costs – all to help increase your profitability.

## EXHIBIT HALL RECEPTION & TEAM BUILDING AWARDS

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# WHAT LIES BENEATH?



## *Utility Location Equipment Helps Contractors Navigate the Underground*

By Jim Rush

**A**ccurately locating and marking underground utilities prior to excavation is one of the most important tasks a contractor needs to perform to ensure a successful project. First and foremost, utility strikes can potentially result in serious physical injuries. Also, strikes can lead to downtime, lost profit, and reimbursement for damaged facilities.

Accurate utility locating is a group effort. Once a jobsite has been outlined and 811 notified, utilities will be marked using color-coded flags and paint to identify the path. For under-

ground contractors, including boring and drilling contractors, verifying the location and depth of existing utilities is a must.

Despite our best efforts, utility strikes are on the rise. According to a 2022 DIRT Report published by the Common Ground Alliance, an industry association of professionals involved in the underground utility industry, damages increased from 2020 to 2022 both in terms of cost (per million dollars of spending) and number (per 1,000 811 requests).

Unmarked or mismarked utilities account for nearly one-quarter of all reported incidents, according to the DIRT Report, meaning that verifying utilities can substantially reduce these occurrences. In order to verify the presence and precise location of existing utilities, professionals need the right tools – and

know how to use them properly. And with the utility construction market poised for growth, there will be an even greater need for accurate utility location in the coming years.

Subsite Electronics has been a leading player in the field since its inception in the 1980s. Originally formed to develop guidance equipment for Ditch Witch directional drills, the company has expanded its offerings to include utility locators and ground penetrating radars.

## UtiliGuard 2 Locators

UtiliGuard 2 locators use electromagnetic technology to detect and locate utilities such as pipes, cables, and other buried infrastructure. There is a range of product options available from basic to advanced, depending on the need and the experience level of the operator. The locator verifies the path of utilities by applying a signal directly to the utility (assuming it is conductive or has a tracer wire) and tracking it with a handheld locator. In the cases of non-conductive utilities with no tracer wire, there are available beacons or sondes that can be inserted through the pipes, allowing the handheld receiver to track its location.

At the top of end of the spectrum, the UtiliGuard 2 RTK receiver utilizes survey-grade technology and features dual-band

antennas to provide operators with accurate and reliable positioning data with centimeter-grade accuracy. Its high-level of accuracy and precision make it an ideal solution for locating abandoned and untracked utilities that are often difficult to pinpoint. By quickly verifying the utilities installed, operators can efficiently tailor their bids to match jobsite needs, as well as gain insight into the underground infrastructure to avoid cross bores during future projects.

However, as with any tool, understanding the process and best practices is key to achieving the desired results.

Rodolfo Cabello, Locating Product Manager for Subsite, says that getting the right frequency is the first step in successful locating. "Some contractors get into the habit of using a 'favorite' frequency, but we recommend starting at the lowest possible frequency and then working your way up. By doing this you increase your ability to locate accurately and decrease the likelihood that the signal will 'bleed off' onto a utility that might not be your target. This becomes more important when working in a congested corridor."

UtiliGuard 2 locators offer a feature called AIM (Ambient Interference Measurement) technology that scans the surrounding area for noise and recommends the optimum setting for fast,

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accurate locates. The combination of automatic real-time data capture, performance analytics information and integrated GPS provides oversight/proof of locator field activity to improve work quality, accuracy and reliability of locate activities.

## GPR

In situations where utilities cannot be tracked using standard locators, ground penetrating radar (GPR) offers an alternative solution. Subsite's GeoRanger XR GPR series are designed to identify both shallow and deep utilities – even those that don't have a wire tracer - in one pass without the need to go back through with multiple frequencies. The new GPR system offers better resolution on deeper scans, helping identify unlocatable or abandoned utilities. With dual-frequency GPR antennas, operators receive high-resolution scans without sacrificing penetration depth. The 750 MHz antennas identify objects up to approximately 10 feet in depth while the 350 MHz antennas detect objects as deep as 20 feet.

Additionally, the integrated GPS system provides real-time steering guidance when paired with the GPS base station so that time-consuming scan grid layout and marking can be avoided. Using the GPR system's advanced software, operators can generate 3D results and mark detected objects for interactive visualization, reducing the need for manual hand-written updates.

"A GPR unit is one of the simplest locators to use, assuming you have the right ground conditions," Cabello said. "It can

be useful in locating deeper utilities and utilities that are not conductive or don't have a tracer wire. They are particularly effective in dry or sandy conditions, but performance can be hindered in clay or ground with a high moisture content."

## Mapping

Over the past few decades, facility owners have increasingly been digitizing their mapping and asset inventory. So, when locating and verifying the precise location of utilities, it is important to have the ability to share that data and incorporate it with GIS platforms to streamline future projects involving buried utilities.

An important feature in today's utility location devices is the ability to share data with stakeholders. As locators track utilities, they have the ability to log attributes including location, depth and utility type. This information can be transmitted wirelessly in non-proprietary formats (.KMZ, .CSV) so that customers can import the data into their mapping or GIS databases. Locators have the option of using equipment with survey-grade accuracy depending on the need of the end-users.

Using the right combination of utility locating tools improves accuracy and contributes to overall project efficiency, cost savings, and enhanced safety. As technology continues to evolve, these innovative solutions will play a pivotal role in shaping the future of underground infrastructure development.

Jim Rush is Editor of *Utility Contractor Magazine*.

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# DOWN-THE-HOLE HORIZONTAL HAMMER BORING



# GEONEX Helps North American Contractors Tackle Tough Conditions

By Jim Rush

**W**hen it comes to horizontal underground utility installations, methods like auger boring and horizontal directional drilling typically spring to mind. However, one company offers a solution that has demonstrated benefits for more than 30 years.

GEONEX, headquartered in Finland, offers horizontal hammer boring (HHB) equipment that is well suited for utility installations in solid rock, cobbles, boulders and other conditions. The company was founded in 2012 but its roots date back to the early 1990s when company founder Kimmo Juvani's family-owned contacting company began implementing the use of traditional vertical down-the-hole hammer equipment to run horizontally, which at the time was the only HHB business operating in Scandinavia using this approach.

The company was sold in 2006, but Juvani stayed on to help further expand the technology, and in 2011, they completed more than 10,000 bores covering 650,000 ft using HHB.

In 2012, the concept for GEONEX was formed to be a manufacturer of HHB equipment. The equipment utilizes three main principles: a pneumatic downhole hammer, hydraulically powered components for rotating the auger, and an umbilical hydraulic power pack that would serve as the system control center.

In 2013, GEONEX made its first commercially available complete system, which is still offered today, the HZR400 and PP90 power pack. Today, GEONEX offerings include four different sized machines, two diesel power packs, and one electric power

pack, allowing clients to run a range of 5.5-in. diameter holes up to 48-in. diameter casings in recorded lengths exceeding 350 lf. Today, GEONEX has 70 machines operating in 11 different countries, with 14 units operating in North America.

The company began operating in the North American market in 2017, and now has a full-time presence led by North American Operations Manager Rich Revolinsky, an industry veteran with nearly two decades of experience. GEONEX's new base in the U.S. provides customers with a direct line to inventory, rental equipment, sales and support.

"While there are a variety of unique features incorporated into the GEONEX system, what stands out is the result," Revolinsky says. "GEONEX equipment can bore small diameter casings through high strength solid rock and cobbles at rates of 7 to 20 ft per hour using the HHB approach. It allows for small diameters to be installed and avoids manned entry. This method also mitigates deviation from the desired path.

"Use of down-the-hole hammer components for horizontal boring is not in itself completely unique and has been used successfully within the trenchless industry. However, the hhb method utilizes specific design features of the

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GEONEX drill machines and modified pneumatic hammering equipment to be successful in horizontal applications. For GEONEX, this includes the use of the central control unit of the hydraulic power pack which helps adapt to jobsite requirements and decrease set-up time for launch pits. The method can and has been utilized in the HDD industry for installing washover casings."

## How it Works

GEONEX equipment is designed to utilize the HHB method. A pneumatic hammer is placed within the lead casting. The hammer actuates a center bit and peripheral bit to pulverize materials linearly instead of using rotational cutting. Release of compressed air through the center bit with each stroke of the hammer blows the subgrade back through small openings where it can be conveyed back to the launch pit by an auger string where the drill machine is located. The method does not use pipe

jacking, but instead the head unit pulls the lead section of welded pipe string into place as it advances to create a straight, although unsteered, path.

This method allows contractors to break up cobbles and rock efficiently and to small sizes which avoids jamming the auger. Additionally, the linear action of the cutting head ensures that the material along the bore path is broken down, and not displaced.

For most applications the recommended installation lengths are up to 350 lf, ranging from 5.5-in. diameter up to 48-in. diameter. Ground conditions can vary as the equipment utilizes the same cutting head regardless of the conditions. While designed and intended for solid rock and cobbles, installations including sand, clay, gravel and mixtures thereof are common.

Most projects entail pressurized systems of water and gas, however electrical and telecommunication installations are becoming more com-

mon. Gravity systems with slopes of 1% or greater can also be installed.

## Case Histories

While the GEONEX HHB system is relatively new in North America, contractors have been using the method with positive results. Here are a few of the recent highlights:

- Fraser, CO – 120 ft of 24-in. casing installed at 0.9% slope through granite cobbles in 12 hours continuous installation under passenger and cargo rail lines. Cobbles excavated during launch pit preparation were round, and some exceeding 20-in. in diameter. The DTH method was selected by B-Trenchless as the best solution for the project to maintain a small casing diameter despite the large cobbles.
- Lenexa, KS – 42-in. casing was installed through 380 lf of limestone.

The project started with traditional auger boring but after initially boring 80 ft, the trajectory was deemed unacceptable. The Tunneling Company was hired by the boring contractor and used its GEONEX HZR1200 to complete the project.

- Marathon City, WI – EBI Drilling of Duluth, MN, was brought in to install twin 320-lf casings of 16-in. diameter through the rocky subgrade. Initially intended to be performed with their HZR400 drill machine, EBI decided to use their HZR610 and completed each bore in three days.

- Scandia, MN – Minger Construction of Jordan, MN, took maiden voyage of their recently purchased HZR1200 to install 240 ft of 36-in. diameter casing below Hwy 95 for a new culvert. Uncertain of when they would encounter rock that was

visibly present on the downstream side, the bore encountered various soil conditions including about 100 ft of wet clay before hitting the boulders. The bore was completed with invert elevation on target.

- Jackson, MI – Dunnigan Brothers Construction launched a 24-in. casing with traditional auger boring for the 120-ft bore only to discover the presence of large cobbles. Well versed in the area and well prepared, Dunnigan had anticipated the cobbles before boring and had GEONEX on standby. Due to launch pit limitation, the shortening section of the GEONEX HZR610 was removed to allow for a compact frame, fitting in the 20-ft long pit. 10-ft casing lengths were installed to successfully complete the bore in about three days, allowing the water main project to move forward toward completion.

- Winter Park, CO – NewTech Construction used the GEONEX system including an HZR610 drill machine to install 300 lf of 24-in. for HDD washover casing. The project highlighted the advantages of using HHB in order to pass through a 50-ft layer of cobbles at a 12 degree entry angle below a sensitive wetland and embed the end of the casing into solid bedrock. This allowed NewTech Construction to complete the 2,200 lf HDD installation successfully and maintain the tight project schedule.

With a track record spanning more than 30 years, the down-the-hole horizontal hammer boring method has demonstrated an ability to effectively construct small-diameter bores in rock and other challenging conditions.

Jim Rush is the Managing Editor of *Utility Contractor Magazine*.

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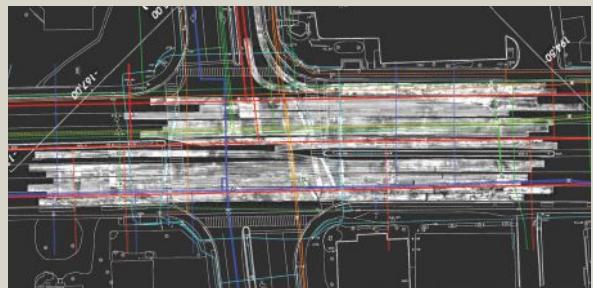
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# SUE and Project Planning

***Knowing What's Below Key to Avoiding Delays, Catastrophes***

By Mike Kezdi

**I**n the underground infrastructure construction world, a good proverb to adhere to is, “An ounce of prevention is worth a pound of cure.”

In this world that ounce of prevention comes in the form of subsurface utility engineering (SUE), a branch of civil engineering practice dedicated to managing the risks of underground utilities. It goes beyond designating and locating utilities and includes the review of utility data and managing the data in the form of maps and other digital models. It is a key component in the design phase of projects.

While some form of SUE has been a component on construction projects for decades, the formalized practice of SUE didn’t

start gaining traction until 2002. That’s when the American Society of Civil Engineers (ASCE) released ASCE 38-02 Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data.

As stated in the original abstract, “Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data presents a credible system for classifying the quality of utility location information that is placed in design plans...Whether used as a reference or as part of a specification, the standard will assist engineers, project and utility owners, and contractors in developing strategies to reduce risk by improving the reliability of information on existing subsurface utilities in a defined manner.”

With the explosive growth of the industry since the release of ASCE 38-02, it was updated and renamed in 2022 as ASCE 38-22 Standard Guideline for Investigating and Documenting Existing Utilities. The update also bred a companion standard ASCE 75-22 Standard Guideline for Recording and Exchanging Utility Infrastructure Data. The former focuses on the utilities already underground and the latter establishes criteria for the new utilities going in the ground.

## The Road to SUE

James Anspach, P.G. (ret.), Dist.M.ASCE, chaired both the writing of ASCE 38-02 and its recent update and is one of the people who has stood at the forefront of the SUE industry, and is often heralded as the father of the industry. While Anspach doesn't shy away from this title, he is fast to point out that he was not alone in this endeavor.

Anspach's journey and the roots of SUE can be traced to 1978 and his work at Heath Consultants. That's where the recent Penn State grad - with a degree in geology, geophysics and geochemistry – got his start. Heath Consultants specializes in pipeline leak detection and corrosion management and hired Anspach as a traveling consultant.

"If you want to find a leak in a pipe, you have to first know where that pipe is. In those days, knowing where the pipe is, was called witching because it was witchcraft," Anspach recalls. "I was the only geologist on staff, and I was able to say that it's not witchcraft. It is an inexact science, but it's actually an application of near surface geophysics tools to sense the presence of a pipe or linear structure in the ground."

From Heath, he went to work for Garon Stutzman, at So-Deep Inc., which used geophysical methods and air vacuum systems to measure and locate exactly where utilities were located. Anspach, intrigued by this new endeavor and new use of technologies, joined So Deep where he looked after the company's work locating underground utilities using geophysical methods. It was during his time at So-Deep that Anspach and his colleagues honed what would become SUE and ASCE 38-02.

Anspach recalls that in 1990 he could count on his hands the number of firms doing this work, in the early 2000s that number blossomed to about 100 thanks in part to an effort by Paul Scott at the Federal Highway Administration (FHWA) that resulted in departments of transportation adopting a SUE approach to projects in their rights of way. By 2010 Anspach checked and stopped counting at about 500.

"The real touch points of the development of the profession were developing that concept of designating, locating and data management and then adding in the utility coordination," Anspach says. "Beyond that it was the development of ASCE 38-02 and then the development of the Utility Engineering & Surveying Institute (UESI) at ASCE. These are the lynch pins of getting utility engineering accepted as a valid field of civil engineering. There were little steps along the way that helped, but these were the big ones."

## Establishing a New Engineering Practice

With the establishment of UESI in 2015, utility engineering became a recognized branch of civil engineering that focused on the cradle-to-the-grave lifecycle of underground infrastructure systems. Utility engineering, according to UESI, includes the planning, position, design, construction, operation, maintenance, and asset management of any and all utility systems, as well as the interaction between utility infrastructure and other civil infrastructure.

"I can't put a number on it, but the industry has grown substantially in the last decade. It has become a well-defined industry and a service many engineering firms now provide," says Matthew Wolf, president, Impulse Radar USA Inc. "We sell GPR equipment to that industry and it's been a big part of our growth in the last 10 years."

One of those department of transportation employees who was an early adopter of SUE practices is John Campbell, P.E., M.ASCE. He currently works as the Texas branch manager for T2 Utility Engineers, arguably the largest SUE provider in North America, but before that, Campbell spent 27 years with the Texas Department of Transportation (TxDOT) as a utility engineer, director of its right of way (ROW)engineering department and then as director of the TxDOT Right of Way Division.

"My responsibilities [as director of ROW engineering] at that time were for the existing utilities on TxDOT's 1.2 million acres of right of way property. I immediately had this concern, coming from my management background, that if I am responsible for these existing assets, I've got to have some mechanism to inventory them and know where they are," says Campbell. "That really started a personal pursuit to figure out how we could better identify where existing utilities are."

While Campbell was interested in this from a DOT standpoint, Lawrence Arcand, P.Eng., M.ASCE, was tasked with helping the industry grow in Canada. In 2003, Arcand joined the new joint venture of U.S.-based Tampa Bay Engineering and Canada-based Totten Sims Hubicki to help drum up SUE work in Canada. Known as TSH/TBE JV, it completed the first SUE project in Canada in 2002. The company would eventually grow to become T2 Utility Engineers.

"It was brand new. There was a lot of, 'Oh, we don't need to do that. We don't need SUE. We do it this way.' It was many, many years of hearing the reasons why they didn't need SUE," recalls Arcand, who worked at the JV and T2 into 2020. He left the company and started 4Sight Utility Engineers in Ontario.

"It's grown by leaps and bounds here in Canada. It went from 20 years ago not a single sole had even heard of it, to now in Ontario it's commonplace to list SUE and the ASCE 38 standard in all major civil RFPs," he says. "It's becoming more common in other parts of Canada, particularly Alberta and BC. There are now way more people who provide the service. It's a bigger pond with more fish."

## SUE and Trenchless Technologies

As an industry, SUE has its use on any project – public or private – that breaks the ground from residential developments to new building construction and major road work to the installation of underground utilities using open cut and trenchless. It's the latter where the benefits of SUE shine.

All on the panel agree that it is of the utmost importance to know – to the best of your ability – what is beneath the surface especially when using trenchless installation methods that can go thousands of feet before seeing the light of day.

"On trenchless, SUE becomes extra important because there is no opportunity to identify anything else," says Arcand. "With shallow trenchless HDD, microtunnelling and the like, you're boring right beside existing water, sewer and electrical. If you don't know where that is, that becomes a pretty scary endeavor."

So the question then becomes, at what point does an owner or contractor decide that a SUE approach is needed on their trenchless project?

According to Wolf, it comes down to what level of risk the owner and/or contractor are willing to assume. It's not a damage prevention tool, so much as it is a smart design tool, Wolf notes.

"I would argue that a SUE approach should be used on every project. The decision must be based on the information that you have," he says. Adding that maybe in a rural setting - where utility congestion is at a minimum - a Quality Level D approach will be sufficient. "The records might indicate there is one facility in that corridor. So, you might take a Quality Level B approach there to verify using GPR or electromagnetic (EM) systems. But do you need a stamped engineers drawing for that? Probably not."

It's the assignment of the Quality Levels D to A to each segment of the underground utilities, and the stamped record by a certified engineer that are the hallmarks of the practice.

"It's the product that makes SUE different from a Call 811 product. The product you get from 811 is the response, and maybe their deliverable is paint on the ground, so you now have some indication on the ground of some utility location that is within a wide area," says Campbell. "Our deliverable, when you perform a comprehensive utility investigation, is the attempt to depict, document and preserve that information for later use by your client. Our product will be signed and sealed by a professional to effectively transfer that risk of the unknown of the subsurface over to the investigator. We're a professionally licensed engineering company, so we can put an engineer's seal on the deliverable, and the deliverable is in accordance with the ASCE 38 standard."

Arcand adds, "In my mind, SUE is one level of protection. If a contractor is going out to build something and they don't have accurate drawing that shows where the underground utilities are, they've already failed."



He notes that the role of a locator called out on a One Call ticket should be the last level of protection as opposed to the first and only level of protection on a project. "It should be that you have an accurate drawing of what's there. That way, the designers can design the projects safely. Either not as close to existing infrastructure or with the necessary protection schemes in place if it is close. Then the role of the locator is to mark those points out," he says.

## ASCE 75 – The Road Ahead

With an established standard in place, it is ASCE 75 that foreshadows what is to come for the field of SUE as it is quite literally the roadmap to mapping and document the new infrastructure going in.

"The industry will always struggle until we get better utility as-built record information. There never existed any standard, in the United States, by which to record as-built information," says Campbell. "That's what ASCE 75 sets out to do. It was written with the understanding and expectation that the evolution in technology is such that we need to be thinking in terms of how the information we collect will contribute to a future world of 3-Dimensional design and modeling of utility infrastructure."

The standard, which draws from and expands on the Canadian CSAS250 standard, specifies essential elements for documenting the location, geometry and feature attributes of underground and aboveground utility infrastructure, with a particular focus on enabling creation of 3D digital twins for newly installed and/or exposed utility infrastructure.

"ASCE 75 is really what points us towards the future as the essential element that will contribute the most. Because ASCE 75 offers that structure of the minimal attributes that need to be captured at installation. Here are the suggested processes and procedures for doing that capture. And here is the structure that the data should be in so that it can be transferable," says Campbell. "That to me is the most important part of it. ASCE 75 is looking to inform future investigations by incorporating that precision in the vertical dimension and gathering the data at installation."

Arcand and Campbell both joked that if every project used SUE, eventually there would be no need for people in the SUE field. Though they – along with Anspach and Wolf – realize that there is much work to be done going forward.

"There are still people who don't get it and can't accept that when you run this process that there is a financial windfall downstream, but you must pay upfront to get it," says Wolf. "The decision makers who don't have the foresight and don't understand that an upfront cost can save a lot of dollars downstream – that's the only thing slowing growth. The data is in, it makes zero sense not to use a SUE process to head-off problems."

That's where the panel agrees that associations and sanctioning bodies play a critical role, as a place where all stakeholders in the process can gather in a common discussion area to get this education. A few of the organizations helping educate and inform are UESI and FHWA, the American Association of State Highway and Transportation Officials (AASHTO), Buried Asset Management Institute-International (BAMI-I), Common Ground Alliance (CGA), National Utility Contractors Association (NUCA), the North America Society for Trenchless Technology (NASTT) and the Subsurface Utility Engineering

(SUE) Association. Just as important are university-based activities like those taking place at Iowa State University, where Anspach is now teaching a graduate class, developing further classes, and conducting further research and outreach.

"I think the future is in getting our younger neophyte engineers and constructors to understand the issues of utilities and give them a toolbox to work through those issues," says Anspach. "That toolbox will be a big toolbox. It's not just going to be contract locating for damage prevention and SUE for planning and design. It's going to be a host of technologies that are digital, in the cloud and instant."

With an established and updated standard, a new standard and a recognized field of practice via UESI, SUE is poised for continued growth and acceptance across North America and – in some form – across the globe.

"The common problem that we have is there are a whole bunch of utilities in the ground that are in the way of a whole bunch of new infrastructure projects, and they can create health, welfare and safety issues to the public," says Anspach. "It's not rocket science what we're doing. It's common sense."

Mike Kezdi is the managing editor of *Trenchless Technology*, a sister publication to *Utility Contractor*.

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# 2024 Opens With Second Session & Elections Ahead

January marked the opening of the second session of the 118th Congress, and what is sure to be a busy sprint to begin our 2024 advocacy agenda. This year, amid a host of other issues, NUCA will be focusing on defending and strengthening federal investment in water and other underground infrastructure, fighting for sensible permitting reforms and damage prevention legislation, working with Congress to advance critical workforce development legislation, and as always pursuing a pro-infrastructure and pro-business agenda.

NUCA continues to actively fight to preserve and increase funding for critical water infrastructure programs, such as the two EPA State Revolving Funds we depend on for federal water and wastewater project resources. Over the course of the FY2024 appropriations process, our association has been a consistent voice for maintaining federal support for these successful programs.

At press time, Congress has still yet to pass most of the FY2024 appropriations bills, but an agreement on topline spending numbers between House Republican leadership and Democrats seems to be holding – paving the way for a flat spending on water infrastructure between 2023 and 2024. While our infrastructure desperately needs a funding increase in this Congress – especially with federal demands to accelerate lead service line replacement and other regulatory burdens – avoiding a proposed large cut is a massive victory. And it is worth noting that in the House Interior-Environment appropriations bill that contained the \$2 billion in program cuts, NUCA helped push through three successful but only sym-

bolic amendments that recognized the House's proposed cuts to water funding were not sustainable.

Congressional leadership is likely to stave off a government shutdown with yet another Continuing Resolution – this time moving the deadlines to March 1 and March 8 – and all but guaranteeing some degree of overlap between FY2024 and FY2025 appropriations work. Should Congress fail to pass all FY2024 appropriations bills by April 30, it will trigger automatic spending cuts under the terms of the Fiscal Responsibility Act of 2023. NUCA will be active early in the FY2025 appropriations process to stress the importance of robust funding for water and other underground infrastructure.

As the 118th Congress second session gets underway, other critical deadlines and legislation loom ahead. Pipeline Safety and Hazardous Materials Administration (PHMSA) re-authorization under the PIPES Act (H.R. 6494) and its associated NUCA-supported damage prevention language still lags far behind its previous expiration date of Sept. 30, 2023. This critical piece of



legislation, if passed in its current form, will support our advocacy efforts to improve dig law in the states, and is a major priority for NUCA National in early 2024.

Meanwhile, the Senate must act on its version of FAA airport reauthorization (S. 1939) to meet the next authorization deadline set for March 8. The FAA bill has significant funding in the House version for airport construction, open-



Photo: "Architect of the Capitol"

ing more utility work at airports. The Senate bill must first pass out of committee before the full Senate can vote on it, and then face a conference committee to resolve differences. Congress will need to move swiftly to address these key issues before election 2024 begins to pull them away later this spring.

NUCA is also looking ahead this session to major workforce development legislation, including the Workforce In-

novation and Opportunity Act (WIOA), various bills pertaining to the expansion of Pell Grant eligibility to short-term vocational training programs, and the potential reauthorization of the billion-dollar Carl D. Perkins Career and Technical Education Act to support our nation's trade schools. However, at the same time, with our coalition allies, we will continue to push back against harmful regulatory overreach from the Biden Administration's U.S. Dept. of Labor and associated agencies, including the OSHA walkaround rule, changes to the independent contractor rule, and project-labor agreement mandates.

In 2024, our association will continue to be a resource for Congress and the Administration as they work to implement historic funding provided by the 2021 Bipartisan Infrastructure Law and other recent legislation. As a part of that legislation's implementation, NUCA has worked with the White House and agencies to gather and submit information on the state of the supply chain to ensure that materials contractors need for projects continue to be available, and that manufacturers, importers, and distributors have the clarity they need to comply with Build America, Buy America Act (BABAA) and other domestic preference requirements for federal infrastructure projects. Thanks in part to comments from NUCA and work by our members, agencies have begun issuing key guidance that follows our recommendations providing all parties with some of the clarity and flexibility they need. Supply chain will remain a key focus for us this year as more of the federal infrastructure dollars translate into projects, including vast sums of broadband funding from the \$42.5B Broadband Equity, Access, and Deployment (BEAD) program.

NUCA National has also made it a priority this year to better support our member advocacy at the state and local level. Last year, we officially formed the State and Local Government Affairs Committee to provide a forum for discussion and coordination for issues affecting NUCA chapters and members away from Capitol Hill, and to help chapters strengthen and grow their own advocacy programs. If you have an issue that is affecting you at the state level, please do not hesitate to ask your chapter and see how National can help!

Last, but not least, it is impossible to talk about 2024 without mentioning the upcoming November elections. NUCA is focusing closely on the race for Congress, with NUCA-PAC, the utility construction industry's political action committee, closely evaluating pro-construction, pro-business, and pro-infrastructure candidates to possibly support. The outcome of the Congressional elections will directly shape our association's agenda for the 119th Congress (2025-26) and together with our members we will work to elect a Congress that will build on the success of the past few years.

In the meantime, as we look ahead to the campaign season, our best odds for legislative success will be in the first half of 2024 – before Congress largely pivots to the campaign trail shortly after our Washington Summit.

The May 22-24 Washington Summit will be the best opportunity we have to directly influence lawmakers before the campaign season takes off in summer 2024. Registration is now open at [www.wedigamerica.org](http://www.wedigamerica.org), and we hope to see you in Washington, D.C., this spring!

**Zack Perconti** is the Vice President of NUCA Government Affairs.

# Don't Gamble With Trench Safety

by NUCA Staff

Our industry is making progress, but employees are still being fatally injured by trench cave-ins. The number one 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 due to the highest number of trench related fatalities in 2022 in more than two decades.

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-feet (4-feet 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. Employees' 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 gamble at best: one roll of the dice could cost a worker's life.

There have been too many cave-ins that have taken the lives or seriously injured employees each year over the last few. The only way this is going to stop is if contractors, municipalities, and other employers whose employees must enter a trench provide and insist on the use of shoring, shields, or sloping before employees enter a trench.

As leaders in underground construction, NUCA members must recognize the importance of protecting employees in the trenches. Protective systems are readily available all over the country, including through NUCA's national partners. They are available for purchase or rental, and OSHA knows it. Trench



related fatalities are almost completely preventable. However, somehow these warnings are still ignored.

Manufacturers of trench shoring and shields have stepped-up and engineered protective systems to handle even the toughest trenching operations. The equipment is light weight, 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 the situation is not one your company faces often, you can easily rent the solution required. If you need help figuring out what's required for any given situation, there are many NUCA National and Chapter members throughout the country who can easily assist you in locating precisely what you need.

Statistics show that employees are killed more often on job-sites where there is no competent person, 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 \$156,259 per violation as of 2023. More importantly when a hazardous situation exists, like an unprotected trench, employees are in danger and could be buried alive.

Don't just train the competent person(s), train employees too. Many NUCA members are not only sending their Competent Persons to NUCA's Excavation Safety and Competent Person (CP) training, but they are also sending all their employees. Why? Because they are supposed to provide trench safety training for employees too and they realize the benefits of employees knowing what the competent person knows. While the average laborer or pipelayer may not need as much training as a CP, employers know that if an employee completes a NUCA course, they will walk away with a solid understanding of what OSHA requires employers to do, as well as what a CP's responsibilities are, in addition to the potential hazards and how to protect themselves and their co-employees. Effective training will ensure everyone will be on the same page.

From June 17 to June 23, 2024, NUCA will be holding its 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 employees 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 employees and to save lives.

OSHA will likely continue their high focus on excavations this year and into the future, so long as the numbers of fatalities remain as high as they are. That means they will continue to show up at any trench or excavation job site at any time. 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 employees should have to put their lives on the line by entering an unprotected trench. Let's continue to take the lead and protect employees. 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 employees. Let's continue to Dig America Safely.

For more information on NUCA's 2024 Trench Safety Stand Down, go to [www.nuca.com/tssd](http://www.nuca.com/tssd).

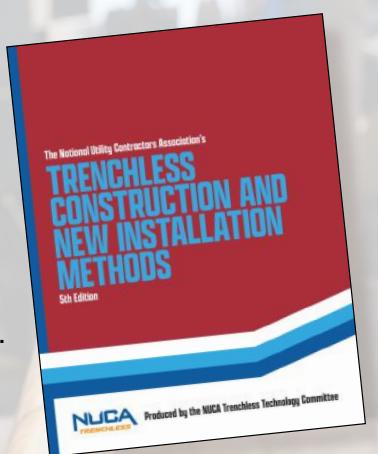
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# SafetyWORKS



## 2023 NUCA Safety Award Overall Winner:

### 2023 NUCA SAFETY AWARD 100,001 TO 200,000 MANHOURS: J.F. WILKERSON CONTRACTING CO., INC.

By

Robert Baylor, NUCA Director of Communications

**SafetyWORKS** is a regular column highlighting NUCA's William H. Feather Safety Awards winners. If you would like to be considered for these prestigious NUCA awards in the future, please visit [nuca.com/safety-awards](https://nuca.com/safety-awards) for details.

Motivating employees at this North Carolina contractor to think about safety starts with their company's safety motto: "Safety is Everyone's Responsibility!"

J.F. Wilkerson Contracting Co., headquartered in Morrisville, has always sought to provide a safe and secure workplace for their employees. The company has been in business since 1968 and has a reputation for delivering quality work on time and on budget. One of the key factors that contributes to the company's success is its commitment to safety.

Safety is a core value and a top priority for the company. The company's mission includes the goal of "providing a safe and healthy work environment for all employees, subcontractors, and the public."

"Safety begins with the new hire training, graduates to daily and weekly Toolbox topic trainings, and culminates with a 'Safety Day' event for all employees and subcontractors that is held yearly," said Michael Coates, the company's full-time safety director.

Their strong focus on safety earned them the William H. Feather Safety Award for 100,001 to 200,000 manhours. But that's not the first time the company

has been recognized for providing their employees and management a safe construction jobsite environment. This enduring safety program starts at the top, and their NUCA membership complements company leadership's decades-long emphasis on jobsite safety. The company's safety committee, composed of representatives from different departments and levels, meets regularly to review and improve the safety program, and to recognize and reward outstanding safety performance.

Safety at J.F. Wilkerson starts with their new-hire orientation training, which includes video and materials from NUCA. The company uses NUCA's extensive library of toolbox talks (all of which can be found online at [nuca.com/toolboxtalks](https://nuca.com/toolboxtalks)). Beginning in 2022, the company is using digital safety topics to enhance their online learning opportunities for employees.

Safety is found across the company. Daily and weekly safety meetings are facilitated by company foremen, with safety reports given at the weekly management meetings. Company "Safety Days" are all-day safety events held periodically. Subcontractors are invited and encouraged to attend all company safety events and training opportunities. In 2022, a new and revised company "Safety Award Program" was created that has a monetary award, but also penalties for safety



## Highlights of J.F. Wilkerson Safety Approach:

- To **PROVIDE** a safe working environment
- To **LIVE** by our motto, "Safety is Everyone's Responsibility"
- To **PROVIDE SAFETY** equipment, supplies, training, enforcement
- To **AWARD** safe work practices, innovation, ideas, participation
- To see **RESULTS** of a Safety First environment
- To **RESPOND** to safety equipment and resource requests asap
- To meet or **EXCEED OSHA** and company safety standards

violations, keeping employees more alert for safety every minute on the job.

All of this emphasis on safety paid off in 2022. There were zero injuries recorded on OSHA Form 300A and zero fatalities, from 115,414 man-hours worked by employees. J.F. Wilkerson has also achieved similar outstanding results for employee safety in 2021 and 2023. That is a tremendous safety record that the company can be proud of!

J.F. Wilkerson has been deeply involved with NUCA for decades. The company's president Joe Wilkerson was a founding member of NUCA of the

Carolinas chapter, with his son Brian a recent past president of the chapter. The company sponsors safety events for the Chapter, sharing their experience with other member contractors. Safety Director Coates is also active with the NUCA Safety Committee.

In 2022, the company included their subcontractors in every safety training event held by the company. OSHA 10-hour classes were held for their own employees and outside contractors and their workers. 45 company employees have attended a NUCA safety training program. Safety director Coates also teaches safety

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classes for the employees, and his courses include expert outside instructors.

J.F. Wilkerson is known in the Raleigh, NC, area as one of the premier utility contractors, and also one that places a high priority on employee safety and safety training.

J.F. Wilkerson has achieved the NUCA-STAR Gold level, and is currently working toward the Platinum level.

The company won NUCA Safety Awards in 1990, 2004, 2014, 2015, and again in 2022. These awards demonstrate J.F. Wilkerson's excellence and leadership in safety, and its dedication to protecting its most valuable asset: its people!



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With an operating capacity of 1,000 pounds and a super compact profile that can easily maneuver through yard gates, tree groves and other tight areas, the new TL100 mini track loader gives contractors a powerful, cost-effective option for upleveling productivity on small jobs. The 24-horsepower machine also features a 14-pin electrical connector and a Common Industry Interface for maximum attachment flexibility and performance. With over 40 attachment options available, the TL100 can handle the work of multiple laborers on jobs like digging, earth moving, setting fence posts, grappling brush and grading.

Additionally, CASE is releasing six new small articulated loaders to help contractors of all sizes meet their toughest challenges on tight jobsites. With power ranges from 24 to 74 horsepower, operating capacity from 1,500 to more than 3,000 pounds, options for diesel or fully electric, and a full range of more than 110 powerful attachments, CASE small articulated loaders are some of the most versatile machines on the market.

CASE is also launching the all-electric SL22EV that delivers the same power as its diesel counterparts and can be charged in 1 hour.

## Cat Introduces 255 and 265 Compact Track Loaders

[cat.com](http://cat.com)

Building on D3 series compact track loader success, the all-new, next generation Cat 255 and 265 Compact Track Loaders are a ground-up redesign of the previous series, improving on the features that made the previous models so popular. The first next generation models in the compact track loader line, the 255 and 265 elevate Caterpillar's loader reputation through improved engine performance, lift and tilt performance, stability, operator comfort and technology.

The new 255 and 265 loaders are powered by Cat C2.8T and Cat C2.8TA engines respectively, which offer 74.3 hp (55.4 kW). The new engines maintain horsepower across a wider RPM range and boast significant torque increases – gains of 13% for the 255 and 43% for the 265 – for improved working performance. A redesigned engine compartment mounts the engine and cooling package lower into the frame for improved stability, giving the operator confidence in handling heavy loads and throughout all aspects of the work cycles. The new 255 loader delivers class-leading lift height.

## Vermeer VX75 Vacuum Excavator

[vermeer.com](http://vermeer.com)



Vermeer has introduced the first model of its next generation of new trailer vacuum excavators, the Vermeer VX75. It is the most powerful Vermeer vacuum excavator in the 75-hp class, equipped with a 1,500-cfm vacuum blower capable of generating 15 in. Hg of suction force. It is available with a 5-in. hydraulic boom option for standard units and a 4-in. hydraulic boom option for air and jetter versions. It is designed for challenging utility work, including potholing, HDD slurry management, and microtrenching dust containment.

The control panel and full-function remote control allow operators to start and stop the machine and control everything from the boom to the water system and spoil tank. This feature is especially useful for contractors using the excavator for slurry management, as they no longer have to manually restart the unit when draining a pit, potentially saving time and fuel.

Powered by a 74.3-hp (56-kW) Kubota diesel engine, the VX75 can be equipped with either a 500-gal spoil tank with two 125-gal freshwater tanks or an 800-gal spoil tank with two 205-gal freshwater tanks.

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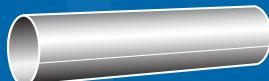
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