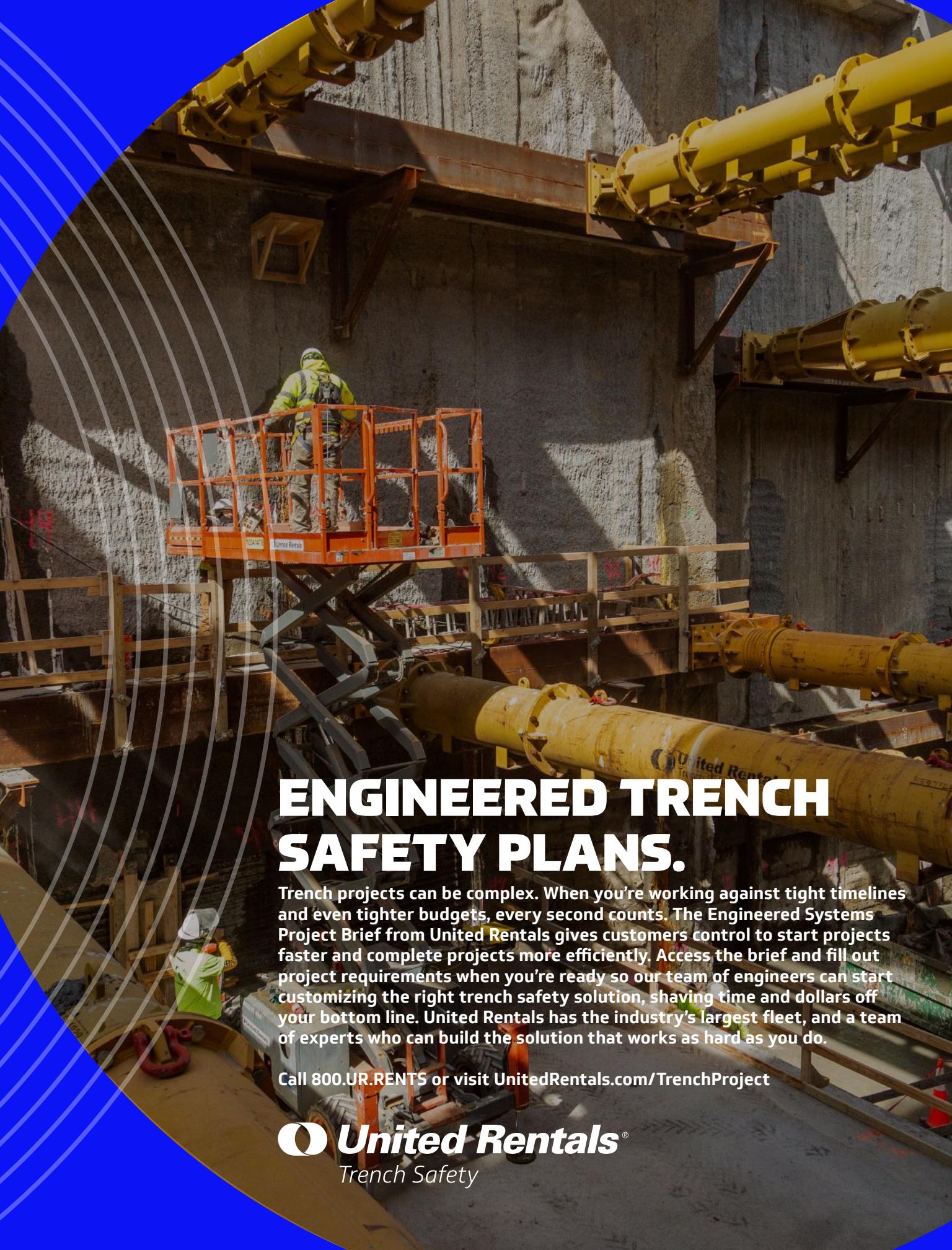


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On The Cover:

Helena Sand and Gravel of Helena, Montana, held their TSSD 2023 event complete with demonstration trenches and safety equipment. TSSD, sponsored by NUCA Gold National Partner United Rentals, Bronze National Partner Sunstate Equipment Co., and NUCA's Safety Ambassadors Club, showed NUCA members' commitment to safety.

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NUCA

Chairman's Message



Fall Washington Summit: Virtually Make It Yours

Fall 2023 is here. The summer building season ended, and our fall production schedules now take on daily importance.

The same can be said for NUCA's advocacy work in Congress, performed by your association on your company's behalf. And much like your own company's success, it will require some of your valuable time working as a NUCA member.

Thankfully, we've designed "Making NUCA Yours" to be as time-effective as possible with our virtual fall 2023 Washington Summit, scheduled for November 8th.

During the pandemic, NUCA arranged for three of our Washington Summits to take place virtually, and the programs worked nicely for everyone, including Congressional lawmakers and their staff. Congress discovered these virtual experiences work very well for their hectic daily schedule for the same reasons a busy contractor does: convenience and efficiency.

It is vitally important we stay engaged with Congress. This industry depends on lawmakers to allocate taxpayer money for our project resources. As we have seen in the fiscal year 2024 appropriations fight, our billions in additional State Revolving Fund resources are not assured.

So, what's involved with this fall's virtual Washington Summit? Just like our past 2020 and 2021, your Chapter will arrange the virtual meeting coordination and time of the meetings. We need every NUCA member executive to set aside on Summit Day about 15 minutes per meeting to participate.

Our virtual Summits are a terrific opportunity for you to get involved for the first time in the NUCA advocacy program. It doesn't require travel, and since you are part of a larger meeting, you'll reduce any jitters you might have about talking to lawmakers or staff about important industry issues.

And for those NUCA members who are veterans of multiple Summit meetings, these virtual events are a great way to help train your Chapter's rookies about what these meetings convey to your federal lawmakers. They also demonstrate how incredibly useful these legislative connections can be to a utility contractor's business success.

These virtual Summits are a fantastic way to stay comfortably involved with a minimum of time commitment. They can be conducted in your office or even on a job site using your mobile phone. They demonstrate to our U.S. Representative, Senators, and their senior staffs that our infrastructure issues are profoundly important to their communities. And it shows them NUCA's membership stays focused and engaged on these issues every day.

I've been going to Washington Summits since 2011. Each one has made me more prepared for the next one, and I know members who have participated in NUCA's in-person and virtual Summits for the past several years are mastering the art of Summit meetings. Practice makes perfect.

Let's make this coming virtual Washington Summit the next big step forward in making NUCA's Congressional advocacy efforts yours, too. You'll discover as I did that our Summit experiences are an extremely rewarding and memorable part of your NUCA membership.

Sincerely yours,
Thomas P. Butler
NUCA Chairman of the Board / Petticoat-Schmitt Civil Contractors, Inc.

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Vermeer Corp. Celebrating 75 Years

Built on Founder Gary Vermeer's legacy of finding a better way, for Vermeer Corp. the last 75 years have centered around impacting people and the world for the better.

As the company looks to the future, third-generation family member, president and CEO Jason Andringa says the next 75 years will continue to aim for the same purpose.

"What started as a small machine shop to meet the needs of local farmers in and around our hometown of Pella, Iowa, soon became the ground floor for my grandfather (Gary) to open Vermeer Manufacturing in 1948," said Andringa. "With the guiding principle of treating other people how you'd want to be treated yourself, we've created a culture over the last 75 years of making a real impact on the way work gets done that continues to drive our company forward. Ultimately, it's a commitment that is part of every interaction we have among ourselves, suppliers, dealers, customers and the communities we live and work in."

Today, Vermeer Corp. has expanded from its modest beginnings to an organization of more than 4,000 team members worldwide, recently having been recognized by Forbes magazine as one of America's Best Midsize Employers.

Operating eight facilities on six continents and offering service and support in more than 60 countries, the iconic yellow iron



equipment is distributed through a global network of more than 600 industrial and forage dealers.

From Gary Vermeer's first invention of the wagon hoist followed more innovative equipment. With the invention of the hydraulic horizontal directional drill, large round baler and stump cutter — Vermeer Corp. has shown its commitment to developing high-quality equipment that addresses the challenges its customers face.

"As we look to the future, we are committed to carrying on the legacy of innovation and continuous improvement to make a lasting impact around the world," Andringa explained. "We understand the important work our customers and equipment are doing, and we support them, wherever they are. Together, we are equipped to do more."



In Memoriam –Juan A. Gutierrez

Gutierrez

Juan A. Gutierrez, chairman of JAG Companies Inc., passed away on July 30, 2023.

Born in Camaguey, Cuba in 1948, he migrated to the United States as a child. Gutierrez attended Newark College of Engineering.

After three years of working for the City of Paterson and seven years with Cruz Construction Co., in 1978 he founded his own civil construction company, performing work in sewer and water pipelines throughout New Jersey.

Over the years, the company expanded its capabilities and geographic reach and acquired additional construction companies. Gutierrez was the chairman of JAG Companies, Inc., whose entities include Northeast Remesco Construction and Caldwell Marine International, both based in Wall Township, New Jersey and Huxted Trenchless based in Texas.

The companies perform a variety of civil construction work including pipelines, tunnels, directional drills, bridges, highways, treatment plants, rail stations and specializing in the installation of submarine cables. These companies presently work throughout North America and the Caribbean.

Gutierrez has served as past president and executive board member of the Utility and Transportation Contractors Association of New Jersey; former regional vice president of the National Utility Contractors Association (NUCA); executive committee member of the General Contractors of New York; and as a member of The Moles. He also previously served as vice chairman of the Cuban American National Foundation and board member.

Together, Juan and Marta Gutierrez raised a family of four sons and one daughter. The family has grown with the addition of eight grandchildren and several grandnieces and nephews.

Services for Gutierrez were held Aug. 2 at St. Mary's in Colts Neck, New Jersey and Aug. 4 at St. Agnes in Key Biscayne, Florida.

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Cat Celebrates 50,000th Wheel Excavator

In 1984, Caterpillar, Eder and Zeppelin Baumaschinen, the Cat dealer in Germany, introduced a new wheeled excavator line, offering four models under the Cat Eder brand. Eight years later, the line became a 100% Cat product with a designated wheel excavator team. Twenty-eight years later, in 2012, Caterpillar celebrated production of its 25,000th wheel excavator. This year, Caterpillar announces production of its 50,000th wheel excavator, a Cat M318 Next Gen model, adding another 25,000 units to the total in just 11 years.

Europe and South Korea were among the first adopters of this new solution. However, the combination of speed, power, versatility and ability to operate a wide range of hydraulic tools has the Cat Wheel Excavator line growing in popularity in China, Southeast Asia, the Middle East, North America and other world markets. Starting with only four models, today's expanded Cat wheel excavator line includes eight models – Cat M314 to M322 – for markets with higher emissions regulations, one model – M315 GC – for China, three models – M315 to M320D2 – for those adhering to lower emissions standards, the M323F railroad-specific model,

and four materials handlers from the MH3022 to MH3040.

Commenting on the significance of Caterpillar's 50,000th wheel excavator milestone, Brian Abbott, vice president of product management for the Excavation division said, "Offering quick movement on the job site and from site to site without damaging the ground, the wheel excavator proved to be a game changer for contractors working in congested areas and markets with mature infrastructure. The advanced hydraulic design, plumbed differently than conventional excavators, allows them to go beyond digging to operate a range of hydraulic work tools to increase application flexibility. We are pleased to present our 50,000th production wheel excavator to our longtime customer, Wolff & Müller."

During a ceremony held on June 22, 2023, at the Caterpillar facility in Grenoble, France, representatives from Caterpillar and Zeppelin presented the 50,000th commemorative Cat M318 to representatives from Wolff & Müller Holding GmbH & Co. KG. On hand to receive the machine from the contractor were Torsten Schuckert, head of logistics service unit, and Siegfried Cammerer, manager of machine and device technology service unit logistics.

Garney Achieves Platinum Safety Rating

NUCA announced that Garney Construction 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.

Garney Construction of Fairfax, Virginia, achieved the STAR

Program's top Platinum Level status. The company is both a NUCA National and a NUCA of Metropolitan D.C. member.

"Congratulations to Garney Construction and their safety team," said Mike Flowers, NUCA's director of safety, education, and training. "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. Garney Construction has developed a top-notch safety program."



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HCSS Partners with Gearflow to Enhance Heavy Equipment Parts Procurement

HCSS, a leading provider of innovative software that helps heavy civil businesses streamline their operations, and Gearflow, a leader in streamlining the parts procurement process for construction fleets, announced a strategic partnership. Gearflow's Parts Hub Pro procurement platform will integrate with HCSS Equipment360, a heavy equipment maintenance solution, creating a turnkey solution for heavy equipment fleet teams to digitize their parts procurement process. The partnership will close the loop for fleets from work order to invoice, resulting in a seamless, end-to-end parts procurement workflow that reduces the costs incurred by today's manual parts procurement process.

"The industry needs this partnership as many companies struggle with a gap in the parts procurement process, which can lead to errors in the parts ordering process and productivity lapses," says Hayden Price, product manager, Equipment360, HCSS. "Businesses will benefit from the efficiencies gained by automating the entire parts procurement ordering process from end to end. With the integrated workflows, customers can collaborate and procure orders from the right dealers to get parts faster to reduce the repair cost and downtime of equipment."

"Together, Gearflow Parts Hub Pro and HCSS Equipment360 will create new efficiencies for heavy equipment fleet's repair and maintenance processes," says Luke Powers, Gearflow CEO and founder. "At a time where the need for skilled labor has never been higher, our partnership will allow fleets to do more with less by sourcing parts



faster, working smarter — and ultimately adding margin opportunities back to their bottom lines."

"With Parts Hub Pro and Equipment360, fleet teams can digitize their entire parts ordering process to drastically reduce the costs and equipment downtime stemming from today's parts processes," says Ben Preston, Gearflow COO and co-founder. "We can now streamline a customer's process from the moment a part is needed to the moment a part is received, filling the gap from the time a work order is created to when an invoice is processed. We are excited to work with a partner in HCSS who has a shared vision to improve the productivity and profitability in construction through the implementation of technology."

HCSS Equipment360 is a shop management and fleet maintenance solution that allows construction companies to manage assets and inventory, schedule and plan for preventive and predictive maintenance, manage mechanics and work orders, perform and track inspections, and more.

Gearflow simplifies the parts ordering process for heavy equipment fleets by increasing access to parts suppliers, centralizing communication, and maximizing visibility, all in one easy-to-use platform. Integrating with E360 removes the need for duplicate entry of parts request information and eliminates manual steps while giving fleet teams automatic oversight of all parts transactions.

"The goal for the HCSS marketplace is to bring high-quality solutions into the HCSS ecosystem," says Rateb Almasri, product manager, HCSS.



Cemen Tech Signs Murphy Tractor as Authorized Dealer

Midwest construction contractors now have greater access to best-in-class volumetric technology thanks to a new partnership between Cemen Tech and Murphy Tractor & Equipment Co., Inc. (Murphy Tractor), one of the region's largest equipment dealers.

"This agreement represents a major growth opportunity for Murphy Tractor and its customers in Iowa, Ohio and Nebraska," said Bill Buckles, President of Murphy Tractor. "The Cemen Tech product line offers our customers a unique opportunity to enhance their productivity and profits as it complements the John Deere and Wirtgen Group equipment lines in construction and road building perfectly."

Cemen Tech is the world's largest manufacturer of volumetric concrete mixers. Using Cemen Tech's volumetric technology, construction contractors can measure, mix and dispense a precise amount of concrete at the job site. This reduces waste, saves time and provides a new way to reduce labor hours while increasing their bottom line.

"We are thrilled to add Murphy Tractor to Cemen Tech's North American dealer network and expand the benefits of volumetric mixing to new markets," said Connor Deering, CEO and President of Cemen Tech. "Murphy Tractor's extensive network, commitment to the industry and dedication to high-quality customer service makes them a perfect partner and we look forward to the future."

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Komatsu Donates \$250,000 to AED Foundation's Vision 2025 Initiative



The current skills gap and workforce shortage issues facing OEMs and equipment distributors are daunting. To address these problems, the AED Foundation created Vision 2025, a project aimed at helping to increase the number of qualified technicians entering the equipment distribution industry. Komatsu is excited to announce that it has contributed \$250,000 toward this important initiative.

“We recognize the imperative to build a talent pipeline for our distributors and the heavy equipment industry at large,” said Komatsu’s Rod Bull, Executive Vice President, North America Region. “Komatsu supports Vision 2025 and its focus on helping schools promote careers in the technical field to young people, who often aren’t aware of the great family-supporting jobs available in this industry. We’re excited to do our part to share this story of opportunity to join an industry that keeps our world growing and sustains our way of life.”

Research by the AED Foundation has found that the industry needs to fill an anticipated 73,500 heavy equipment technician positions over the next five years, and that the technician shortage is compounded by a gap in required skills and available training.

Vision 2025 aims to address these issues by growing the foundation’s impact to include a minimum of 120 accredited college programs (currently 71), and a minimum of 200 recognized high school programs (currently 36). If the project is successful, it has the potential to create a talent pipeline that includes an additional 10,000 skilled technicians entering the workforce, 5,000 AED Foundation-certified technicians and 500 AED Foundation-certified managers.

With a fundraising goal of \$10 million over the next five years, Vision 2025 funds will be directed toward:

- New college accreditation programs targeting underserved areas where an existing heavy equipment/diesel technology program is already in place
- High school recognition programs that will prioritize locations that can serve as a feeder system into current and anticipated accredited college programs
- Expanding the AED Foundation’s endowment to ensure Vision 2025 efforts are sustainable over the long term

“The AED Foundation is grateful for Komatsu’s leadership and investment in our Vision 2025 campaign,” said AED Foundation President Brian McGuire. “Komatsu’s support, in conjunction with nearly 75 other investors, brings our Vision 2025 campaign to over \$6 million. These investments provide the Foundation the sustainability needed to continue to be the heavy equipment industry’s leader in workforce development.”

Including Komatsu’s donation, a total of \$1.45 million has been pledged to the Vision 2025 campaign by Komatsu and its dealer network. Among dealers that have donated:

- Anderson Equipment Company
- Berry Tractor & Equipment Company
- Brandeis Machinery & Supply Company
- C.N. Wood, Inc.
- Continental Equipment Company
- Equipment Sales & Service Ltd.
- General Equipment & Supplies, Inc.
- Kirby-Smith Machinery, Inc.
- Modern Machinery, Inc.
- Power Equipment Company
- Road Machinery & Supplies Company
- Roland Machinery Company
- Waukesha-Pearce Industries, LLC

The AED Foundation (AEDF) is the non-profit foundation for the Heavy Equipment industry and is the sister organization to Associated Equipment Distributors (AED), the international trade association for equipment distributors, manufacturers, and service providers. The AED Foundation actively addresses the serious shortage of skilled professionals in the equipment distribution industry through the expansion of its “community-based, school-to-work” school partnership strategy. By putting dealers, manufacturers, and educators together, the foundation is working toward the common goal of growing a new generation of in-demand, highly skilled, and high rewarding technical positions in the heavy equipment industry.



United Rentals Releases 2022 Corporate Responsibility Report

United Rentals, the world's largest equipment rental company, released its 2022 Corporate Responsibility Report. This comprehensive report showcases the company's dedication to sustainability, culture and governance and includes important updates from 2022 and 2023.

2022 was a landmark year for United Rentals, which celebrated its 25th anniversary. For over 25 years, the company has been at the forefront of partnering with its customers, communities and employees to build a better future together.

The report highlights the company's progress in sustainability both in its operations and in customer offerings. Notably, 31% of the company's rental fleet consists of electric or hybrid equipment. Additionally, United Rentals introduced an industry-first emissions tracking tool on its Total Control platform, helping customers track their sustainability performance.

United Rentals welcomed a record 8,000 new team members in 2022. The company's dedication to diversity and welcoming new employees to the 1UR culture yielded positive results, increasing diversity in sales and management positions and improving on an already strong retention rate despite a challenging labor market. The company also maintained its best-in-class safety rating while reducing its already low U.S. total recordable incident rate.

These achievements have earned United Rentals well-deserved recognition. In 2023, United Rentals was named a JUST 100 company, listed on Glassdoor's 100 Best Places to Work and also appeared on Newsweek's lists of America's Most Trustworthy and America's Most Responsible Companies.

"This momentum, and the determined enthusiasm of our teams, is what will energize us for the next 25 years and beyond," says Matthew Flannery, CEO at United Rentals.

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resources in real
time to **keep jobs**
running smoothly.”

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NUCA's 2023 Trench Safety Stand Down Demonstrates Member's Commitment to Employee Safety

The June 2023 Trench Safety Stand Down Week, sponsored by NUCA Gold National Partner United Rentals, Bronze National Partner Sunstate Equipment Co., and NUCA's Safety Ambassadors Club, showed NUCA members' commitment to safety. More than 23,070 workers on 2,105 jobsites from 429 organizations participated this year, indicating that even more companies and organizations are helping spread the word and commit to safety.

Thank you to everyone who took the time to conduct safe stand-downs by holding pro-bono safety training across the country, including hosting live trench demonstrations, holding Toolbox Talks, training sessions, and more. Your participation speaks volumes about your continued commitment to employee safety. And most importantly, ensuring that our people get home at the end of every day.

Participating Organizations:

3D Excavating	Bay Laurel Center CDD	Chattanooga Gas	Directional Services Inc.	Foremost Pipeline Construction
4-Horn Trench & Shoring	Beemer Construction	Clayton County Water Authority	Don Wartko Construction Inc.	Forquer Contracting
502 Equipment	Bentley Companies	Cleary Construction Inc.	Double Z Construction Co.	Fort Worth Civil Constructors LLC
Abay Construction	BESCO	Cleveland Utilities	Duinick Inc.	Foshee Construction Co. Inc.
Absolute Group	Beyond Underground	CM&B	E.P. Brady Ltd.	Fowlkes Pipeline Inc.
Acadia Services	Blaine Construction Corp.	Complete Underground LLC	E.R. Snell Contractor Inc.	Gaines and Company
ACS Utilities	Blaze Contracting Inc.	Contractors Machinery / Case Construction	East Tennessee Natural Gas	Garney Construction
Adams & Sons	Blue Tank & Pump Rental	Corbitt Site Services	Edward Kelly & Sons Inc.	Genesis Environmental Solutions
AGI Construction	Boller Construction	Craig S. Danielson Inc. dba Danielson Inc.	Efficient Pipeline	Gilbane
AJ Johns Inc.	Brewer Companies	CUMBERLAND PIPELINE LLC	Elder Corporation	Glacier Construction Co. Inc.
Alex E Paris Contracting Co. Inc.	Brewer Enterprises LLC	Cushman Excavation	Emery Sapp & Sons Inc.	Golden Triangle Construction
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Anchor Construction Corp.	BTrenchless/HDD Willco	Dan Christiani Excavating Co. Inc.	Erosion Solutions	Grooms & Pollard
ANSCO & ASSOCIATES LLC	Burgess Civil	Davids Hydro Vac Inc.	Eslinger Contracting Inc.	Hallsdale-Powell Utility District
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 McClam & Associates Inc.
 McCoy Grading Inc.
 McDonald Excavating Inc.
 Meade Tractor
 Metro Transit
 Midstate Site Development
 Midwest Vac Professionals
 Minger Construction
 MJ Scully & Co. Inc.
 Montana Construction Inc.
 Morgan Contracting
 MTX Contractors
 Muller Inc.
 Naranjo Civil Constructors Inc.
 NG Companies
 NG Roustabout
 NL&L Concrete
 Northeast Knox Utility District
 NPL Mid America LLC
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 NUCA East TN
 NUCA of Colorado
 NUCA of Kentucky
 NUCA of Las Vegas

OnTrack Construction
 Oscar Renda Contracting LLC
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 Pate Construction Co. Inc.
 Peoples Gas
 Perna Finnigan Inc.
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 Rowland Inc.
 Royal Plumbing
 RP Weddell & Sons
 Ruhlin/Shelly & Sands Co.
 Saf-T Enterprises
 Schlouch Inc.
 Service One Inc.
 Shadco LLC
 SiteWORX
 Skoda Contracting
 Slack & Co. Contracting Inc.
 Southeastern Construction Concepts Corp.
 Southern Constructors Inc.
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 Sparrow Environmental Consulting Services LLC
 Spencer Construction
 State Utility Contractors Inc.
 Suburban Sanitation Service Inc.
 Sunbelt Rentals - Trench Safety
 Sunstate Trench Safety
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 Tab Construction
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 Tennessee American Water

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 The Ruhlin Company
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 Whiting-Turner
 Wiedenmann Inc.
 William Anthony Excavating Inc.
 Wolf Construction Inc.
 Woodinville Water District
 Yonkers Contracting Company Inc.

2023 TRENCH SAFETY



6



7



8



9



10



11



12

1 T-Olsen Contracting LLC

4 NUCA of Indiana

7 Clayton County Water Authority

2 Sunbelt Rentals

5 AJ Johns Inc.

8 CW & Sons Infrastructure Inc.

3 Blue Tank & Pump Rental

6 Brewer Enterprises LLC

9 Landmark Construction Inc.

STAND DOWN



Thank you to everyone who took the time to conduct safe stand-downs!

- 10 Montana Construction
- 13 Havens Construction Co. Inc.
- 16 NUCA of Colorado
- 19 Horizontal Boring & Tunneling Co.

- 11 NUCA of Middle Tennessee
- 14 Kerns Excavating
- 17 SiteRite Construction Co.
- 20 Western States Contracting

- 12 Burgess Civil
- 15 Kissick Construction
- 18 Team Fishel of Las Vegas



NUCA of Middle Tennessee LAUNCHES HEAVY EQUIPMENT ACADEMY

Workforce Initiative Graduates First Class in April

By Utility Contractor Staff

Workforce shortages in construction has been a hot topic of discussion over the last several years, even before the pandemic further exacerbated the issue across just about every industry. In fact, the construction industry averaged more than 390,000 job openings per month in 2022, according to an Associated Builders and Contractors (ABC) report.

While shortages are high, so is demand. The American Society of Civil Engineers (ASCE) have U.S. infrastructure an overall grade of C- in its most recent Report Card, with Drinking Water and Wastewater – two areas near and dear to utility contractors – received marks of C- and D+, respectively.

The academy trains

students for a career in heavy equipment operation.

With increased resources available through the Infrastructure Investment and Jobs Act (IIJA), the lack of available workers is limiting the ability of contractors to bid work and grow their operations. To address the shortfall, NUCA of Middle Tennessee has taken a unique approach to close the gap. This year, Middle Tennessee, in partnership with Volunteer State Community College and the Middle Tennessee Workforce Development Academy, launched the Heavy Equipment Academy.

The Heavy Equipment Academy is a six-week program that trains students – free of charge – for a career in heavy equipment operation. Upon completion of the first program in April 2023, NUCA of Middle Tennessee hosted a job fair that included 12 NUCA member companies.

“Our workforce in Tennessee is like everyone else’s is across the country; we’re short of trained workers and we’re having to turn down work because of it,” Natalie Hansen,

executive director of NUCA of Middle Tennessee said on NUCA’s ‘Dig This’ podcast. “So, the idea of a Heavy Equipment Academy started over two years ago when our board realized that we were so far behind in workforce development that we needed to take some type of action.

“Many of our Member companies were taking skilled lifetime career employees and using them to train new employees in lieu of being in the field increasing production. It was then that we realized we needed to take assertive actions to turn it around in our industry or we were going to continue to suffer for many years ahead.”

In developing the program, NUCA of Middle Tennessee worked with the National Center for Construction Education and Research, a group formed in the 1990s by leading contractors who came together to standardize training and provide industry recognized credentials.



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"NCCER develops curriculum in about 40 craft areas and it's been used in all 50 States and 20 countries," Hansen said. "We're one of over 1,000 accredited institutions that provide their credentials. The NCCER program issues industry-recognized credentials, and our students can carry these credentials with them wherever they go. So, we're able to provide workers with formalized training, while also kick-starting their careers."

Fourteen students – ranging in age from 18 to 62 – completed the inaugural course. All of the graduating students found employment in the construction industry, mostly with NUCA member companies. The second Heavy Equipment Academy began July 10.

The class covers a range of basic construction topics including Communications, Math, Construction Drawings, Basic Rigging, Material Handling, Handling of Power and Hand Tools, and Employability. The students also receive certifications in CPR, First Aid, and OSHA10.

Following 2 1/2 weeks of core instruction (72 hours of instruction), students perform online and performance testing and proceed to Level 1 training (encompassing about 40 hours of additional classroom instruction and testing). Students use simulators and field training to become proficient in heavy equipment safety, identification of heavy equipment, and basic operational techniques. During the six weeks in the course, they visit project sites and vendor locations. After graduation, students will return to the school about once a month to receive an additional 240 hours of classroom and field training.

Students trained in simulators and on equipment provided by Thompson Machinery, Portland Utilities Construction Co., Parman Tractor & Equipment, and Cleary Construction. Training materials and equipment were provided by Sunbelt Rentals, Rogers Group, United Rentals, Ferguson Waterworks, Pavement Restorations Inc., Badger, and TN 811.

For Hansen, helping to advance the industry is a labor of love. She spent more than 40 years in the industry before accepting the executive director position at NUCA of Middle Tennessee. "In my role I can use all of my background and training to help give back to the industry," she said. "Hopefully, some of the younger people will start seeing construction as a desirable and fun career."

In addition to the Heavy Equipment Academy, NUCA of Middle Tennessee has a Dozer Day event scheduled for Sept. 16 to increase industry awareness among high school aged students and younger, as well as their parents. "Dozer Day is a great event because everybody loves to run tractors and equipment," Hansen said. "It is a great way to introduce people to construction and what could become a rewarding career. There is nothing like being involved on a construction project from the start, turning that first shovel of dirt and seeing that blank canvass transform into a completed project that benefits the community. It is a very satisfying feeling."

For more information about the Heavy Equipment Academy, go to www.nucamidtn.com. To listen to NUCA's 'Dig This' podcast, visit nuca.com/podcast.

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50
YEARS



DEVELON -7 Series Wheel Loaders

By Jim Rush

DEVELON is a construction equipment company with roots dating back to 1937. Wheel loaders have been a staple in the company's arsenal for more than 30 years, supplying utility contractors with tools for moving dirt, rock, or any construction material around a jobsite quickly and efficiently. In addition, wheel loaders have carved a niche in snow removal, agriculture and other markets.

DEVELON, formerly Doosan, is staying on the forefront of market development with the release of its -7 Series wheel loaders. The next-generation -7 series loaders were previewed at CONEXPO this past spring, and feature improvements in operator productivity, visibility and safety.

"This is an exciting time for us because we have a whole laundry list of great features on our -7 Series loaders," said Jake Sherman, product and dealer marketing manager for DEVELON. "At the forefront we have the 'transparent bucket' that we launched in 2021 and this year we have incorporated that as a standard feature. So not only is it an industry exclusive, but it's also now a standard industry exclusive."

"The key takeaway from a safety perspective is it increases visibility significantly because the blind spot that you would normally encounter is not there; it gains you visibility access to the other side of the bucket."

The transparent bucket incorporates two cameras situated at the front of the machine – one high and one low – that combine to create a clearer view for the operator via an in-cab monitor. The two cameras provide complementary views as the bucket is raised and lowered. Maximizing visibility allows the operator to work more confidently, efficiently and safely.

In addition to the incorporation of the transparent bucket, DEVELON has made other improvements within the -7 Series: 14



The transparent bucket incorporates two cameras that combine to create a clearer view for the operator via an in-cab monitor.



percent more glass in the cab, which also enhances visibility; rear-view camera, which is standard on most models; a standard roll-over protection warning system that alerts the operator if the machine is becoming unstable; a standard back-up alarm; and optional Around View Monitoring (AVM), which provides 270 degrees of machine-sensing visibility to identify potential obstructions.

In today's workforce environment where experienced operators are in short supply, the enhancements to the -7 Series help ensure that crews are operating efficiently.

"In utility construction it is common for these pieces of equipment to be operating in tight, congested areas, and the features of the -7 provide assistance to even inexperienced operators who may not be familiar working in that type of environment," Sherman said. "These safety assistance devices, notably the transparent bucket, are very intuitive and can help make the operator comfortable in all types of working conditions."

Of course the bucket is the main feature of wheel loaders, so making sure you have the right tool for the job is paramount in optimizing performance. "There are a large number of buckets to

choose from, so you need to make sure that the bucket is configured correctly for the particular machine and the application," Sherman said. "You also need to consider the density of the material you are moving; gravel or dirt weighs a lot more than sawdust, for example. We have lift charts and other resources available that provide guidance on how much weight can be moved efficiently while maintaining a safe and stable machine. And, our Smart Load weighing system tells the operator the weight of material in the bucket via the Smart Touch screen."

Another innovation to help in this regard is the Load Isolation System, which is designed to improve wheel loader stability while moving, helping reduce cycle times, increase productivity and boost fuel efficiency. The Load Isolation system features a nitrogen accumulator that helps reduce spillage during travel and provides a smoother ride.

Other improvements to the -7 Series include an optional rear fender kit that folds out of the way to allow easy access to the engine for maintenance, and the use of heavy-duty Dana or ZF axles throughout the lineup.

In buying new machinery, contractors can be confident buying from an equipment partner with a broad dealer network. DEVELON has a network of about 180 dealers, who provide support throughout the life cycle of the machinery. "DEVELON dealers provide excellent service after the sale, as DEVELON and our dealers are aware up-time is key in this industry," Sherman said. "Additionally, DEVELON provides dealers education in a variety of ways; including online and in-person with hands-on technical training. DEVELON is determined to provide our dealers the best support possible. This enables DEVELON dealers to possess the tools to surpass their customers' expectations."

Jim Rush is the editor of *Utility Contractor*.



Common Vacuum Excavator Faux Pas: → **Top Three Mistakes** ← → **Cutting into the Bottom Line** ←

By Chris Thompson

As anyone in the utility construction industry can attest to, regulations that require exposing existing underground infrastructure have increased greatly over the last several years. This has led to a large increase in the demand for vacuum excavators. As any growing business segment, this has drawn a lot of new people into the vacuum excavation market. While it is great to see this critical tool of the underground jobsite become more mainstream, this can lead to some misunderstanding and misuse of the equipment that might be costing contractors money.

There are a few helpful reminders of note that will ensure owners and operators are working effectively. The goal is to get the job done as quickly as possible, with as little cost as possible, while following best practices to mitigate damages.

→ **Wrong Equipment**

The first mistake commonly made by contractors is having the wrong vacuum excavator for the job. Oftentimes, the initial cost of a bigger vac is enough of a deterrent for contractors to make the investment. If a contractor is just wanting to stick their toe in the water and learn more about their vacuum needs, a smaller unit is a great place to start. However, for a more experienced contractor, or a contractor looking to bring in-house soft excavation work they are currently subbing out, a smaller vacuum excavator may cost more over the long haul.

An undersized machine may not have enough freshwater on board to complete a job, or multiple jobs in one day. Trips to get more water slows down the operation. The same is true for spoils tanks. Smaller vacs will obviously fill up faster and require more

trips to the dump site, which equates to more time off the job and increased fuel costs and dumping fees.

Additionally, it's important that contractors are buying the correct type of vacuum. Many equipment manufacturers have multiple types of vacuums. Two common types are hydroexcavator vacuums, meant for potholing, and mud vacs, which are designed as suction only machines, mainly for HDD spoils support. Contractors who try to dig with mud vacs are in for a long, unproductive day.

→ **Wrong Nozzle**

The nozzle contractors select to use on the end of the wand is another factor in how much money can be made on vacuum excavation jobs. The first consideration about nozzles should be the size. If a nozzle is too small, the contractor may not be getting the full benefit of the water system from the vacuum. If the nozzle is too big, it will have too much water coming out and will struggle to get enough pressure to cut.

Nozzles are rated by gallons per minute (gpm) and should be fit to the vac. Typically it is recommended to select a nozzle that has a gpm output that is slightly less than the maximum gpm the water system is rated to produce.

Now that you have the right size, you'll need the right type. Fan nozzles increase the likelihood of damaging existing utilities. Oscillating nozzles should always be used, not only for the sanctity of the existing utilities, but also for production. It's expensive and time consuming to have to deal with damaging utilities and using underperforming equipment.

Much like the vac itself, you get what you pay for when it comes to nozzles. Cheaper nozzles don't perform as well, will typically wear out and need to be replaced faster, and can not be rebuilt. OEM equipment, like the Prospector nozzle, is rebuildable, oscillates and has multiple sizes that can be fit to any vacuum excavator.

→ **Too Much Cutting**

Costs can add up quickly on a vacuum excavation job. One of the quickest ways to add unnecessary expenses to the jobsite is over-cutting the size of the excavation. Contractors are strongly encouraged to start with the smallest possible hole, in diameter, and only go bigger when needed. By over-cutting, contractors will use more water, collect more spoils than necessary, and add time and costs to the job.

Vacuum excavator contractors should have already called 811 to locate existing utilities before beginning the job. However, there is an 18" tolerance zone on either side of the paint and/or flag they put down to mark the spot. These locates should be verified by the contractor. Not only does this go a step further in damage mitigation, but it also reduces the amount and size of holes the excavator will have to dig. The more precise an existing

utility can be located, the less dirt an excavator will have to move to expose it.

When potholing, it is important to excavate to the depth of the bore, not just to the utility. If an HDD crew is coming in behind the vac to install new product, the vacuum excavator needs to dig deep enough to visibly see the new product passing under the existing. This step helps mitigate damage to utilities and equipment, resulting great time and cost savings for contractors.

→ **Make More Money**

Regular maintenance, like cleaning and changing filters, will go a long way in keeping vacuum excavators up and running. And operational tips, like always using a boiler in sticky soils, regardless of ambient temperature, can make contractors up to 30 percent more efficient.

There is a lot of work to be done in this space, and a lot more coming. By ensuring contractors have the right vacuum excavator, with the right nozzle, they'll be well on their way to cashing in. With the proper operational procedures and following best practices, contractors will be set up for success.

Chris Thompson is vacuum excavation product manager for Ditch Witch.

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Trencher Maintenance: Trencher Teeth, Chains, Tires and More

Ride-on or walk-behind, a trencher is the machine you need for digging phone, cable, TV or electrical trenches as well as plumbing and irrigation trenches. But you can dig yourself into some downtime, or reduced equipment performance, if you don't properly maintain the machine.

Regular maintenance not only helps you maintain productivity but also extends the useful life of the equipment. It also contributes to trencher safety.

Adopt basic maintenance best practices

When you perform inspections and maintenance tasks, pay attention to any safety precautions outlined in the owner's manual. Turn the machine off first (except when checking engine gauges) and wear the appropriate PPE for the task, including work gloves and work boots.

- Inspect the trencher before each use. Look for signs of wear and tear. Frequent inspections will help you spot trencher problems early.
- Keep up with preventive maintenance tasks. Most manufacturers specify preventive maintenance, including engine oil and filter inspections and changes, at 10, 50, 100, 250 and 500 hours of operation. Follow the schedule in the owner's manual.
- Check and change the oil regularly. Some trenchers require an oil change after 10, 20 and 100 hours of use. The user's manual will spell out the intervals. Use oils and coolants recommended by the manufacturer and maintain recommended levels.
- Lubricate if needed. If the machine requires it, lube necessary parts with a small amount of multipurpose grease after each use. Depending on your trencher, that may include the pivot head shaft bearing, the pivot bushing, the auger bearing, wheel tracks and tail roller. Manufacturers are increasingly using sealed bearings on pivot points to reduce lubrication needs.
- Clean the trencher, including the chain, often. Some dense soils, such as clay soil, are relatively easy to remove when moist but become cement-like when given time to dry.
- Check the air filter regularly. When working in dusty conditions, check it daily.

Inspect the trencher chain, teeth and sprockets

The digging chain, digging teeth and sprockets of the trencher are the primary wear parts, and they require regular inspection. Visually inspect all three after each job or roughly 10 hours of operation.

Follow the manufacturer's specifications for matching the digging teeth, sprockets and digging chain to the digging conditions. If you're working in rocky or sandy soil, you'll need to replace the teeth, chain and sprockets more often.

Trencher chain

Follow the manufacturer's recommendation on chain tension and check the chain tension before and after each

use. As a general rule, you should be able to fit two fingers between the chain and the lowest part of the boom when the boom is parallel to the ground. A chain that's too tight causes premature wear on the rollers, boom and sprockets. A loose chain can cause the equipment to vibrate, and it may hit the boom and eventually bind the tail roller.

Also inspect the chain for wear. A worn digging chain can jump off the sprockets or end roller and damage other parts of the digging system.

Trencher teeth

One of the most common trencher maintenance mistakes is not replacing digging teeth often enough. Digging teeth should be sharp. Worn teeth force the trencher to work harder because they create higher shock loads on the chain and boom.

Check that the face of each cutting edge is intact. Broken teeth should be replaced right away.

Different types of teeth work best in specific situations. Cup teeth work well in soft, medium or sticky soils. Tougher teeth with carbide bits work better in rocky soil or frozen ground. Choosing the right teeth for the soil reduces stress on the trencher.

Trencher sprockets

When you find worn sprockets, replace them and the chain at the same time to maintain the system tolerance and increase the life of the machine. If you replace one and not the other, the newer component will be impacted by the worn one and degrade faster.

Inspect the trencher tires, fluids and gauges

The tires, fluids and gauges of a trencher are often overlooked, but they are critical to ensuring good performance.

Trencher tires

Check the tire pressure. You'll also want to tighten the tire mounting bolts to the manufacturer's specifications since the stress of digging loosens them.

Trencher fluids

Check the levels of hydraulic fluids, engine oils and coolants, and look for leaks while you're at it.

Eyeball the hydraulic hoses for weathering, damage or bulges that can lead to bursting under pressure.

Trencher gauges

Start the engine and check each gauge. All temperatures and pressures should rise to levels specified in the user's manual and remain there. If you get any abnormal readings, shut down the trencher and remove the machine from service until the problem has been fixed.

This article was written by United Rentals.



Workplace Incident Notification System

NUCA-WINS Releases Next Generation of Jobsite Reporting App

By Robert Baylor

NUCA announced to its members this summer that the popular job site recording solution NUCA-WINS has been upgraded to Version 3.0, and is available for construction job site event documenting and reporting needs.

NUCA-WINS is a powerful software application that documents injuries, utility strikes, employee illnesses, near misses, and safety observations in real-time, utilizing both iOS and Android devices. It was first released to the industry and NUCA members in the fall of 2020, and remains popular with utility contractor members.

NUCA-WINS was designed by industry experts to prevent the negative consequences of delayed and inaccurate workplace incident reporting. Powered by app partner Compatica's intuitive software, this point-of-occurrence incident recording app allows authorized users to quickly report a variety of job site events, such as employee injuries and illnesses, property damage, utility strikes, for-record-only needs, near misses, and safety observations, as well as recently added conduct and security incidents.

"Software is like a shark that can never stop swimming," says Adee Feinstein, Compatica's CEO. "It requires constant development and enhancement to keep up with perpetual technological change and ever-evolving industry needs and practices. We're fortunate to have NUCA and its members as partners in this process, guiding us on how to best improve NUCA-WINS and the state-of-the-art."

NUCA-WINS 3.0 represents the "Next Generation" in job site data collection. It supports fully documenting all types of incidents, including Injuries, Utility Strikes, Property Damage, Vehicular, Safety, and many more, as well as collecting any possible Site, Asset, or Employee reports and communicating them within the organization in real-time. NUCA-WINS allows companies to create their own workflows and customize reports to better fit their unique requirements.

NUCA-WINS 3.0 Now Includes:

- **Video Statements**

- Great for pre-dig surveys

- **Job Site Reports**

- Collect all job site information

- **Data Collection Workflow Configuration**

- Customize to your requirements

- **Data Visualization Dashboard**

- Instant status analysis

- **Geolocation Mapping Annotations**

- Sketch "how it happened"

- **Audit Trails**

- Full tracking of user access, transactions, and modifications

On-the-spot worksite recording is the best way to avoid delays in reporting incidents, most of which carry liability concerns. With NUCA-WINS 3.0, a supervisor can make a complete event report, including pictures, audio, and video recordings. It can document incident locations, equipment involved, and witness statements. The app also easily allows supervisors to record near-misses and workplace safety observations.

Employee health and illnesses can also be recorded with NUCA WINS 3.0, allowing supervisors to report issues immediately after recognizing them. E-signed attestations and waivers are instantly accessible, and employees can be referred to an approved clinic if there are injuries requiring medical attention.

NUCA WINS 3.0 provides all the data required for FROI, OSHA, and other workplace incident forms. Workers' Compensation recording needs are delivered in a timely fashion once entered into the app. It delivers immediate text and e-mail notifications and securely stores this information in a password-protected cloud system.

This powerful cloud-based incident manager is the solution to the reporting requirements the utility construction industry generates through its work on job sites.

NUCA WINS has been upgraded twice since its 2020 release and is only available by subscription to NUCA members. Subscriptions to the NUCA WINS 3.0 app are made via www.nucawins.com.

Robert Baylor is NUCA's Director of Communications.

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The Safety Damage Prevention Conference offers the unique opportunity for safety management to hear from industry experts on a wide variety of topics that impact the industry and network with other utility construction safety managers from across the country.

This conference also provides an opportunity to address and strategize how members can better navigate complex damage prevention issues in our industry.

PRELIMINARY PROGRAM*

Thursday, January 25

Keynote Speaker: 9:00am - 10:00am

Break: 10:00am - 10:15am

Safety Session: 10:15am - 11:30am

Networking Lunch: 11:30am - 12:30pm

Safety Session, Industry Speakers: 1:00pm - 3:00pm

Break: 3:00pm - 3:15pm

Safety Session: 3:15pm - 4:14pm

Networking Reception: 4:30pm - 5:30pm

Friday, January 26

Damage Prevention Session: 9:00am - 10:00am

Break: 10:00am - 10:15am

Damage Prevention Session: 10:15am - 11:15am

Networking Lunch: 11:30am - 12:30pm

Damage Prevention Session, Industry Speakers: 1:00pm - 4:00pm

*This program is subject to change specifically the meeting conclusion time on January 26th.

For the most up-to-date list of speakers, registration, and venue information please visit:

www.NUCA.com/sdpc

Excellence in Underground Awards



Sanitary Sewer Collection Winner:

Beaver Creek Interceptor Improvement Project Contract 2

[EDITOR'S NOTE: In each issue, Utility Contractor profiles NUCA's Excellence in Underground winners (formerly "Top Jobs"). The projects recognize challenging, innovative, or unique projects completed with excellent results. To nominate your project for an Excellence in Underground Award, visit:

<https://www.nuca.com/excellenceunderground>

Cleary Construction Inc. of Tompkinsville, Kentucky, successfully completed the Beaver Creek Interceptor Improvement Project Contract 2, located in the Powell community near Knoxville, Tennessee, which has experienced substantial growth over the past decade. This project was necessitated by the significant population increase and growing infrastructure of the area in an effort to support the local growth as well as reduce the amount of infiltration into the sewer system.

Beaver Creek Contract 2 consisted of the installation of 13,000 ft of 48-in. Ductile Iron Pipe Gravity Sewer, 13 major crossings of Beaver Creek, 65 precast manholes, 5,000 ft of multi-sized sewer services from 8 to 18-in. piping, 100 ft of 60-in. jack and bore road crossing, and 200 ft of 72-in. jack and bore railroad crossing.

Cleary diligently worked alongside Hallsdale Powell Utility District (HPUD) and Jacobs Engineering over the course of two years to install the new 48-in. gravity sewer. The new 48-in. line was replacing an existing 36-in. sewer that was a 50-plus year old concrete pipe that allowed significant infiltration, resulting in sewer overflows. Additionally, the ground water infiltration caused the pump station to overcompensate for extended periods of time, decreasing

the overall efficiency. The new sewer line has alleviated the pump station and operates at a more systolic capacity reducing or eliminating sewer overflows.

The project location was notoriously vulnerable to localized flooding. Additionally, the project had extremely limited access. To combat this, Cleary Crews built multiple access points from main roads and installed eight bridges across Beaver Creek to allow access to the work areas. To ensure project success, the Cleary Team identified and strategically pinpointed specific work areas that needed to be installed during the dryer seasons of East Tennessee.

The project began in July 2020, when Cleary mobilized focusing entirely on access, material staging, clearing-and-grubbing and rock removal. Soon after the project was properly mobilized and staged, Cleary crews immediately and aggressively approached the 13 open-cut stream crossings. It was no secret that a key factor to overall project success was dependent upon the success of these major crossings. This aggressive and strategic approach led to the successful installation of seven of the thirteen major stream crossings before the wet season set in.

This high-profile project was widely recognized throughout the community and industry for its heavy rock excavations.

tion, creek crossings, bypass pumping, poor access, and its proneness to flooding. Many previous contractors had contributed to the projects notoriety by experiencing significant loss and even walking away from contractual obligations due to the difficulties presented by the Beaver Creek project area. To further exemplify the project's reputation, the project only received two bids, with both bids coming from out-of-state contractors who work nationally.

One important challenge of the project was maintaining grade. The grade was 0.08 (practically flat) and there was only 9 ft of elevation change over the 2.5 miles of trunkline. The location of the project proved to be a significant challenge. The site was often flooded and left underwater for multiple weeks during construction due to rain and the low elevation of the project area. Cleary crews preformed dewatering via a well-point dewatering system well in advance of pipe installation. Due to the proximity of the trunkline to the stream, many areas had blasting restrictions per state and federal regulations. In addition, erosion control BMPs was essential to protect this highly visible waterway.

Due to the magnitude of the project, materials had to be received in phases and subcontractor coordination was also tricky. Cleary engaged in strategic and constant planning to ensure that its subcontractors had the best opportunity for success. On a project with as many challenges as this, it is quite an achievement that HPUD, Jacobs Engineering, impacted property owners, subcontractors and Cleary all deemed the project a success.

Challenges and Innovative Solutions

Cleary used the forethought to phase construction during dry weather to maximize the schedule and utilize the existing sewer trench to speed up the installation process. Also, because of the size of Beaver Creek, Cleary decided instead of traditional bypassing of the creek, to engineer and build a diversion structure to flume the creek. This diversion structure was Cleary's own design and constructed by its in-house fabrication team.

Cleary worked closely with its bypass pumping sub to design and implement a much longer bypass FM than is commonly used, this extended (dually redundant) line was used to increase installation footage and to reduce the downtime experienced when moving a bypass system. Additionally, specific locations were chosen where the new trunkline was rerouted into the existing trunkline which resulted in expedited installation and often allowed for restored flows within hours.

Cleary's collaboration with HPUD and Jacobs throughout the project kept communication open and allowed parties to work through any potential issues before they could cause major problems. This teamwork, coupled with innovative solutions and aggressive installation strategy, allowed Cleary

to provide a fully functioning sewer while only using 83% of the allotted contract time.

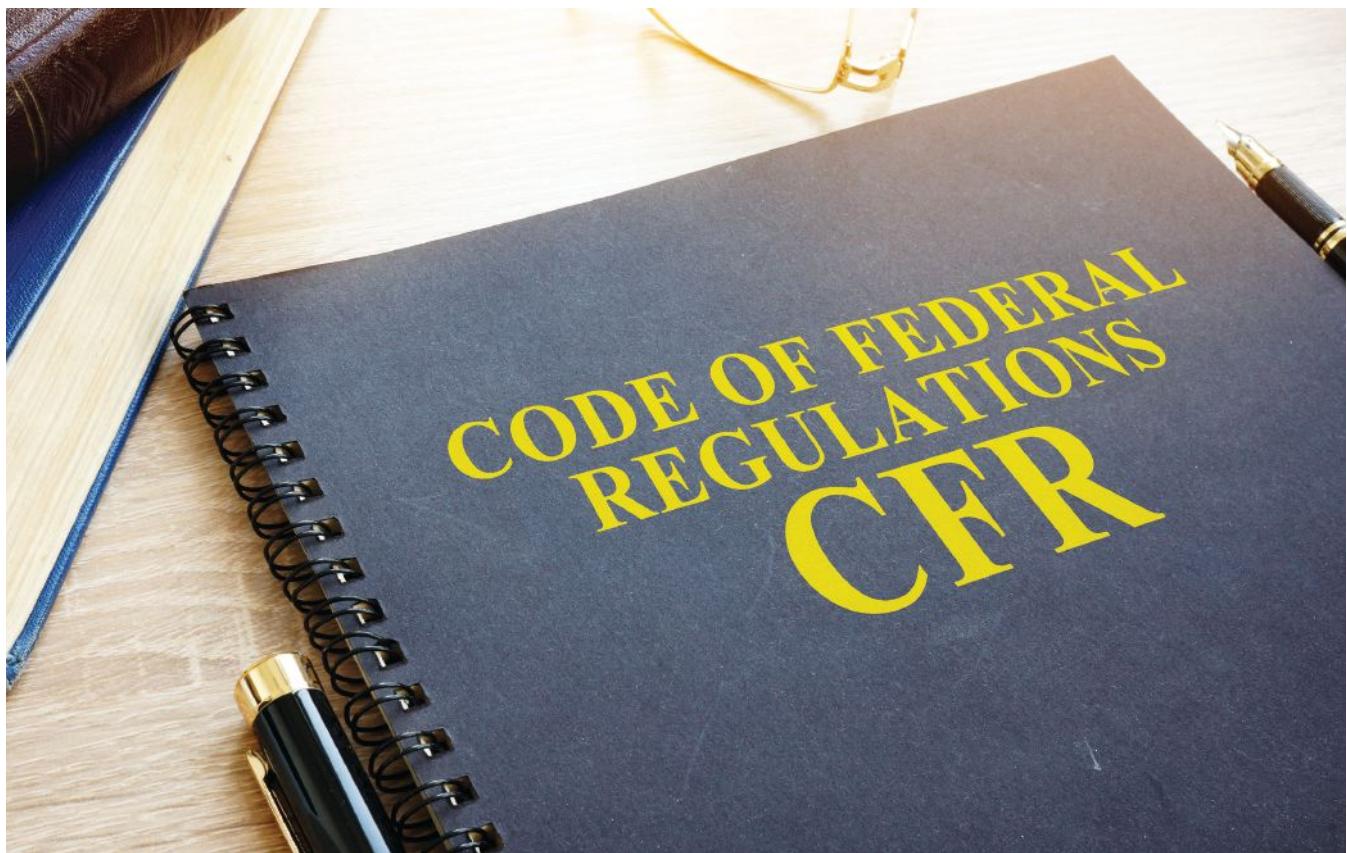
Cleary Construction would like to thank its many subs and suppliers, most being NUCA members, for making this project a success. Core & Main supplied all pipe and appurtenances; Cleary used Caterpillar equipment on this project; the boring subcontractor exclusively used Barcco boring machines. East TN NUCA members, PRI completed the project paving and CTR Coatings performed the man-hole coatings on the project. Westfield Insurance provided the bonding. VCE Inc. supplied the pre and post blast survey, while Austin Powder performed the blasting for rock removal. Loyston Quarry and Vulcan Materials provided stone for the project. Cross Country Infrastructure Services was utilized for bypass pumping and dewatering. United Rentals supplied trench boxes and shoring.

Benefit to the Client and Community

Cleary delivered a completed project in 2022 that was on time and under budget. The HPUD Pump station has seen major decreases in infiltration and overflows due to the installation of the new 48-in. DIP. This updated sewer trunkline will accommodate the large growth in this thriving community for years to come. Beyond the significant positive impacts to the environment and the lower operating cost experienced by the owner, the community has also benefited from the improved entrance to the Beaver Creek canoe landing and improved parking area for recreational purposes. Additionally, the local school system will benefit for years from the improved athletic lighting, flagpole, fencing, sodded softball field and sodded football practice field, all of which were provided by Cleary at no additional cost to the owner.

Cody Humphrey, Chief Operating Officer of the Hallsdale Powell Utility District, wrote: "Recently Cleary Construction, Inc. successfully completed the new Beaver Creek Interceptor Phase 2 project.

"The Beaver Creek Interceptor replacement project had many challenges for Cleary Construction like deep excavation, multiple creek crossing, flood plain areas, and multiple landowners to coordinate with. Since completion of the project HPUD is now seeing a large drop in flow from this section of pipeline. Due to the reduced flow HPUD is having fewer sanitary sewer overflows throughout its system as well. Cleary Construction and Jacobs Engineering have made this project a success story. Although the project presented a number of challenges Clearly Construction met all Hallsdale Powell Utility District expectations. It was clear that Cleary has the knowledge and field experience to handle difficult project challenges."



New Regulations On Parade

By Robert Baylor

The Biden Administration's regulatory agenda is alive and well this year—and reaching into the utility construction industry. As of the end of August, there have been 2,019 final rules and regulations published in the Federal Register during 2023, of which 179 have been dubbed significant. Several of these new or updated final rules affect the American utility construction industry and your business. NUCA members should be aware of these changes and ensure compliance with the regulations.

Regulatory Highlights:

Davis-Bacon Act

The U.S. Dept. of Labor (USDOL) issued a final rule on August 23 making significant changes to contractor and subcontractor obligations under the Davis-Bacon Act on federal and federally-assisted construction projects. Most signifi-

cantly, the department changed the 40-year-old definition of “prevailing wage.” The rule now defines a wage as prevailing if it is paid to a majority of employees, or if no wage rate is paid to a majority of employees, then it is the rate paid to at least 30% of workers.

The new final rule expands Davis-Bacon Act coverage to additional construction activities, expanding the “site of the work”



definition to include certain “secondary construction sites” where a sizable portion of the work is constructed. The regulatory changes also clarify that the material supplier exemption is only available to companies whose sole obligation under the contract is to supply materials.

The rule also makes official USDOL’s position that benefits should be annualized when calculating a contractor’s contributions. It also requires contractors to seek approval of unfunded plans before crediting it against costs of the plan towards prevailing wage obligations.

Finally, the requirements of the final rule are effective even if the contract does not expressly require them. Contractors have to be aware of the new requirements even if the contract with the federal department does not provide notice.

This is not an exhaustive list; there are additional recordkeeping requirements, anti-retaliation provisions, and geographic area expansion.

The new Davis-Bacon regulations are scheduled to become effective October 22, 2023. NUCA opposed these changes to long-standing industry practices. In response, several business associations have promised legal action against these regulations once they are in force.

OSHA Injury and Illness Regs

OSHA finally released on July 21 their “Improve Tracking of Workplace Injuries and Illnesses” final rule. The rulemaking would require designated establishments with 100 or more employees to electronically report Form 300A (Summary of Work-Related Injuries and Illnesses), Form 300 (Log of Work-Related Injuries and Illnesses) and Form 301 (Injury and Illness Incident Report).

This change revises the Trump Administration’s illness tracking rule and reinstates the pre-2016 regulations. This final rule becomes effective on January 1, 2024.

NUCA and other business associations opposed these changes, arguing that employers are being forced to publicly disclose sensitive and private information about their employees. These forms contain personal medical information about individual employees, which has previously been kept private. OSHA has said it intends to make this information publicly available online, which is concerning to privacy needs.

These records could be further misused since they are not a reliable measure of a company’s safety record or its efforts to promote a safe workplace. Smaller contractors will also be impacted by the expanded requirements.

Buy America Guidance

The Office of Management and Budget released its final “Build America, Buy America” (BABAA) guidance on August 15. The guidance provides definitions for key terms and finalizes the test Federal agencies and award recipients must use to determine the cost of components of manufactured products.

The guidance (found at www.madeinamerica.gov) confirms the procedures for requesting and obtaining BABAA waivers. For example, it includes definitions for key terms, including iron or steel products, manufactured products, construction materials, and materials such as aggregates and cement.

The guidance also offers standards that define “all manufacturing processes” in the case of construction materials. This guidance will become effective on October 18.

The U.S. Dept. of Transportation also released the same week its BABAA waiver for small grants. The waiver took effect on August 16 and applies to construction materials and iron/steel used in certain USDOT funded projects. It applies when the total value of non-compliant products is under \$1 million or 5% of total project costs.

Agencies are currently asking for comments on BABAA with regard to possible waivers — or exemptions — from some specific requirements of the new regulations. Some waivers would be based on a “public interest” standard while others could occur under an “unavailability” standard for specific items.

NUCA members with questions about these regulatory changes and others are encouraged to contact the NUCA Government Affairs department at 703-358-9300..

Robert Baylor is NUCA’s director of communications. He is a former Republican staff member who worked for the U.S. House Education and the Workforce Committee.

Suicide and Mental Health Wellness in Construction Are Industry Priorities



September marks Suicide Prevention Month, which is particularly important in the construction industry. The Construction Industry Alliance for Suicide Prevention (CIASP) is a taskforce created by the Construction Management Financial Association (CFMA) in 2016 in response to a statistic released in a CDC study ranking construction as the #1 industry for deaths by suicide.

Suicide is a serious issue, particularly around the holidays. As much as 25% of the U.S. population experience mental health issues and as many as two thirds (16%) don't seek treatment. Employers and coworkers may be able to provide support to workers experiencing mental health issues if they understand how to recognize warning signs, and how they can aid helping a coworker/friend get help.

Many companies don't realize that when workers face problems involving mental health, they can increase the companies' risk of accidents and losses. Management and safety professionals also need to know that workers' mental health issues increase worker absenteeism, presenteeism, and loss productivity – all of which affect the economic strength of the company.

According to the latest information from CFMA, in 2020, there were 45,799 recorded suicides, up from 42,773 in 2014, according to the CDC's National Center for Health Statistics (NCHS). There is an estimated 30% increase of suicides since 1999. For every person who dies by suicide, an estimated 316 people seriously consider suicide. There was a 22% increase in suicide among white middle-aged men with less than a college education; suicides, opioid overdoses, and alcohol abuse were



listed as the cause of this increased mortality. The construction industry has the highest number of suicides and the highest suicide rate of any industry.

Although most construction related suicides do not happen on construction sites, I'm sure do occur. When a fellow worker commits suicide on or off the job, many people within the company are affected. Historically, the construction industry has spent a lot of time and money to provide workers with a safe place to work, including efforts to protect workers from exposure to chemicals and other health hazards such as asbestos and silica dust. However, we often overlook or don't recognize the psychological aspects of working in construction.

Many job factors can have a negative effect on a person's mental health: job security, odd hours, low pay, job stress, bullying, or separation from family and friends when jobs are not local. Additionally, events outside of work, such as divorce, family illness, death of a loved one, or PTSD, can take a significant mental and emotional toll. One or more of these issues can be overwhelming, leaving a person feeling like they have no place to turn.

Recognize when a Worker is Having a Difficult Time

CFMA has identified these common warning signs as indicators of possible mental health problems:

- Appearng sad or depressed most of the time,
- Increased tardiness and absenteeism,
- Talking about feeling trapped or wanting to die,
- Decreased productivity,
- Increased conflict among co-workers,
- Extreme mood swings,
- Increased use of alcohol or drugs,
- Decreased self-confidence,
- Feeling hopeless and helpless,
- Sleeping too much or too little,
- Acting anxious, agitated, or reckless,
- Near hits, incidents, and injuries,
- Withdrawing from family and friends,
- Talking about being a burden to others,
- Decreased problem-solving ability.

Preventing Construction Worker Suicide

- Educate management and employees about mental health problems and what they can do if they feel depressed or suicidal, or recognize that a coworker/friend may need help.
- Establish an Employee Assistance Program (EAP) and make sure all understand that contacting the EAP is confidential.
- Make information about additional resources and support groups available to all employees, such as the Veterans Administration Suicide Hotline or the National Suicide Prevention Lifeline.
- Work to destigmatize mental health issues in your company's culture.
- Create a post-suicide crisis response plan to help employees deal with the death of a coworker.

More detailed information can be found on the CFMA website, the CIASP website, and the OSHA Suicide Prevention Site:

<http://www.cfma.org/chapters/resources/suicide-prevention>
<https://preventconstructionsuicide.com/>
www.osha.gov/preventing-suicide



Is Your Company's Information Ready For The Industry's Buyer's Guide?

Utility Contractor's next issue is the annual NUCA Buyer's Guide. Make sure your contact information is up-to-date and accurate to help potential business find your company.

Log in to your NUCA member's account at nuca.com and update your online profile **before October 18, 2023**.

If you need assistance logging into your account, please contact NUCA's membership department at 703-358-9300 or by email at nuca@nuca.com.

SafetyWORKS



2022 NUCA Safety Award Overall Winner:

2022 NUCA SAFETY AWARD 501,000 TO 1,000,000 MANHOURS: MAC CONSTRUCTION & EXCAVATING 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 2023, please submit your entry by the end of December 2023. Award details can be found at nuca.com/safetyawards.

It's always a strong sign of a successful safety program when the company wins another NUCA Safety Award, and NUCA can safely write that MAC Construction & Excavating, Inc. of New Albany, Indiana, has one of the strongest safety programs in the nation.

NUCA was proud to award in 2022 for the third consecutive year a William H. Feather Safety Award to MAC Construction. But what's behind this repeat performance? I think it can be found in four very powerful words:

“Safety is a Decision.”

This commanding phrase, “Safety is a Decision,” is the framework behind MAC’s excellent safety record over time, rooted in the 44-year-old company’s culture, core values, and beliefs. “This phrase naturally embodies the accountability MAC operates with every day, not only from a professional standpoint, but also personal,” wrote Neal Biggs, MAC’s EHS / Risk Director.

Safety is a core value at MAC, with the true belief that zero incidents are achievable and expected.

MAC is a second-generation, family-owned business providing site development and excavation services in the southern Indiana and Louisville, Kentucky, metro area.

Their prior leadership blazed the trail for their employees by setting a high standard for safety in all of their operations. With ideal conduct on the jobsite and in their business demonstrated daily by MAC’s leadership, it allows for an easy buy-in from their employees across the company. This corporate safety culture encourages continuously raising the bar for safe and quality work on their jobsites.

Through their Environment, Health and Safety (EHS) program, the company strives to eliminate job hazards. In return, the company’s leadership demands from their employees an equal and binding responsibility to the company, themselves, their fellow employees, the community, and their family to perform their tasks in a safe manner. The information contained in their company safety manual is expected to be known by all employees,

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and to apply all of its information when performing their jobs.

MAC's EHS education is compulsory, addressing education at employee orientation, continual onsite workforce training, and continuing education for employees, supervisors, and management. MAC utilizes specifically designed company training programs to educate our workforce. These programs are designed to address site-specific hazards such as fall protection, confined space, excavations and trench safety, management of traffic/flagging, First Aid/CPR, and manager development. These programs are offered at both the "User" and "Competent Person" level.

Their NUCA membership also offers key benefits and readily available safety resources to their company, enabling them better to manage and operate more efficiently across large and small tasks. Safety publications, personnel training, and the relationships established from their years of NUCA membership continue to aid the company's safety protocols.

"We believe our company has the upper hand by investing in our NUCA membership and being a part of a durable

organization that cultivates leadership, growth, and success in the safest way possible," said Biggs. The company employs a full-time, degreed safety director in Neal Biggs, who works daily with their 44 crew supervisors to manage their safety program, inspect jobsites, advise on excavations, and promote a safe working environment for all of its employees and subcontractors.

Safety training plays a major part in reinforcing their safety culture. All of their supervisory staff has attended a 10-hour or 30-hour OSHA Construction Outreach Program in the last three years, with 17 employees attending a NUCA Excavation Safety, Competent Person Training, or NUCA Confined Space Entry Training Program.

MAC's safety program earned the 501,000 to one-million manhours Safety Award in 2022 and another NUCA safety award the previous year, so they knew their program was delivering award-winning results. In 2022, the company had only one reportable accident for their OSHA 300 log.

MAC believes that this safety training starts early, even before their future

employees are hired. At their local high school trade classes, they conducted safety training outreach for the students, donating PPE equipment and promoting driver safety training. They also conducted youth first aid and CPR classes at local events.

MAC wrote in their award application that their NUCA membership has provided many benefits which have helped MAC to grow and support their leadership's vision of safety. Those resources help improve operational and safety management. "We firmly believe our company has the upper hand by investing in NUCA and being a part of an organization that strives to cultivate leadership, growth, and success with the greatest level of safety in mind," as stated in their 2022 application. We couldn't agree more with MAC.

Safety is an everyday part of MAC's culture, both on and off the job. We salute their commitment to their employee and workplace safety and hope all NUCA members can learn from their example.

Robert Baylor is NUCA's Director of Communications.

MAC Construction: Environment, Health, and Safety (EHS) Program

- EHS policies and procedures are regularly reviewed and updated. These procedures are used to complete site-specific programs that address job hazards that are unique to each job site.
- EHS policies require daily jobsite safety inspections by the site foreman and weekly audits by our EHS Director or staff.
- Management safety meetings are held regularly such that safety issues are effectively communicated throughout the entire organization.
- MAC performs root cause analysis for all near misses allowing us to communicate efficiently across all personnel such that it can be prevented in the future.
- It is the responsibility of each level of supervision to ensure that his or her employees understand their role in the safety of the project.
- Every employee of MAC has the authority to stop work should they observe a potential unsafe condition.





Komatsu PC130LC-11 Excavator

Komatsu.com

For contractors looking for an excavator that can help complete jobs faster, Komatsu's newly upgraded PC130LC-11 with a longer undercarriage design increases lifting capacity by up to 20% compared to the previous model. This durable, reliable and productive 97.2-HP small conventional tail swing excavator is easily transportable and offers a unique combination of lightweight power and agility in a small package.

Engineered for efficiency, the PC130LC-11 uses up to 12% less fuel than the previous model (PC130-8). Fuel consumption on this excavator can also be reduced with the auto idle shutdown feature that can be set to automatically stop the engine after a preset amount of idle time. The Komatsu diesel oxidation catalyst (KDOC) helps reduce particulate matter by using passive regeneration over 98% of the time. Komatsu excavators benefit from fast cycle times, seamless multifunction motions, exacting bucket movements and exceptional lifting capabilities. On the updated PC130LC-11, high hydraulic pressures help optimize high arm and bucket digging forces. For long-term durability, steel castings in the boom foot, boom nose and arm tip help spread working loads away from high-stress areas.



Yanmar SV40 Mini Excavator

yanmarce.com

The SV40 redefines the mini excavator category by pushing the limits of performance and capability. With best-in-class power, digging force and lifting capacity, you'll be hard pressed to find a job it can't do. More than just powerful, the SV40 also features our patented hydraulic quick-coupler attachment system, auto-shifting two-speed shift travel to efficiently move between work areas, and standard blade float control. You can also add optional 4-way or 6-way blade control. Plus, the advanced cab features innovative and intuitive controls, informative LCD monitoring system, and automated diagnostic making it easier to schedule maintenance for less down time and increased productivity.

The intelligently designed operator station of the SV40 is designed to be easy to use and easy to monitor machine performance. Controls fall perfectly into place and an LCD monitor makes it easy to keep tabs on engine and hydraulic parameters. Plus, with a second optional auxiliary hydraulic circuit available, you'll have even more control over attachments.

Pettibone Cary-Lift 254i

yanmarce.com



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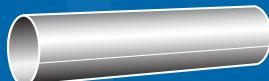
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