

dpc-PRO™

SPRING 2022 • VOLUME 13 • NUMBER 1

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MARCH 1-3, 2022



JJ

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- Best Practices Following a Disaster //
- Tracer Wire & Telecom Locating Systems //

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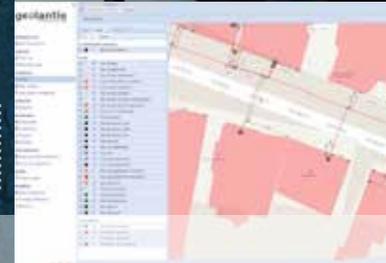
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FROM THE
PUBLISHER



BY SCOTT LANDES

Listening Makes the Difference

One of the main things everyone on the Infrastructure Resources team works hard on is to be good listeners. If we do a good job listening, we know which conference sessions to develop and what articles to include in *dp-PRO* and the *Excavation Safety Guide*. If we listen to our readers, we hear which speakers and authors resonate. If we listen to partner organizations and endorsing organizations, we choose the best dates and locations for our conference. If we listen to our exhibitors and sponsors, we create an expo floor that is full of things that will make attendees want to spend time there.

We can always get better, and one of our main goals rolling into 2022 is to keep listening and keep improving. One of the reasons we are so excited about our 2022 and 2023 live events is that we have been able to listen to the 23,522 attendees that have attended since 2004, as well as the 1,704 subject matter experts who have put on sessions. Listening has helped us develop the right mix of session topics which appeal to attendees, whether they're attending their 10th or 15th conference or coming to their very first Global Excavation Safety Conference. This has also helped us keep the quality of our sessions high. In 2019, our last live conference, our session quality rating was 3.41 (4 is EXCELLENT and 3 is VERY GOOD).

Many of our attendees have told us that they would rather see our conference happen earlier in March, or even February, because it is harder to get away as the dig season gets close. People have told us that they have big events during April, National Safe Digging Month (NSDM), which require significant time to plan and execute. They don't want to be gone right before such a busy time. Hearing all this feedback led us to having the 2022 event March 1-3. We listened to people tell us they loved Tampa, so in 2023 we are going back to Tampa, February 14-16.

Exhibitors are a key component in a good Expo and a successful overall event, so feedback from both attendees and exhibitors shaped some changes to the schedule and the layout for Global ESC 2022:

- People told us that the large, structured lunches and breakfasts were too formal and rigid. Based on this feedback we created meal pods scattered around the Expo floor which give people the flexibility to grab their meal when it is convenient for them and sit with smaller groups of people where they can network. This also gives conference attendees more time to spend with exhibitors learning about new technology.
- Many attendees have told us that in addition to full length sessions, they would love to see some shorter sessions. Rather than reduce the number of full-length sessions we have added shorter sessions which will take place on the Expo floor. Some of these will be educational Tech Talks and some will be facilitated discussions more aimed at networking and idea exchange. This will make the Expo floor more fun and full of activity.
- Some people tell us they want sessions from dawn to dusk and others want to see more of a mix of sessions, networking, and Expo time. To accommodate everyone, we dedicated Expo hours where everything is on the Expo floor. We have two learning labs on the Expo floor which will have sessions, along with the Tech Talks, networking talks, and new product demos. When the Expo floor is closed, we will have Plenaries and sessions back-to-back.

We know many people are super excited to finally be back face-to-face, but we also know not everyone is comfortable traveling yet. Back in late 2019 when we started planning our 2022 event, I never expected Covid to still be such a big part of our world, but it is clear that a sizeable part of our industry has adapted to the new world. We totally respect everyone's perspective and have done everything possible to find the right mix of safety and functionality.

My wife and I both kicked off 2022 with positive Covid tests, so now we have been on both sides of the fence. I literally tested positive the morning of January 1. Hello 2022. Luckily, my symptoms were very minor. My wife had far worse symptoms and they dragged on longer, but she battled through it. Now, it is full speed ahead into 2022.

I hope to see many of you in Phoenix, but if you can't make this year be sure to circle Feb 14-16, 2023, for Global ESC 2023 in Tampa, Florida. 



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..... **CHAMPION**



Arizona 811 is a nonprofit communication center, which performs excavation notification services and stakeholder education that promote the safety and welfare of the community by protecting underground facilities from damage. Call 811 or click Arizona811.com at least two working days before you dig.



Claims Management Resources (CMR) has provided third-party recovery services to utility companies and state transportation departments for over 30 years and understands the struggles utility companies experience when recovering the millions of dollars owed to them for property damages. Contact us to schedule a meeting to discuss how outsourcing your claims recovery can benefit your company.



Our mission is to lead Kentucky in promoting safety and preventing damage to underground facilities by providing excellent coordination and notification services at a reasonable cost.



Our mission is to lead Indiana in promoting safety and preventing damage to underground facilities by providing excellent coordination and notification services at a reasonable cost.



KorTerra is the leading provider of damage prevention software, protecting billions of dollars in underground infrastructure. For over 30 years, KorTerra has helped mitigate risk and ensured personnel safety by providing secure platforms for processing 811 locate tickets, tracking damages, and more.



MetroNet is the nation's largest, independently-owned, 100% fiber-optic provider of internet, television, and telephone services. MetroNet started in 2005 with one fiber-optic network in Greencastle, Indiana, and has since grown to serving and constructing networks in more than 120 communities across Indiana, Illinois, Iowa, Kentucky, Michigan, Minnesota, Ohio, Florida, North Carolina, Virginia, Texas, Wisconsin, and Missouri.

..... **CHAMPION**



As the country's first statewide notification center, MISS DIG 811 has helped keep Michigan safe for over 50 years. Looking forward, we will continue to reach our communities by utilizing advancing technologies, grassroots efforts, and consistent engagement to decrease damages across the state.



OKIE811, Oklahoma's One-Call System, is the liaison between excavators and underground facility owners/operators in the state of Oklahoma. We are available 24/7/365. Excavators call 811 or visit our website to submit a web ticket prior to starting your excavation project. This is a FREE SERVICE!



Pennsylvania One Call System Inc. is a non-profit service company dedicated to minimizing utility service interruptions, reducing on-the-job injuries and deaths, promoting a higher level of public safety and protecting the environment, available 24 hours per day, every day of the year.



Missouri One Call System is THE go-to source for all things damage prevention in Missouri. The mission of Missouri One Call is to enhance public safety and prevent damages to underground infrastructure. Using innovative approaches and time tested awareness and education strategies, Missouri One Call serves as a comprehensive resource for damage prevention stakeholders throughout Missouri and beyond.



Our mission is to protect the buried assets that power our everyday lives. Since 1990, Rhino Marking & Protection Systems has been the industry leader in damage prevention. We have over 30 million products installed across the globe protecting underground utilities.



North America's leader in underground utility damage prevention, USIC protects critical infrastructure and communities nationwide. Utilizing state-of-the-art technologies, we provide the highest quality, safest, and most accurate locating services, and the size and scope of our operations deliver significant cost savings for our customers.

CHAMPION



Alberta One-Call, Alberta Common Ground Alliance & the Joint Utility Safety Team have united under one name: Utility Safety Partners; Alberta's trusted resource for utility safety, education & awareness to prevent contact with overhead and underground energy & utility assets.
#ClickBeforeYouDig



North American Telecommunications Damage Prevention Council

The NTDPC is a non-competitive forum dedicated to promoting the awareness and protection of telecommunications facilities and the use of One Call notification systems. Our goal is to prevent damage to the aerial & buried facilities that form the telecommunications infrastructure.

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of sponsorship offers valuable benefits that place your organization at the center of the conversation. Contact Jerilyn Foster for more information. Email: jerilyn@ir-savinglives.com | Cell: 507-581-3399



Ketha Molina

An Unrivaled Commitment to a Culture of Safety

KETHA MOLINA IS THE SENIOR DAMAGE PREVENTION MANAGER FOR TEXAS811, VICE PRESIDENT OF THE DAMAGE PREVENTION COUNCIL OF TEXAS, AND PRESIDENT OF LEADING WOMEN OF DAMAGE PREVENTION.

She has more than 19 years of establishing and cultivating strong partnerships, implementing successful programs and initiatives, creating a culture of empowerment and workplace responsibility, and using her skills to advance and develop safety.

Leading Women of Damage Prevention is designed for the advancement and discovery for all women who have an interest in underground infrastructure. The group's mission, and Ketha's vision, is to influence and encourage all women in the damage prevention industry to be bold, confident, and brilliant through collaboration, empowerment, and networking.

Words her peers use to describe Ketha include: dedicated, educator, entrepreneur, respected, knowledgeable, creative, passionate, reliable, brilliant, loyal and driven.

"Ketha is an educator and thought leader in the damage prevention space," said Abby Ferri, Senior Risk Control Consultant with Gallagher. "She is a strong example for young Latina women looking to get into the safety profession."

"Ketha is a dedicated damage prevention manager and a subject matter expert on Texas damage prevention regulations," added Doug Meeks, Damage Prevention Manager with Texas811. "She provides damage prevention and excavation training in English and Spanish to more than 5,000 students annually. She is also very good at coming up with new ideas on how to reach underserved areas or groups."

Ketha has a reputation for serving on statewide, regional and national damage prevention organizations. She is passionate about what she does and strives to educate everyone she interacts with about the importance of safe digging and calling 811 before you dig.

"The question should be, what does Ketha NOT do to promote damage prevention and safe excavation," said Jennifer Pratt, Program Manager at Texas811. "Ketha is simply a rock star! She is an advocate for all that work in the industry and her passion shows in all that she does."

Her work for Texas811 and the Damage Prevention Council of Texas has made her a household name when



it comes to underground infrastructure safety in Texas and she serves as a liaison between Texas811, the regional Hispanic Contractors Association, and Hispanic Contractors Association de Tejas. But now she is having even more impact across the country with the Leading Women of Damage Prevention.

"She is really building a strong foundation for the Leading Women of Damage Prevention social enterprise," claimed David Ferguson, Damage Prevention Manager at Texas811. "She has now been invited to speak about Leading Women of Damage Prevention at the upcoming Global Excavation Safety Conference in Phoenix."

And as far as Ketha being honored as a *dp-PRO* Damage Prevention Hero goes, Tina Sanders, Damage Prevention Manager with Texas811 said, "Ketha is a true champion in the industry, supporting damage prevention activities and promoting safe excavation to a wide array of individuals."

And Jennifer Pratt adds, "If you don't know Ketha, get to know her. She is the type of person you want in your corner, fighting for you and cheering you on. She is an incredible mentor and I am better because I know her and have the privilege of working with her." 

“Ketha is simply a rock star! She is an advocate for all that work in the industry and her passion shows in all that she does.”



WEB

SPRING 2022

EXCLUSIVE

BONUS CONTENT:

Visit dp-pro.com/current-issue to enjoy these additional articles

SOCIAL MEDIA

Video Library, What's Trending, Hot #Tags and More!

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CALENDAR OF EVENTS

Live and Virtual Events in the Underground Infrastructure Industry from March through May.

PAGE III

CHECK OUT PAST ARTICLES

On dp-PRO.com

- Evolving State Privacy Laws
- Spotlight: Facility Notification Center Association
- Work Zone Safety Awareness
- Detecting Underground Lines
- Drone Inspections
- Utility Maps & Hydro Excavation
- Covid-19 and Sewer Deterioration
- AND MORE!





HOT #TAGS

Utility Safety Partners @Utility_Safety - Dec 29, 2021
 Congratulations! Welcome to the industry, our shared safety partnership and your role in the damage prevention process! #ClickBeforeYouDig #WherethestheLINE #Achievement #Safety

APTN News @APTNNews - Dec 27, 2021
 The first-ever, all-woman Heavy Equipment Operator class at the Interior Heavy Equipment Operator College.

These grads from Little Red River Cree Nation-Garden River, Alberta celebrated by wearing traditional ribbon skirts.

#ClickBeforeYouDig

A classic, #ClickBeforeYouDig continues to remind everyone how fast and easy it is to submit a locate request online.

SCGA @SaskCGA - Jan 2
 Your Sunday chuckle. If dogs can learn where to dig safely, so can you. sask1stcall.com/request-online/ #clickbeforeyoudig #digsafe #besafeSK #damageprevention

FLOODS TRYING TO EXPLAIN TO THE NEIGHBOURS TOOLS THE AREAS WHERE THEY CAN BURY ALL THEIR BOXES.

REMEMBER THE SILENT GUY WITH THE SHovel? HE'S THE ONLY ONE WHO CAN BURY ALL THEIR BOXES.

#ClickBeforeYouDig

CCGA @CanadianCGA - Dec 9, 2021
 Meanwhile in @cityofhamilton @enbridgegas is proud to support the @CFHOF during #GreyCup108 week. Promoting damage prevention in both official languages. #ClickBeforeYouDig #DigSafe

330 Views 0:08 / 0:30

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WHAT'S TRENDING



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 Pittsburgh, PA | pgh2o.com | Joined April 2010
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NYC Water @NYCWater - Jan 6
 50 years ago today, sandhogs were working on City Water Tunnel No. 3 with this crawler type drill jumbo. The first stage of the tunnel broke ground in 1970 and was completed in 1998, entirely excavated using the drill and blast method. 1/6/1972 #tbt #TodayinNYCWaterHistory



Believe it or not, public utility social media accounts are gaining tens of thousands of followers online thanks to a more transparent (and funny) approach to PR.





#LeadWithInfrastructure

United For Infrastructure works to educate the American public and policymakers about the importance of infrastructure to the nation's economy, workers, and communities. In partnership with the leaders at all levels of government, labor unions, the business community, associations, and think tanks we have led the charge for nearly a decade to ensure that our nation's infrastructure meets the needs of every American – both now and for future generations.

Learn more at unitedforinfrastructure.org/



WHAT DO YOU THINK?

This issue's question:

The Winter issue of *dp-PRO* featured a story on Underground Service Alert's 811Pro.com, an online training platform for California and Nevada. Would you prefer and online training option for your state?

- A) Yes
- B) No

(Learn more: dp-pro.com/changing-the-way-stakeholders-get-trained-online/)

To answer click **HERE**

<https://dp-pro.com/survey/>



Winter Issue Results:

Do you see augmented reality being used in your field within the next 10 years?

- A) Yes, (42%)
- B) No, (58%)



Trenchless Pipeline Rehabilitation

Trenchless Pipeline Rehabilitation methods are used more and more around the globe as aging water, sewer and other utility pipelines are in need of repair or complete rehabilitation, whereby excavating and pipeline replacement is no option, due to the site conditions above and below ground (heavy traffic roads, residential and office build-ups, pipeline congestion - below ground). This group is meant to share opportunities in pipeline rehabilitation contracting for small and large diameter pressure and non-pressure pipelines. 



Calendar of Events

Due to COVID-19, some events have rescheduled or transitioned to a virtual environment. Be sure to verify the status of all events you are planning to attend. (V = Virtual Event)

March

February 22 – March 4 (V) ASSP SafetyFocus

February 28 – March 6 Damage Prevention Week (Phoenix, AZ)

- 1-3 **Global Excavation Safety Conference (Phoenix, AZ)**
- 2 & 3 ITA Showcase (Portland, OR)
- 2-5 NUCA Convention (San Antonio, TX)
- 6-10 AMPP Annual Conference + Expo (San Antonio, TX)
- 7-10 No DIG Berlin (Berlin, Germany)
- 7-11 2022 Spring Committee on Petroleum Measurement Standards Meeting (Dallas, TX)
- 8 & 9 TechAdvantage (Nashville, TN)
- 9 & 10 Oklahoma Excavation Safety EXPO (Norman, OK)
- 12 & 13 JJ Harrison: Okeechobee Cowtown Rodeo (Okeechobee, FL)
- 13 Natural Gas Industry Spring Gas Conference (Columbia, SC)
- 14-16 2022 MTA Annual Convention & Trade Show (Minneapolis, MN)
- 14-18 CONEXPO-CON/AGG (Las Vegas, NV)
- 19-27 JJ Harrison: La Fiesta de los Vaqueros (Tucson, AZ)
- 28-30 SCTBA 2022 Annual Convention (Charleston, SC)
- 28-31 AGC Convention (Grapevine, TX)
- 29-31 World of Asphalt (Nashville, TN)
- 30 (V) Pipeline Opportunities Conference
- 30-April 1 Tennessee Damage Prevention Summit (Franklin, TN)

April

- 3-7 Texas Water 2022 (San Antonio, TX)
- 4-6 Gas Ops Roundtable (Omaha, NE)
- 5-7 2022 Texas Communications Expo (Belton, TX)
Waterpower Week 2022 (Washington D.C.)
- 6-8 FUCC Spring Meeting (Ocala, FL)
- 7 Competent Person and/or Confined Space Training (NUCA of Arizona)
- 8 Spring Golf Tournament (NUCA of Arizona)
- 10-14 NASTT 2022 No-Dig Show (Minneapolis, MN)
- 11-15 NAPSR Southern Region Meeting 2022 (Lexington, KY)

- 14-17 JJ Harrison: Red Bluff Round-Up (Red Bluff, CA)
- 18-24 Locator Safety & Appreciation Week (LSAW)
- 19 National Gas Industry Management Conference (Louisville, KY)
- 21-24 JJ Harrison: Clovis Rodeo (Clovis, CA)
- 26-28 Canadian Gas Association Nexus 2022 (Vancouver, BC)
iP Utility Safety Conference & Expo (Orlando, FL)
- 29-May 1 JJ Harrison: Stonyford Rodeo (Stonyford, CA)

May

- 2-4 Utility Conference (Portland, OR)
- 2-5 Offshore Technology Conference 2022 (Houston, TX)
- 2-6 NAPSR Western Region Meeting 2022 (Las Vegas, NV)
- 3 & 4 Minnesota Health & Safety Conference (Prior Lake, MN)
- 3-5 Broadband Communities Summit (Houston, TX)
2022 Pipeline, Control Room and Cybernetics Conference (Savannah, GA)
- 3-6 AGA Operations Conference (New Orleans, LA)
- 7 & 8 JJ Harrison: Mother Lode Round-Up (Sonora, CA)
- 8-10 APGA Board & Committee Meetings (New Orleans, LA)
- 10-12 NSC Southern Conference & Expo (New Orleans, LA)
Appalachian Underground Corrosion Short Course (Morgantown, WV)
TOC Conference North Dakota Telephone Association (Fargo, ND)
- 20 & 21 JJ Harrison: Penn Valley Rodeo (Penn Valley, CA)
- 23-25 Mountain Connect (Keystone, CO)
American Industrial Hygiene Conference & Exposition (Nashville, TN)

Abstract Submissions Now Being Accepted:

- Global Excavation Safety Conference
[IR-SavingLives.com/submissions](https://www.ir-savinglives.com/submissions)

To include your event in an upcoming Calendar of Events schedule, email karin@IR-SavingLives.com. 



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SHARK
TANK



NEWS



811 EMERGENCY REPORT: \$61 Billion Lost due to Waste & Inefficiency

(ConstructionDrive) – Failures and inefficiencies in the country's "811 Call Before You Dig" system are costing utility consumers \$61 billion per year and increasing risk to public safety, according to a report released in November by the Infrastructure Protection Coalition (IPC).

The report found that expenses were accrued most often when locate marks were destroyed, leading to wasted time and additional work, and when utilities and third-party locators received poor instruction or were sent to do work for projects that didn't happen.

The study looked at all 50 states in the U.S. plus the District of Columbia and the city of Chicago. According to the report, Arkansas, Florida, Georgia, Michigan, Missouri, Wisconsin and the District of Columbia accounted for more than 20% of the waste, for a combined \$13 billion. The \$61 billion in waste, inefficiency and excess cost is embedded in the system and largely invisible, the report said. This sits on top of the \$30 billion in annual out-of-pocket costs due to damage to underground utilities, calculated in 2019 by Common Ground Alliance.

The study put forward a variety of solutions, including:

- Mandating that all asset owners, operators and other personnel enroll in the 811 system
- Refine dig laws so that all damage to underground utilities must be reported
- Create a third-party enforcement board to deal with issues
- Balance the penalty structure so that all parties face a similar risk



PHMSA FINAL RULE TO EXPAND OVERSIGHT & INCIDENT REPORTING TO ONSHORE GAS GATHERING PIPELINES

PHMSA's new regulations will now cover more than 425,000 miles of gathering pipelines, designed to improve public safety, reduce threats to the physical environment, and promote environmental justice for minority populations, low-income populations, and other underserved and disadvantaged communities.

The gas gathering lines typically transport natural gas from production facilities to interstate gas transmission pipelines. Historically, these lines were exempt primarily due to the rural location, smaller diameter, and smaller pressure lines. The new rule, due to be effective on May 16, 2022, will require onshore gas gathering lines to begin filing incident reports and comprehensive annual reports. Some of the new requirements include:

- Corrosion control measures
- Damage prevention measures
- Public awareness programs
- Maximum allowable operating pressures
- Install and maintain mile markers
- Conduct leakage surveys
- Develop and implement emergency response plans

Rhode Island Contractors Cited in Sewer Line Excavation

The U.S. Department of Labor Occupational Safety and Health Administration (OSHA) cited two Rhode Island contractors after inspectors said the companies exposed employees to cave-in and struck-by hazards in a trench over the summer.

According to the report, Reyes Landscaping, Inc. and TRD Contracting LLC face \$75,000 in penalties after failing to correct hazards identified by OSHA inspectors. Inspectors said when they arrived at a sewer installation site in July, employees were working in a trench between five and eight feet deep without cave-in protection. Inspectors found nobody with knowledge and authority to identify hazards inspected the trench before the employees began working. Employees did not have helmets, nor an adequate ladder.

OSHA cited the companies after changes were not made five days after returning to the excavation site.

ADVANCING THE DESIGN OF PNT SYSTEMS

The U.S. Department of Homeland Security (DHS) Science and Technology (S&T) Directorate recently published a *GPS Receiver Whitelist Development Guide* and a new release of the *Positioning, Navigation and Timing (PNT) Integrity Library* in an effort to protect against GPS spoofing.

The free resources are intended to advance the design of PNT systems and increase resilience of critical infrastructure to PNT disruptions. "We hope this guide and related resources will help industry advance towards a cybersecurity-based approach to PNT resilience," said S&T Technical Manager Ernest Wong.

"Since GPS signals can be jammed or spoofed, critical infrastructure systems should not be designed with the assumption that GPS data will always be available or accurate," said S&T Project Manager Brannan Villee. "Application of these new tools will provide increased security against GPS disruptions, however."



protecting Mississippi's vital flow...one call at a time

Mississippi 811 Presents Damage Prevention Champion Award

Mississippi 811 Magazine honored 15-year damage prevention veteran Marty Turner as its Damage Prevention Champion. Turner is the manager of damage prevention for the entire five-state network of C Spire.

C Spire is headquartered in Mississippi but also operates in Alabama, Florida, Louisiana, and Tennessee. Marty manages both the internal and external locate requests for the entire network and also keeps a close eye on contractors working near C Spire's facilities. He helps with troubleshooting and repair of faulty locates and trains his locators on how to correct common issues with lines that won't locate, even providing the equipment and materials to repair grounding and bonding to make sure all lines are locatable by electronic means.

Marty is a huge champion of Mississippi 811. He works closely with the One Call center for locates, but also helps to educate locators, contractors, and even other utility/operators to get the most out of their experience.

DENNIS DOHERTY INDUCTED INTO TRENCHLESS HALL OF FAME

Kleinfelder Senior Principal Professional Dennis Doherty was honored by the North American Society of Trenchless Technology (NASTT) as a 2022 inductee into the NASTT Hall of Fame. Since its founding in 2010, only 31 professionals have been recognized with this industry honor. Doherty will be formally inducted and recognized during the 2022 No Dig Gala Awards in April.

With more than 40 years of industry experience, Doherty has focused most of his career on design, construction, and management of underground infrastructure through the application of trenchless technology. Doherty has been a member of NASTT since 1992. Doherty also works with the Center for Excellence in Trenchless Technology and Underground Engineering at UMass Lowell. He is a Fellow of the American Society of Civil Engineers (ASCE) and contributed to the ASCE Standard Construction Guidelines for Microtunneling and Pilot Tube Methods.

Founded in 1961, Kleinfelder is a leading engineering, design, construction management, construction inspection and testing, and environmental services firm.

NEWS



NEW CALIFORNIA State Department Targets Infrastructure

This past summer, California created a new department dedicated to stopping its strained electrical grid from causing more catastrophic wildfires. The Office of Energy Infrastructure Safety (OEIS) became a standalone department, with Caroline Thomas Jacobs named director.

OEIS is fleshing itself out with energy experts, analysts, engineers, inspectors and attorneys. In simplest terms, the department will keep a watchful eye on state electricity providers' plans to harden their network against changing climate, a drying state and an ever-growing need for electricity.

"We have our own direct authority to conduct inspections," Jacobs explained. "The difference is, we are proactively looking at the infrastructure. There are more eyes and ears in the field."

Jacobs explained that one long-standing practice, known as "run to failure" is on the way out. "We need to shift from the old model to managing life cycles – replacing something before it fails, not waiting for it to fail."



JULIE Establishes Damage Prevention Advocacy Award

The late Gina Meehan-Taylor, who worked in the Canton office for Ameron Illinois, is being honored by JULIE, who is establishing a Damage Prevention Advocacy Award in her name.

Gina was the public awareness supervisor for Ameron Illinois, a past member of the JULIE Board of Directors and a member of the JULIE Public Education Committee. The award was created to recognize Gina's tireless and passionate work as a damage prevention advocate and her efforts to protect underground utilities, the people who work around them and the entire state of Illinois. An honorary donation will be made in the award winner's name each year to the Jim Meehan & Gina Meehan-Taylor Charity Golf Outing.

TENNESSEE811 HONORS ALLYSON HORNER

Tennessee811 Magazine recently honored Allyson Horner as their Damage Prevention MVP. Horner is the general manager at Gibson County Utility District (GCUD). She has been with the gas company for more than 21 years and in September celebrated her one-year anniversary in the general manager role. She started with GCUD in 2000 as an accounting clerk and worked her way up to the role of chief financial officer prior to being named general manager.



The GCUD employees have bought into Allyson's positive energy and leadership style. "We have a lot of fun around here, but we have a product that can be dangerous," Allyson said. "When it's time to go to work, we go to work and get the job done."

In May of 2021, Allyson took the lead on creating a successful safety day in Gibson County. The event, called "811 in 731" was held at the Gibson County Fairgrounds in September with more than 300 in attendance, providing more than \$3,000 in door prizes. Though the event was a collaborative effort, it would not have happened without Allyson's ownership of the project. 

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We received tremendous feedback from both attendees and exhibitors when we held Global Excavation Safety Conference in Tampa in 2019, and we are thrilled to announce that we will be returning to The Tampa Convention Center in 2023! Over the past several years we have also fielded requests from attendees to try to avoid dates

too close to National Safe Digging Month and the start of construction season. With that in mind, Global ESC 2023 will take place February 14-16, creating a perfect launching point for a safe and productive season to follow.

Stay tuned for more information.

GlobalExcavationSafetyConference.com

Ready, Respond, Recover

Damage Prevention Best Practices Following a Disaster

BY KELLEY HEINZ

When it comes to damage prevention following a disaster, *Ready, Respond, Recover* is an easy way to think about what needs to be done to be successful in safe and rapid restoration. The best defense is a good offense, and the first step is always preparation. It is imperative that an electric utility have a business continuity and crisis management plan that has been designed, implemented, and tested to ensure proper execution in a time of disaster. An automated mass emergency notification system is critical to assemble leadership, mobilize response teams and deliver messages to employees, contractors and customers through email, text messages and cell phones, assuming telecommunications services are still available. If not, Wireless Priority Service or Satellite Broadband Services would be necessary to communicate with teams. The team of emergency responders should be pre-trained and well versed on all processes and procedures well before an event occurs. This prevents the need for on-the-spot training for maps, clearances, lock out/tag out, etc. needed to work safely.

A large part of being ready is mitigation. Regularly scheduled patrol of overhead infrastructure as well as a robust vegetation management program reduces the likelihood of wires down

its lifespan to reduce the likelihood of an unscheduled outage as old equipment with multiple repaired faults may pose a risk for increased outages during heat-related events.

Once the threat of the disaster has passed, assessment of the infrastructure is needed. Are there pockets of damage or is it more widespread? Do we need to de-energize circuits before work can safely begin? Do we need to remove debris before rebuilding and restoration can start? This information provides us a guide as to which emergency responders need to be called in first. The more information, the better the response.

After assessment of the damage, begin to respond and dispatch much needed emergency personnel to the areas that can provide the safest and quickest path to restoration. Most disaster events are severe storms, high wind, ice, etc. After lines are de-energized for safety, send in tree crews and circuit patrollers first to remove debris so equipment can be accessed, and the damage assessed. Begin at the substation and work the mainline downstream resetting poles and re-hanging wire until the circuit is complete and can be re-energized. This is followed by tap fuses off the main and finally services. During this time, it

tain hazards. Load is most likely out of configuration so communication between the crew and locator is needed so that locators are briefed on hazards and are not locating in areas where they don't need to be, and crews aren't digging where there are no marks. Joint Operation Centers that contain members of the municipality, the utility, etc., can help advise on access points or trouble areas and can also assist in getting word out to their constituents, especially about hazards on downed wires.

Even though customers are anxious to get their power back on, it must be done safely. This includes ensuring no excavation begins without notifying the One Call and all crews working know and understand the state's One Call laws. Training up front is important, but some events require mutual assistance from neighboring states. Not all One Call laws are the same so the restoration crews, as excavators, must be brought up to speed on requirements such as the waiting period and tolerance zone. State laws should provide contractors the ability to dig on the same ticket as the utility during large-scale disaster events. This helps reduce the redundancy of calling in the same ticket by multiple excavation crews and overloading the One Call system. If the same work is being done at the same location, it should be considered a valid dig ticket for whomever is doing the work. This also prevents the locator from getting bogged down with duplicate tickets. Check with your local One Call to determine what your state allows.

During restoration, care must be taken to protect the existing underground infrastructure. The last thing an excavator needs is to hit a gas main while attempting to install a pole, so the crew should know the dig number and the extent of the work called in. They must only work in the areas outlined on the ticket and only perform the work advised on the ticket. They should not be trenching in a service when they called in to set a pole.

due to tree contact, broken limbs, and uprooted trees. Also, where possible, aged underground infrastructure should be replaced at the end of

is important that coordination occur between the One Call system, the utility, its contractors and locators. This is a critical time, and some areas may con-



**Ready
Respond
Recover**

“Excavators should always work with marks on the ground and prudently dig within the tolerance zone.”

Helpful tools like smartphone apps from locate vendors can provide the excavator access to view the ticket as well as confirm the locate has been completed and which utilities have been marked. This makes it easier to schedule crews to each location when there is confirmation that the locate is complete and allows crews to remain productive rather than waiting on a locate.

Positive Response is used in some states and produces the same outcome of ensuring crews are sent to locations where the locate is complete. Once the area is located, the crew must dig by hand carefully and prudently to expose any marked utilities within the tolerance zone. During storms, vacuum excavation is always a good tool and can safely excavate in congested areas quickly when multiple utilities are present or when imminent danger is present requiring immediate excavation. This reduces time need-

ed to hand dig with a shovel and when properly used, helps to prevent damage to other utilities. The crews should also know when and how to contact the One Call system in case they need marks verified or confirmed.

When it comes to damage prevention best practices after a disaster, the main points to remember are *Ready, Respond, Recover*. Always consider the actual business plan before discussing the damage prevention plan. While in the response and recovery process, coordinate between the utility and the municipality to help determine areas of concern or pockets of minor or major damage. Open the lines of communication between the crew and the locator to advise of hazards in the field and to aid in the confirmation of existing infrastructure. The execution of the work is where the most exposure for damage lies. Use tools such as vacuum excavation in

areas of congestion. Excavators should always work with marks on the ground and prudently dig within the tolerance zone. Digging to the depth of the excavation, not using mechanized equipment in the tolerance zone, and visually identifying the line have always been best practices of safe excavation.

Ready, Respond, Recover is a good starting point when developing a damage prevention plan following a disaster. It is important to understand that damage prevention is a shared responsibility and when we all understand our role and the impact it has on the process, we have a much better opportunity to get the service restored for our customers in a timely and, most importantly, safe manner. **DP**

Kelley Heinz is Senior Claims Case Manager/Damage Prevention at ComEd. She can be reached at kelley.heinz@comed.com.

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Bringing Fiber to a Remote Village in Nepal

BY TEK BAHADUR LIMBU

Nepal is uniquely situated between India in the south and China in the north. Being landlocked, the landscape is quite distinct with a beautiful mixture of plains, hills and the mountains. With a total area of more than 91,661 miles and a population of 30 million, it is bigger than 100 other countries.

The economy of Nepal runs mostly based on agriculture, which employs 60% of the population but contributes just 25% of its GDP. With a total GDP of \$36 billion and just a GDP per capita under \$1300, it is still an underdeveloped country.

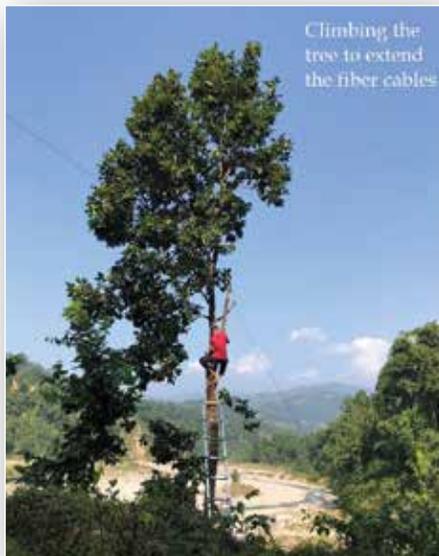
Konnect Nepal Networks hopes to make a small impact to reduce the outbound manpower and over-reliance on remittance by delivering broadband in the most remote parts of Nepal. Konnect Nepal Networks is one of the leading private internet service providers (ISP) in Nepal reaching 40 districts out of 77 in the country. The company has a particular focus on the rural sectors where fixed line connections are difficult to reach.

Acting as an Internet aggregator, we enable local entrepreneurs to start their own home-grown networks in their villages and suburban cities all over the country, and we cover as many as 1,000 villages out of a total of 6,743 all across the country.

Over 24 million people out of 30 million in Nepal have access to the Internet as of 2021. Out of these, 11 million of the population has access to the internet via 3G, and the number of 4G users has reached more than 7 million. The contribution of fixed broadband is 18% with 5 million FTTH internet users over fiber cables.

Nepal gets connected to the Internet via overhead fiber optic cables from India. The current international bandwidth capacity of Nepal is estimated to be 800 gbps.

Nepal has one of the harshest terrains in the world which makes getting fiber optical connectivity a big challenge. The challenge comes especially getting fiber connectivity to the hills and moun-



tain regions. It has to be noted that over 95% of all fiber connections are overhead or aerial in Nepal. This means that fiber optic cables are tied overhead on utility poles all across the country.

Overhead fiber comes both with its share of advantages and disadvantages. The advantages being that it is cheap and quick to deploy. The disadvantages being that overhead fiber is prone to be damaged from natural calamities such as strong winds and is easily disrupted due to environmental factors.

Underground fiber is a remote possibility in Nepal where it is deployed only in a few areas in selected urban cities. The burden of cost and the infrastructure required to deploy underground fiber makes it currently impossible to be deployed in rural Nepal. Therefore, we have to run aerial fiber cables in many cities, towns and villages, making it a challenging task to keep the network stable and running.

To minimize the downtime and the risks of fiber getting damaged, we use a few unique techniques in Nepal. We use aluminum wires and PVC coated binding wires to tie the fiber cables to utility poles. These support wires will hold the

fiber cables tightly to the poles making them less likely to be dragged down.

Unfortunately, because the overhead cables are tied to poles, the poles can easily be knocked down by vehicles or even human errors making the cables unusable. To repair these damaged cables, a dedicated team has to be on standby 24-7 increasing the manpower costs.

In this article, we focus on our journey to connect a remote village named Kalitar of Rong Rural Municipality. This village is located in the eastern district called Ilam. Konnect Nepal partnered with



Mr. John Tamang, a local entrepreneur, to deliver internet in the borders of Jhapa and Ilam districts.

However, delivering fiber connectivity to this village proved to be a difficult challenge. There were two major hurdles:

- 1. Lack of utility poles**
- 2. A small hill in between the central POP and the village**

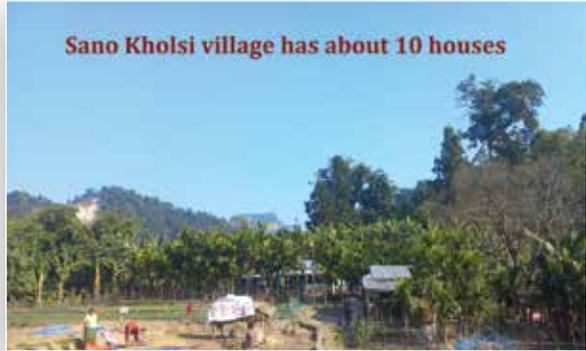
All fiber cables and equipment had to be carried manually by hand up the hill. It took half a dozen workers to transport the equipment to the top of



Finalizing the link to Kalitar village

the hill. After the arduous work of transporting the fiber cables up on the hill, we faced another daunting task. There were no utility poles to tie and connect the fiber cables.

We had to rely on a large tree acting as a repeater to get the trunk link to the village. It took a single technician to carefully and skillfully climb the tree with the fiber cable. Once he was toward the top, the fi-



Sano Kholsi village has about 10 houses

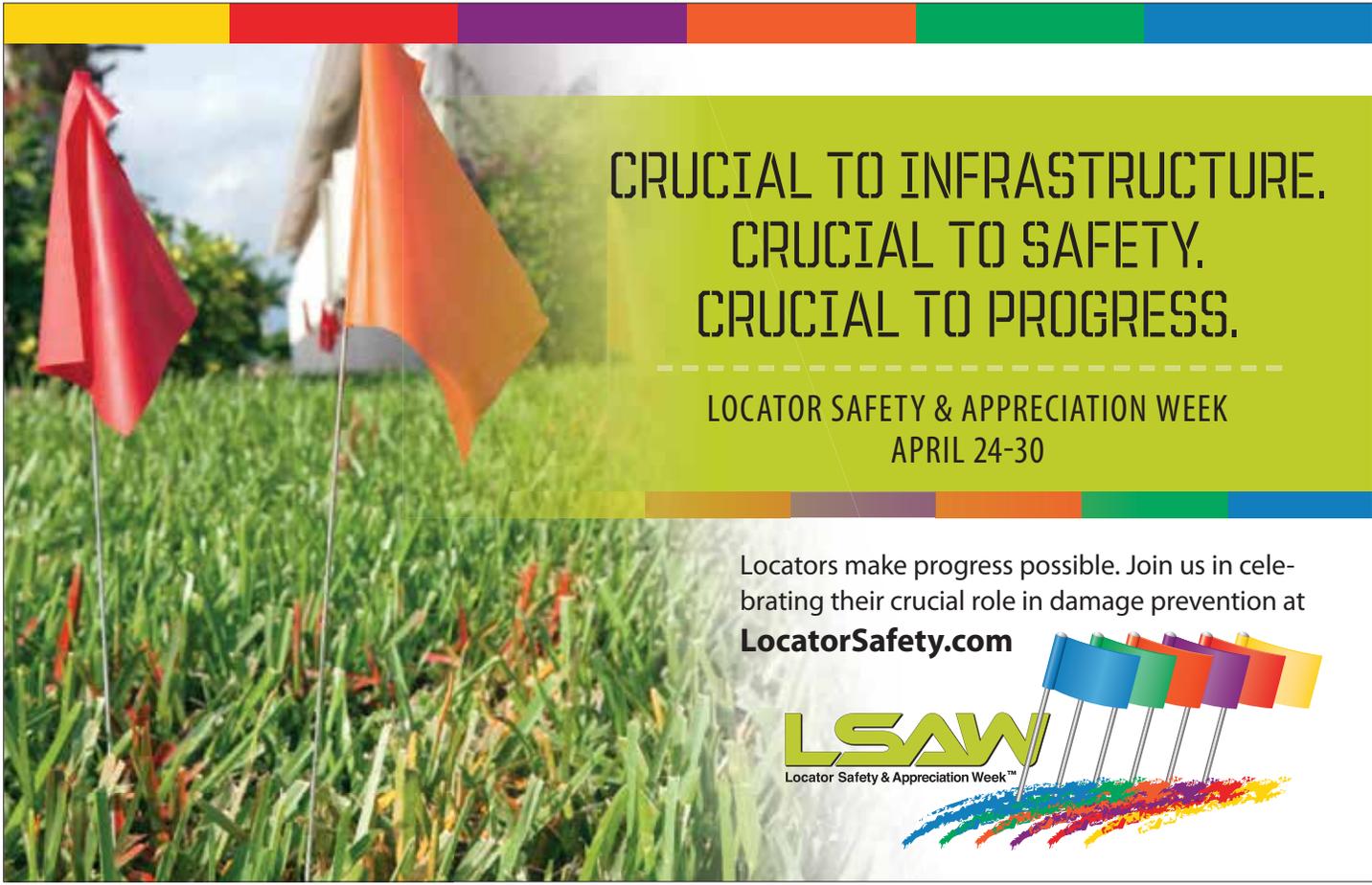
ber cable had to be tied to the strongest branch of the tree. Finally, they completed the task and connectivity to Kalitar village became a possibility.

Along the Biring River touching Jhapa and Ilam districts, the only internet connectivity in the village is limited 2G/3G services, which are quite expensive. It took an entire week to lay the cables from the central POP to reach Kalitar village. Once the fiber network reached the village, the villagers experienced high speed broadband for the first time. Without worrying about the cost, video lagging or buffering, they can now use the internet for education, video calls, Zoom classes, entertainment, etc. Konnect Nepal delivers broadband to consumer

homes throughout Nepal at a relatively economical prices ranging from \$7 to \$40 per month. The speeds range from 10 mbps up to 100 mbps. Internet is essential in today's world and will possibly fall under the same category as shelter, water, food, education and electricity.

We hope that the fiber internet installed in Kalitar village will open more opportunities to the local villagers and empower them to make the right decisions. A 2012 study by the World Bank showed that in developed countries like the U.S., every time broadband penetration rises 10%, GDP rises 1.19%. In developing nations, the increase in GDP is even more at 1.35%.

It is in this regard that Konnect Nepal believes that the growth in connectivity will directly be proportional to the economic growth in Nepal. Being a landlocked country, Nepal has limited access to the rest of the world via roads and seas. Konnect Nepal is working to make fiber connectivity possible in many different villages across Nepal. 



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It's Time for a New Approach on Tracer Wire and Telecom Locating Systems

BY MONTE HARNDEN

Telecom systems (excluding fiber optic cables) don't normally require tracers because the locate signal is applied to the conductor sheaths. However, many principles mentioned in this article still strongly apply.

Tracer wire is specially designed to be buried near non-metallic pipes and cables. Some examples are fiber optic cables, poly pipe, fiber glass pipe, PVC pipe, Fiberspar pipe, and more. This is done to provide an electrical path so less expensive conventional locating methods can be used to locate otherwise difficult-to-locate utilities. Hopefully

less likely to transfer to unintended targets. This translates into cleaner, more accurate locate results. It does, however, require direct connection points and far-end grounding (the far end of wire locates need to be grounded).

Higher frequencies don't require far-end grounds but they create very large, intense signals which readily transfer to unwanted targets, and are not optimum, particularly in congested areas. The locate technician can become easily confused resulting in bad marks that lead to unnecessary damage and serious consequences. In short, using higher

This is a tremendous improvement over the past!

With these two measures in place, a locate technician can now design their own path and accuracy and efficiency are dramatically improved. Fortunately, specialized, retrofit systems are available that solve these problems with the flip of a switch. (Figure 2) No more lost hardware or frozen fingers fumbling with poorly thought-out connectors.

SLOPPY CONSTRUCTION

Sloppy, outdated construction methods continue to sabotage our infrastructure damage protec-



Bad Tracer Install
Photo: Courtesy of Center Line Resource

Figure 1



Simultaneous Isolation Switch
Photo: Courtesy of Tracer Wire Technologies

Figure 2



Wandering Tracer

Figure 3

the wires are installed in close proximity with the utilities they are intended to protect. Undoubtedly tracer wire plays an extremely important and necessary role in the continuing effort to minimize preventable damage to our infrastructure.

Poor understanding of standard line locating basics and sloppy, outdated construction methods are causing thousands of mis-locates every year. Sadly, most people are still following the bad practices of the past. As underground utilities become more crowded, it's time for serious change. New technologies exist today to fix most of the problems of the past.

LOCATING WIRE

When locating wires, tracers or telecom, low frequency should be a locate technician's first choice. It creates a small, compact signal which is

frequencies in congested areas is a terrible practice that needlessly creates confusion and bad locates.

If you spent any time in the field you have seen tracer wire ends hanging free or lost in the weeds. (Figure 1) This is a mistake for two reasons - not only are they subject to environmental damage but they remain ungrounded as well, forcing locate technicians to use high frequency in order to overcome the lack of far-end grounding.

Permanently grounding wire ends is also a bad practice! Grounded ends need to be easily interruptible in order to provide isolation preventing the transmitter's energy from simply traveling to the best ground rather than following a pre-determined path. Also, it is extremely important to make sure all line segments are easy to separate from one another and the ground simultaneously.

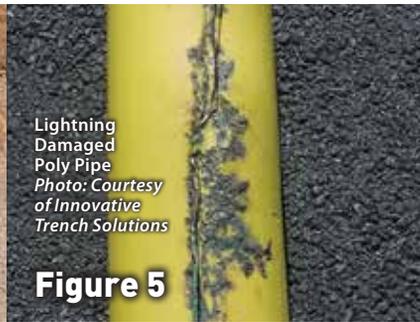
tion measures. Many are still building in stumbling blocks that cannot be easily rectified. For instance, when tracer wires "wander" in a ditch or are stretched around corners, they end up too far away from the utilities they are intended to protect. (Figure 3) Remember, a locator's signal follows the tracer, not the actual utility. Consider how often you have seen construction crews install tracers poorly. They must be installed with regard for function.

For best results, tracers should not be closer than 2" or farther than 6" from the utility. Never wrap them around or tape them directly to the utility. (Figure 4) They should never be allowed to contact the utility. (Figure 5) The utility could be damaged if lightning or stray electrical current accidentally finds its way onto the tracer. (Figure 6) They should be held in place with spacers at the 5



Never Tape Tracers to Utilities

Figure 4



Lightning Damaged Poly Pipe
Photo: Courtesy of Innovative Trench Solutions

Figure 5



Properly Spaced Tracer
Photo: Courtesy of Innovative Trench Solutions

Figure 6

o'clock or 7 o'clock positions if possible. This puts them in the "shadow" of the pipe which helps to minimize damage from backfilling and subsequent excavations while remaining close enough to achieve accurate locates.

If tracer insulation is damaged and left unrepaired it will corrode forcing the use of high frequency to overcome any breaks. In order to overcome less obvious insulation nicks, small magnesium anodes can be used as grounds. They make excellent grounds and help protect tracer wires from corrosion due to insulation damage.

Never tie your system to foreign grounds. Since it's impossible to know what foreign grounds are

tied to, this practice will definitely create impossible locating nightmares. Signal will go in many different directions simultaneously creating unbelievable confusion. Use your own, independent grounds for your system.

After locates are complete, all tracers and locate wires should be bonded together and grounded at termination points along the system. This does three things:

1. Allows a locating tech to start any place on the system with the assurance that the far-end is grounded
2. Helps protect wires from lightning and stray electrical current

3. Makes wires much more visible to passive locating.

Never use standard electrical wire (THHN or THWN) for tracer wire installations. They are not designed for it and will fail prematurely. Tracer wire is specifically designed for the task. It is covered with a thick high density or high molecular weight polyethylene insulation (HDPE or HMWPE) which is designed for the harsh environments and is unbelievably tough.

Never use conventional splicing methods for tracer wire. They often exist in extreme environments and require special care. Splice kits specially designed for this purpose are available from many suppliers. 



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Excavation Safety Alliance (ESA) virtual Town Halls are an open forum for all stakeholders to discuss concerns and present potential solutions to improve damage prevention and excavation safety. The ESA Town Halls are free to attend and are open to anyone.

The goal of each ESA Town Hall is to provide a forum for open discussion on key industry topics and to be a place where anyone can suggest solutions or improvements. There is rarely one solution that will work for everyone, but often someone has a solution that will work for others. While outlining the problems and causes is an important first step, the goal of the ESA Town Halls is to end up focused on solutions and improvements.

Each ESA Town Hall will have a moderator and a panel. As a Town Hall these will be heavily weighted towards questions and comments from the virtual audience. At the end of each Town Hall there will be a short survey asking participants if there should be follow-up meetings on this topic to keep discussing solution ideas.

A summary of each Town Hall will appear in the *dp-PRO* magazine. Each Town Hall will also be recorded and available on the ESA website.

Guiding Principles for ESA

- **ESA is the place in the industry where solutions to industry problems are developed, with no bias towards any stakeholder group.**

- **ESA will not develop best practices, but ESA will post members best practices and/or solutions that have worked for them.**
- **ESA is the place where subject matter experts will have a platform to have their voices & ideas heard.**
- **ESA is the go-to virtual resource for damage prevention and excavation safety education.**
- **Every ESA member and member company is equal.**

ESA will Evolve

Town Halls and Virtual Keynote speakers are the first step in the evolution of ESA. Future plans include:

- *Allowing people to post proposed solutions on the ESA site*
- *Allow associations and companies to join ESA*
- *Hosting virtual networking events*

ESA Virtual Keynote Speakers

These speakers will be experts with compelling messages and great content. Our first two keynotes will be:

Going to the Rail: An 811 Outreach

JJ will not only share his experiences on the road as an 811 Ambassador, but also share practical knowledge on successful outreach experiences to cognitively engage the customer on the 811 message.

The Power of Safety First

From electrical construction accident survivor to Olympian, Cliff Meidl's dynamic presentation shares his incredible journey of resilience and vision and how he persevered to overcome many challenges. Cliff will demonstrate how worksite accidents affect both our employees and families.

Check [ExcavationSafetyAlliance.com](https://www.excavationsafetyalliance.com) for dates and details.



2022 Town Hall Schedule

APRIL 14 AT 10:30 AM CST

Town Halls will be held monthly on the second Thursday of the month. Each Town Hall will be scheduled for an hour.

Where: Register at ExcavationSafetyAlliance.com

Topic: April 14th – Let's Partner for 811 Solutions!

Everyone wants the same outcome, on time locates with zero damages while keeping workers and the public safe. Contractors say, "Why can't I get my marks on time and accurate?" Locators say, "Why do you request so many unnecessary tickets or keep destroying the marks I just put down?" 811 Centers serve utility owners and excavating customers who take positions on all sides of every issue and can help bridge the gap between parties. Let's partner to keep improving. This will be a forum so bring your ideas.

FUTURE TOPICS

1. Late Locates

What causes them and how can they be reduced significantly?

2. Exemptions to One Call Laws

Why do these exist, what problems they cause, and should they be eliminated?

3. Mandatory Damage Reporting & effective metrics Pros & Cons.

Why is this not required everywhere? Will standardizing the data collected in every state, province, and globally help the industry develop the best solutions?

4. Enforcement of One Call Laws

What makes them fair and effective? Third party enforcement Boards are a trend that seems to be effective. What do you think?

5. Does online ticket entry reduce damages and improve efficiency?

Do the current systems for this work well? How can they be improved? Should this be required?

6. How can effective excavation site descriptions and identification be improved?

Using white lining, GPS, and aerial images all help. When will all asset owners have complete and accurate GIS records?

7. How can you create a culture of damage prevention and excavation safety?

Educating people one at a time is important, but the real long-term solution is to create a culture of damage prevention and excavation safety that starts in the C Suite and ends in the field with technicians. How can this be accomplished with both contractors and asset owners?

8. Should tickets be standardized?

Would it improve safety and damage prevention if required response time, ticket size, distance, and ticket life were all standardized?

Have an idea for a future Town Hall?

Contact Scott@IR-SavingLives.com or Karin@IR-SavingLives.com

See excavationsafetyalliance.com for details



AGC Survey Tells Professional Excavators' Story in 811 Process

BY ALLEN GRAY

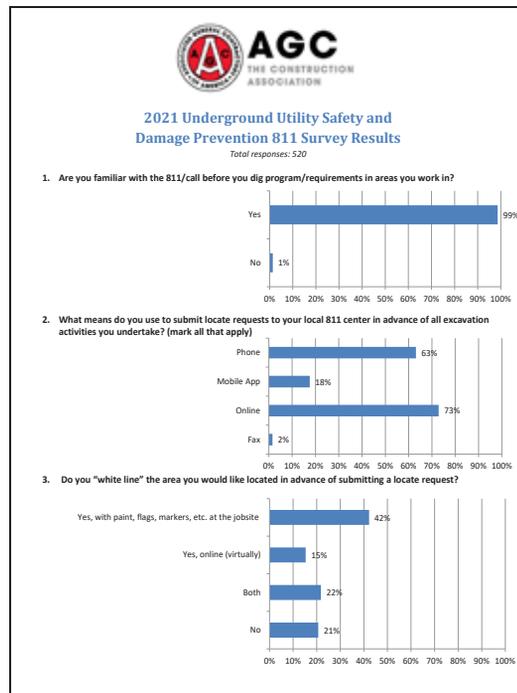
Recently, AGC of America conducted an 811 underground utility safety and damage prevention process survey of heavy water/wastewater, highway/bridge, telecom, gas transmission and distribution, and energy infrastructure contractors. The purpose of the survey is to provide an accurate accounting of the professional excavator/construction industry's story in the 811 process and to counter erroneous conclusions found in other resources.

There are many surveys and data repositories that claim to tell the professional excavator/construction industry's story in the 811 process. Many of the conclusions in those sources are heavily influenced by facility owner/operators, their locators and other process stakeholders. In addition, they include data on non-professional excavators, such as homeowners and landscapers, with professional excavators' data when compiling statistics, skewing the results. These sources point to excavators as the weakest link in the process and conclude it is excavator failure that must be addressed.

Many of these sources are being referenced by the USDOT, OSHA, states' public utility commissions and enforcement programs as an accurate representation of the construction industry's competence in the 811 process. Decisions are being made using these sources affecting the professional excavator's part in the process sometimes based on questionable data.

The 811 process involves multiple stakeholders, each with grave responsibilities they must execute properly for the overall process to work. Owner/Operators (O/O's) must be members of their local 811 center, have up-to-date maps of the facility locations and competent technicians locating and marking their facilities accurately. One Call centers are the communication hub for the process and must reliably take locate requests in detail and pass them on to O/O's to act on. And finally, the excavator must have a program in place to communicate with other stakeholders and deal with existing facilities on the jobsite. Stakeholders not executing their respective responsibilities in the process invite danger, compromise public and workforce safety and threaten the integrity of vital facilities.

Over the past two years, there have been widely reported breakdowns in the 811 process across the nation due to facility owner/operators'



failure to respond to tens of thousands of locate requests required by law. As examples, several media reports show the breakdowns include 78,000 late or no-show responses in Minnesota, 30,000 in Arizona, and 20,000 in Michigan. A major facility owner/operator agreed to pay \$65 million to settle claims that they falsified records and misrepresented response time to excavators' requests to locate and mark gas lines.

The survey results make it clear, there is room for improvement by all stakeholders, not just excavators. All stakeholders, particularly facility owner/operators, must be held accountable for failing to execute their responsibilities in the process. Often, these failures are the root cause of damages that occur during excavation activities.

Key findings of the survey show:

- 99% of professional excavators are familiar with their local 811 program/requirements
- 73% of respondents found weaknesses in the 811 process
- Top 3 weakest elements in the 811 process:
 - o 78% of respondents found accurate locating as the weakest element
 - o 56% found owner/operator response time as the weakest element
 - o 52% found wait time for locate request to clear as the weakest element
- 98% of respondents found excavators/the construction industry should have vested representation on 811 center boards of directors
- 43% found abandoned facilities are seldom marked and treated as live lines
- 53% of respondents found unmarked/mismarked facilities as the most frequent cause of damages and near-miss events
- 66% of respondents have received a claim or invoice from a facility owner/operator for a damage to an existing facility they were not responsible for
- 43% of respondents include Common Ground Alliance Best Practices in their safety program
- 57% of respondents include AGC's Elements of an Effective Underground Excavation Safety and Damage Prevention Program

We hope the results of the survey will help professional excavators tell their story as they work to ensure workforce and public safety, protect vital facilities, engage in the 811 process and work to better states' 811 programs, laws and regulations. **DP**



CHANGE IS HARD! So common sense dictates change is made as easy as is possible, which is the focus of this article.

COVID brought many changes, and training that I do was no exception. Pre-COVID work was onsite, i.e., in-person training. Now, I'm being introduced to a virtual classroom and the need to learn the Adobe Connect platform. I'm not the most tech savvy person in the world, so my immediate reaction was — damn! Then it got worse as the first couple sessions with the platform specialist were disasters. The instructor was proud of their knowledge and ran (not crawled) through content proudly announcing everything that the platform can do. Information overload! I didn't care to know A through Z specifics as I didn't even understand A. Just tell me the ABC's of what I need to know as the presenter.

Categories of Change

There are three categories of change: 1) passive changes that occur over time like the 10 lbs. many gained through COVID, 2) forced change as I faced with the Adobe platform, and 3) planned change which is the content of this article.

When change occurs all of us have three options as depicted in the illustration above (the percentage range tells the approximate percent of people in each of the categories).

As depicted in the illustration, I was left of the middle upon learning about the introduction of the Adobe Connect platform. The desired outcome is to move people to the right (including yours truly) because the critical mass in the middle can either move left and kill the change effort or right to implement the change depending upon what they see and hear.

Introducing Change

You want to sell change when introducing new technology to your people instead of ordering it as Adobe Connect was forced upon me. People don't like to be told what to do, but they like to buy, which is determined by the need for something new or wanting the item without needing it. All of us can fit our purchases into these two categories.

When introducing change in your organization people need understand the two "whys".

.....
1. NEED is simply based on the ratio of disadvantages over the advantages of the current situation. You want the disadvantages to be so extreme as to push the decision that remaining as is, is not an option!

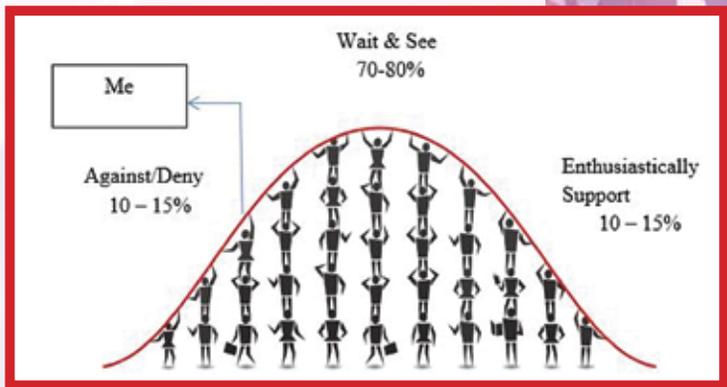
2. WANT is created by the reversed ratio of advantages over the disadvantages so the decision is now I just have to have it! That's exactly what happens upon purchasing an item that exceeds our budget. The magnetic pull is so strong, it literally sucks money out of our pocket.
.....

Now let's make introducing change even easier — structure those impacted by the change to help generate the two ratios that define the need and want. Doing so helps to create the necessary "insight" and "buy-in" that moves people to the right.

You're right, the process to sell change has a price — time. And, yes, time is money. Ordering change can appear easier, but that too has a price. This price includes, among other things, the immediate spike in resistance which can slow the implementation because the morale to implement has been adversely impacted. Worse yet is people may sabotage the introduction of the new equipment.

I've been a supplier of leadership and organizational development for over three decades. As much as I wanted to order the prospect to buy my services, it wouldn't work until the need and want ratios worked for me!

In conclusion, as the change agent in your company you're going to decide whether to pay the price to sell the change effort or pay the price to dictate it. Be people-smart and sell it first. **DP**



BY LARRY COLE

NEW TECHNOLOGY:

OH BOY

OR UGH!

ONE CALL

BY DR. AHMED AL-BAYATI & LOUIS PANZER

for Design Phase & Construction Phase



DESIGNERS AND EXCAVATORS initiate the One Call process by placing a ticket through a One Call center. Most One Call centers include a special ticket to address projects that do not include excavation (i.e., a designer's ticket). Because the planning and design phase precedes excavation activities, coordination of the utilities in a proposed project area can facilitate communication with affected parties much earlier in the damage prevention process.

In the construction industry, several subcontractors often work together on a single project. Therefore, a decision must be made regarding who should start the underground utilities locating process. As allowed by law, it is everyone's responsibility to ensure that underground utilities have been appropriately marked. Thus, before they start digging, excavators must verify that a responsible party has already notified the One Call center and that a positive response has been received and verified from all notified utilities.

Design Phase

During the initial planning and design phase for any construction project that requires excavation, understanding the potential conflicts with underground utilities is extremely important. It saves time and money when the project is underway by pointing out any potential conflicts and allowing people to identify these conflicts in their plans, coordinate with the owners for any relocation efforts, and do so well ahead of the actual project implementation. Many states include a design ticket in their One Call process. These tickets have longer response times than a normal excavation request, and, in some cases, they do not require a physical locate by the utility. Utility owners can comply by providing plans and maps illustrating where their facilities are in relation to the area proposed instead of delivering physical locates. In some cases, it is a challenge to educate the planners and designers about the limits to what they receive in response to these requests. They often believe that they should also be granted physical locates, which provide a much more accurate representation than some of the maps that are currently held by utilities. It is understandable for people to find a way to work around a system that is not performing for them as they expected and as legally required. Although it is certainly ideal to have every design receive a horizontal depiction of all present utilities, owners are required to pay for the locates, and they view provision of maps or access to maps as an acceptable replacement when allowed by law. Designers can certainly hire private locators at their own expense if the maps are insufficient. In any event, at the actual point of true excavation, locate marks should be provided and the excavator should visually expose and protect facilities at the depth being excavated.

For surveyors, the situation is completely different if they are driving stakes, pins, or rebar into the ground as part of their survey, because these actions disturb the earth and are therefore considered excavation activities. This can be confusing to the locate community because they may not believe actual excavation is taking place, given that the company is a survey or design company. Thus, it is crucial for locators, excavators, and surveyors to

understand the distinct differences between planning and design activities that do not involve actual excavation and those activities described that can result in damage to facilities. It is crucial for

all parties to understand what laws require with respect to requesting survey design tickets and the responses that are provided to them. They should refer to the state laws in the area in which they are working to better understand specific requirements.

Construction Phase

Contractors, including general contractors and subcontractors, make the majority of the construction phase requests to One Call centers. As a result, a high degree of damage to underground utilities has resulted from construction activities. This makes perfect sense because other excavators, such as homeowners, only request work infrequently, but professional contractors have daily interactions with the One Call system, as well as with underground infrastructure. For this reason, contractors and subcontractors have a special duty to follow laws and procedures that limit the number of damages and limit the number of requests to only those that involve work during the prescribed ticket life. **DP**

Authors Al-Bayati and Panzer provide an overview of the location process that is generally followed across the United States, explaining the role of all stakeholders in the reduction of injuries and damage to underground utility property during construction. Specific topics include:

Subsurface Utility Damage Prevention

- One Call Process
- Evolution of Damage Prevention
- Damage Prevention Acts
- Definition of Key Terms
- Causes and Trends of Damages
- Affected Services per Type of Employer
- No Locate Request
- The Cost of Damages

One Call Centers

- Damage Prevention Acts
- Act Enforcement and Dispute Resolution
- Educational Outreach
- Subsurface Utility Engineering – CI/ASCE 38-02
- Case Study – North Carolina One Call Center (NC 811)

Designers' and Contractors' Duties

- Design Phase
- Construction Phase
- Desirable Excavator Actions
- Safe Excavation Process
- Undesirable Excavator Actions
- Homeowner Responsibilities

Utility Owners' and Locators' Duties

- Desirable Actions
- Undesirable Actions
- Utility Owners' Actions – Case Studies

Claim Resolution and Damage Investigation

- Federal Oversight
- Variety of Enforcement Models
- Damage Investigation

Dr. Ahmed Al-Bayati is the founding director of the Construction Safety Resource Center (CSRC) and an assistant professor in the department of Civil and Architectural Engineering at Lawrence Technological University (LTU).

Louis Panzer has served as executive director of NC 811 since 2011. He currently serves on the NC Underground Damage Prevention Review Board and has been active in CGA for 16 years.





Should Owners **Sue** Designers for Negligence If Utility Conflicts Severely Damage the Project?

BY DR. AHMED AL-BAYATI

Utility conflicts represent a risk that should be addressed early during the design phase of the construction project life cycle. Addressing the risk of utility conflicts early, when designs are relatively simple to change, is easier and less expensive than making changes during the construction phase. Information about potential utility conflicts can be used to create a utility map that can be laid over the project plans to identify conflicts.

According to an article in the *Journal of Construction Engineering and Management*, acquiring reliable information pertaining to the location of underground utilities during the design phase reduces:

- The number of utility relocations
- Contractor claims and change orders
- Incidents and injuries
- Project delays due to utility relocations

Designers are well positioned to review and mitigate the risk of utility conflicts. According to Jim Anspach, designers should have in-house specialists trained and certified in utility conflict management. Designers can also sub-contract this vital task. Accordingly, they should create a map of existing subsurface utilities and compare it with the proposed construction plan. During this time, all changes are possible and easy to undertake.

Designers should use both the One Call system and private locating firms to generate a utility conflict map. The One Call system often marks active utilities within the project limits that are located on the right-of-the-way, which gives the designer an adequate idea of what is underground. Thus, the One Call system represents the initial stage of a proactive utility management plan that aims to address potential utility conflicts as early as possible.

The One Call system does not locate inactive and abandoned facilities. Therefore, utilizing a private locating firm is a necessity. Designers may hire a subsurface utility engineering (SUE) private locating firm or a non-SUE private locating firm, depending on the anticipated complexity of the underground utility network, which can be estimated using a site survey and marks obtained through the One Call system. SUE is an engineering standard that aims to physically locate utilities via different techniques and technologies. A data quality level is assigned to the findings based on the techniques and technology used (ASCE, 2002). The SUE standard

outlines the steps that the American Society of Civil Engineers (ASCE) has suggested to mitigate risks related to subsurface utilities by offering four levels of data quality (see Table 1). The One Call system satisfies levels C and D because it collects recorded utility information (level D) and visual indicators (level C) from utility owners. However, the SUE standard requires a registered professional to stamp the depicted findings before a quality level can be assigned.

What if things go south during construction due to a designer's lack of accuracy in addressing utility conflict risks? Do owners have the right to sue the designer for negligence?

A valid negligence to fulfill a duty claim requires the following:

1. The designer owed a duty to the owner
 - a. "A duty of care may arise from a statute, a contractual relationship, or by operation of the common law, which imposes an obligation to use due care or to act so as not to unreasonably endanger other persons or their property" (Cummins v. Robinson, 2009)
2. The designer breached that duty
3. The breach caused damage

Clearly, a suit for negligence is possible if the contract between the owner and the designer addresses the utility management plan. **DP**

TABLE 1. SUE QUALITY LEVELS	
Quality Level	Short Description
Level A	Actual exposure and subsequent measurement of subsurface utilities
Level B	Geophysical methods
Level C	Surveying and plotting of visible aboveground features
Level D	Reviewing records, interviewing

LOCATOR SAFETY & APPRECIATION WEEK IS APRIL 24 - 30: NOW IS THE TIME TO PREPARE!

Always observed on the last full week of April, this year's Locator Safety & Appreciation Week (LSAW) is April 24-30. LSAW is about letting locators know how much we appreciate the difficult, challenging, and sometimes dangerous work they do protecting our underground utilities. LSAW is also the perfect time to recognize and appreciate the critical role locators play in the overall utilities landscape. The safe installation and protection of utilities relies on the everyday diligence and hard work of locators.

Last year, the theme of LSAW was "Getting Home Safely", where we celebrated the safety of not only locators themselves, but the safe environments their work creates for everyone on a jobsite. This year, we're recognizing just how much of the work around us – from roadways, to utilities, to landscape projects – is made possible by the initial work of locators. Progress is made possible through their accurate marks.

Given the challenges of the job on which so much depends, LSAW is a great time to show appreciation for these unsung heroes of the damage prevention industry. There are many creative ways to do this, and the most effective strategies are ones that invite people to take responsibility for safe practices and encourages them to campaign for safety both on and off the job. Here are a few ideas:

- Nulca, a driving force behind the development of LSAW, encourages its member companies to have daily safety talks with their locators and to designate one of the days during LSAW as "Locator Appreciation Day," thanking them for a job well done. LSAW is just as much about expressing our gratitude as it is about spreading safety awareness.
- Share ways you have or plan to appreciate locators at your job! A form is available at LocatorSafety.com, and we would love to share your ideas and actions with the *dp-PRO* readership.
- Hold a locator safety coffee break and provide coffee and treats. Engage in both formal and informal discussions on safety while communicating thanks to locators for their hard work.
- Let locators know they are appreciated with small gifts like coffee mugs and t-shirts that combine a safety message with your company logo. Not only does this make the locator feel appreciated, but it's a great way to get the word out.
- Reach out to the media to get some local coverage. Even a small notice in a newspaper or a 30-second story on a local television or radio station can help educate the community at large about the valuable role that locators play in keeping neighborhoods safe. Many people are curious about the meaning of paint marks and flags, and LSAW is a wonderful time to teach the public about what locators do. It's also a perfect op-



**Crucial to infrastructure. Crucial to safety.
Crucial to progress.**

Locators make progress possible everyday.



Locator Safety & Appreciation Week **April 24 - 30**

portunity to enhance your image within the community.

These are just a few of the possibilities. When you add your creative ideas to the mix and take advantage of all the FREE resources provided by Infrastructure Resources on the LSAW website (www.locator-safety.com), planning your involvement in Locator Safety & Appreciation Week could not be easier.

This year, as in previous years, suggested daily social media posts are available for download. Post or share these messages to provide daily safety reminders throughout LSAW. Public interaction like this helps to increase positive attitudes about the important job locators perform. What better way to show appreciation for locators than by spreading the message about the critical work they do! **DP**

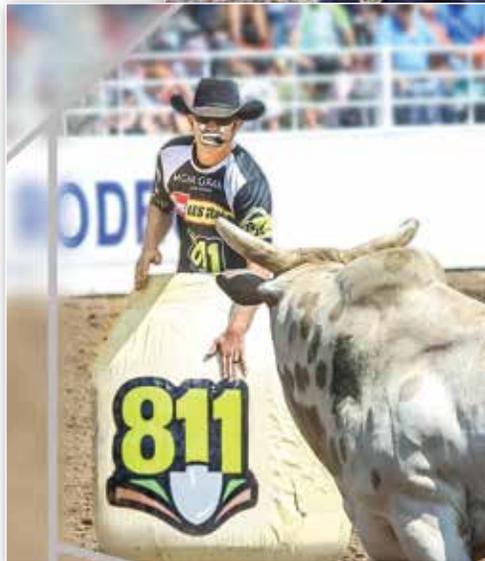
JJ Harrison Spreads 811 Awareness Online as well as in Person

HOW DOES an entertainer entertain with no audience? With 2020's new way of life, during a pandemic, JJ Harrison was forced to alter his way of connecting with the community. Covid-19 impacted human interaction drastically. Though it hampered many aspects of his job, JJ's enthusiasm and charisma got a chance to shine. This was most evident on his social media platforms. From engaging people with his "daily tips on surviving a quarantine", to 811 awareness videos featuring his kids, he kept his audience focused to see what his antics would produce next.

Families are having to adapt to this temporary way of life. One thing is for sure, having five kids to entertain as schools closed put this entertainer to the test! From attempting to provide haircuts to finding creative toilet paper alternatives, this guy has an answer for everything, and social media was there to broadcast it. With the positive responses JJ received, he immediately knew this was his best venue for informing our farming and ranching community of the importance in calling before digging. His 811 messages are recognizable to the western community through rodeo and anyone else that may cross his path. Whether presenting an anti-bullying assembly for schools or a keynote address to the agricultural industry, JJ's message of safety continued to thrive.

Though 2021 came with adversities, JJ Harrison was more than ready to come back into the spotlight. Rodeo provides an amazing platform to reach a wide demographic, spreading the facts and importance of calling 811 to the live audiences was crucial. His social media platforms certainly prospered during 2020, but for this Rodeo Clown, nothing beats interacting directly with a live audience. What JJ wasn't ready for however, was the large-scale reactions that came from those following his antics during the year of Covid. Many Rodeo attendees approached JJ with positive feedback to not only his performance at the show but rather his messages of safety online.

Rodeos all over the country were recording record-breaking audiences as people were eager to get back to a sense of normal life. As people emerged from their isolation, JJ and 811 partners strongly encouraged farmers and ranchers to remember the safe digging practices they used prior to the pandemic. With many of his events aired over the Cowboy Channel, he was able to broaden and increase the amount of people who heard our safe digging messages. Making a connection and interacting with the community



is what JJ Harrison enjoys most and being able to provide his audience with helpful tools to make their lives safer is his goal.

Though 2020 was a challenge to us all, 2021 was the greatest comeback story for western sports. Harrison learned that though he was able to reach over 80,000 people in attendance during his rodeo season, there was a massive impact in connecting to viewers on every type of social media platform. What was very clear to all was the interest in learning how to be a more responsible property owner. One thing living in quarantine provided to our society was a chance to check up on all the

home projects that were simply put off due to time constraints. Providing knowledge to his audience was JJ's goal as to keep families and crews safe during this time. As a new year rapidly approached, JJ continues to promote the importance of 811. This has become his recognizable call number and people of all ages identify JJ Harrison as the 811 spokesman. As the platforms grow with opportunities of positive outreach, JJ will be there interacting and informing his audience of the benefits and safety in calling 811 every time and any time. **DP**



Celebrating 50 Years of Safety!

2022 IS A MILESTONE for several One Call Centers in the U.S., celebrating 50 years of operation! Since the need to protect underground infrastructure from excavation began, the One Call Industry has been here to enable effective communication between stakeholders. Over time the technology used to meet this mission has evolved. Starting with teletype systems and evolving to full computerization - even automated systems - over the years, the One Call Industry has held to its original concept of Cooperation, Communication, and Coordination.

Passage of the Natural Gas Pipeline Safety Act of 1968 prompted the utilities of Pittsburgh Public Service Coordinating Committee (PPSCC) to form a subcommittee to address excavators contacting each utility independently. The Occupational Safety and Health Administration (OSHA) was formed in 1971 and brought new pressure to formalize damage prevention. PPSCC hired an answering service to handle the excavation calls in 1972. The answering service took the information and relayed it to the member utility companies via a private line network of teletypes.

In 1973, the national American Public Works Association (APWA) established the Utility Location and Coordination Council (ULCC). In 1975,



Pittsburgh hosted the first One Call managers meeting which went on to become the One Call Systems, International committee of APWA, used to share innovations and processes. APWA published the Uniform Color Code and Guidelines for Uniform Temporary Marking of Underground Facilities for the first time in 1979. These standards are still used today with slight modifications over time.

In 1976, Pennsylvania introduced a fully computerized ticket taking process with CRT/keyboard combination at the answering service with immediate transmission to the members. As technology advanced, the One Call Centers began offering methods of self-service to stakeholders. Products like fax-a-locate, ticket management systems, street screening, batch remote response entry through modems were all precursors to the systems in place today.

As more excavators used the One Call center, there was a need to simplify getting facility owner responses back to the excavators. In 1995 PA One Call introduced their automated response system, KARL, and began accepting facility owner responses, collecting them based on the ticket serial number, and transmitted them back to excavator prior to the proposed start date.

Access to the internet transformed the industry. Excavators and designers started entering their own requests via the web instead of fax or telephone. Modern day mapping systems made streamlining notifications possible. The use of maps expanded notifications to include work sites, enabling locators to see where the work would take place and determine involvement.

The implementation of the national number - 811 - was completed in 2007 and empowered the One Call Centers with joint public awareness efforts and an easily remembered number for the public.

The communication link that One Call provides has succeeded in reducing damages, saving money and promoting safety. Programs like Pennsylvania's Coordinate PA connect stakeholders and improve collaboration and



savings for shared projects, from design through construction activities. The ideal project allows for proper planning and coordination with other stakeholders to prevent things like digging up a newly paved road. Pennsylvania's damages as a percent of total tickets has decreased from 0.83% in 1995 to 0.74% in 2021. The ratio of notifications going out has reduced while membership and ticket volume grew, showing the efficiency of the One Call system continues to improve.

The One Call Industry was born out of necessity when underground facility owners were scrambling to stop the repeated damage/repair cycle happening with their lines. As technology advances and stakeholder connections strengthen the commitment to reach no damages, the work endures. With the 50 years of experience, passion, and service as the foundation, the One Call/Facility Notification Center industry will continue the safety mission and support damage prevention well into the future. 



Day of the Dozers



THE MINNESOTA Utility Contractors Association (MUCA) was able to hold their annual charity event for Children's Minnesota in person in 2021, resulting in another record-breaker. Day of the Dozers offered rides for the kids in dozers, backhoes, excavators and dump trucks on September 25 in Elk River, Minnesota.

The annual event saw 3,342 participants raising \$78,965 for families and children in need, far surpassing their 2021 goal of \$665,000.

Day of the Dozers offers a variety of activities for families to enjoy throughout the day, including sand piles to play in, a tour of Children's "Big Rig" Emergency Transport vehicle, and the "811 Kids Zone" sponsored by utility and damage prevention partners to teach families about safety around utilities and the Call Before You Dig message. Kids were also able to learn how to operate heavy equipment using simulators in a vir-

tual setting. New this year were two bouncy houses, one in the shape of a giant skid steer and the other shaped like a construction obstacle course.

This year's total of \$78,965 marks the highest donation level in nine years, bringing the grand total to more than \$400,000. Children's Minnesota is one of the largest pediatric health systems in the U.S. 

2021 Greater Chesapeake Damage Prevention Training Conference

• BY MATT RUDDO, MISS UTILITY/ONE CALL CONCEPTS •

AFTER MAKING the difficult decision to postpone the 2020 Greater Chesapeake Damage Prevention Training Conference (GCDPTC), title sponsors Miss Utility of Maryland/District One Call and Miss Utility of Delmarva were very excited to welcome back hundreds of damage prevention professionals to the 2021 GCDPTC, which took place in October at the Clarion Resort Fontainebleau Hotel in Ocean City, Md.

The conference, which had more than 300 registrants, was the collaborative effort of partners across the Greater Chesapeake region, including 34 sponsor organizations and a sold-out exhibit hall of more than 40 exhibitors. Dr. Bertice Berry, a best-selling author and award-winning lecturer, kicked off the conference with a keynote that captivated and inspired attendees as they entered two days of informative training sessions, including demonstrations from New York 811 of its new Virtual Reality Excavator Simulator, which features cutting-edge 4D technology creating endless variations of real-world situations; updates from Maryland Occupational Safety and Health (MOSH); the Common Ground Alliance (CGA) and One Call Concepts, Inc.; and a Pandemic Panel with representatives from key stakeholder groups across Maryland, Delaware and Washington, D.C., who shared the unique challenges their organizations faced when the COVID-19 pandemic began, and how they overcame those obstacles to remain focused on, and committed to, damage prevention.

Attendees participated in the conference's multiple networking events, including the annual cornhole and golf tournaments, as well as the first-ever "paint and sip" event, led by award-winning paint party service TC Studios, where attendees painted wine and beer glasses during a two-hour guided class while enjoying lunch and networking with other industry professionals.

The conference also honored some of the safest contractors in Maryland and Washington, D.C., for the 2019-2020 and 2020-2021 Dig Smart Awards, including: Anchor Construction Corporation, 2019-2020 Excel-



lence Award Winner and 2020-2021 Washington, D.C. Winner; BF Joy, LLC, 2020-2021 Excellence Award Winner; Flippo Construction Company Inc., 2019-2020 Washington, D.C. Winner and 2020-2021 Maryland Winner; Gaines and Company, 2019-2020 Maryland Winner; and M Luis Construction Co., Inc., 2020-2021 Honorable Mention Recipient.

Through generous donations at the cornhole tournament and a 50/50 raffle, GCDPTC attendees and sponsors raised a total of \$1,215 for Construction Angels, which provides assistance to families who have lost a loved one as a result of a work-related accident. The GCDPTC's "\$811 Dig for Cash" game – where two lucky attendees combined to take home more than \$750 – closed out the conference during grand door prizes, making for a very memorable final day. **DP**

Save the date for next year's conference! The GCDPTC will return to Ocean City, Md., from Oct. 25-28, 2022.



Spreading the Word About Safe Digging One Billboard at a Time

OVER 29 MILLION people call Texas home. Reaching each resident has proven to be challenging for Texas811.

What happens when we face challenges at Texas811? We think outside-the-box for ways to maximize our exposure.

One way we have been able to do this is with the help of the One Call Board of Texas.

The One Call Board of Texas is a non-profit governing agency that oversees the statewide “One Call” notification system.

In September of 2021, the One Call Board of Texas began funding a billboard campaign to help Texas811 “Spread the Word” about safe digging. Currently, we have 22 billboards placed around the state. There are six billboards located in Dallas/Fort Worth, three in San Antonio, two in Houston



and El Paso, and one in Austin, Corpus Christi, Odessa, Lubbock, Amarillo, San Benito, McAllen, Tyler, and Beaumont. In September we were able to reach an impressive 4,872,075 people. While these numbers looked promising, we were blown away by the amount of people reached in October once all billboards were active. In October we reached a total of 27,669,583 people! Our billboards will run for approximately three to six months. We are excited to see what our end campaign numbers will look like.

We thank the One Call Board of Texas for funding this initiative. We also want to remind everyone that “Spreading the Word” about safe digging is a shared responsibility among all stakeholders in the one call industry. 

If you are interested in more information about this program or in sponsoring billboards in your area, please reach out to Christi McLain, our Communications Manager, at ChristiMcLain@Texas811.org.



Utility Training Academy (UTA) specializes in damage prevention training programs designed to build and advance the knowledge and skills needed for accurate line locating and excavation safety.

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-  **Pipeline Locator Training**
-  **Excavation Safety Training**

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2021

• STAFF REPORT •

Damage Prevention Hero of the Year

Kelley Heinz (Spring, 2021)

A Damage Prevention Hero Who goes Above and Beyond her Responsibilities to Promote Safety and Damage Prevention Outreach! Kelley is the brainchild behind the Ready, Respond, Recover Program (learn more in *dp-PRO*, Spring 2021). She brings more than 20 years of experience to her current role as Damage Prevention Manager and Claims Investigator with ComEd. She has served as an active member of JULIE's Public Education Committee for more than five years. Dedicated to damage prevention and safety, Kelley has written powerful articles for *dp-PRO* and is a highly rated speaker at the Global Excavation Safety Conference. She led the campaign to have Call Before You Dig decals represented on all ComEd vehicles.

Read the full article here: dp-pro.com/damage-prevention-hero-kelley-heinz



Dora Parks (Special Locate, 2021)

Just call her "Miss Utility." Dora Parks is passionate about damage prevention. She has tirelessly promoted the dig safe message to people of all ages, including professional excavators, contractors, utility owners, homeowners, and even children – generally, anyone who might excavate, demolish, or disturb the earth. As Secretary of the Maryland/DC Damage Prevention Committee, Dora and the Committee developed a Damage Protection Training Program. Dora is the first female board member of the AUC of MD and belongs to the PWC of MD, the Anne Arundel Contractors Association, and NUCA of DC. Dora is instrumental in the execution of the GCDPTC, Locator Achievement Awards, and Touch-a-Truck program.

Read the full article here: dp-pro.com/damage-prevention-hero-dora-parks-just-call-her-miss-utility

George Kemp (Summer, 2021)

Definitely Not Someone Afraid of a Challenge. Along with his "day job" as VP Safety, Government Affairs & Quality Assurance with MetroNet, George is currently serving as Chairman of the Board for Indiana 811, during which time he led them through both a software and leadership change. He also serves as Alternate Trustee for OHIO 811, Secretary for NTDPC, and is a member of both the CGA Education and Best Practices Committees. George is a big advocate for getting suppliers involved in exercising a partnership for damage prevention/best practice guidelines. He not only trains associates and subcontractors, but he gets out in the field to ensure accountability and monitors the work being done.

Read the full article here: dp-pro.com/damage-prevention-hero-george-kemp



Bruce Campbell (Fall, 2021)

Bringing New Ideas and Processes to Damage Prevention. Bruce Campbell has brought new ideas and processes to Michigan, and the One Call industry, since the early 2000s when he was named the first excavator representative on the MISS DIG 811 Board. Bruce's gift for bringing differing viewpoints together to have difficult conversations has led to the creation of the MDPB (Michigan Damage Prevention Board), TIME (Ticket Initiation Management Execution), and LAC (Locator Action Committee), which all focus on improving the MISS DIG 811 processes for stakeholders. Currently, Bruce is committed to the continued development of the Facility Notification Center Association (FNCA), which he believes is the evolution of the One Call System.

Read the full article here: dp-pro.com/damage-prevention-hero-bruce-campbell



Richard Broome (Winter, 2021)

Driving Safe Digging in the UK. Instrumental in the development of LSBUD, the UK notification service, Richard actively recruits facility owners to participate in this entirely voluntary system. Richard regularly attends local, national, and international damage prevention events, and is a frequent contributor to publications, speaking out tirelessly for damage prevention. He organizes an annual National Damage Prevention Day, contributes heavily to LSBUD's annual Digging Up Britain Report, has been the driving force behind USAG's biannual Utility Strike Damages Report, the only reliable source of third-party damage data in the UK, and has given his time to re-writing PAS128 and PAS256.

2021 Damage Prevention Hero of the Year

- Kelley Heinz
- Dora Parks
- George Kemp
- Bruce Campbell
- Richard Broome

Snap a pic of your vote and email it to info@emailir.com or go to dp-pro.com/dp-pro-hero-of-the-year-voting to vote online. 

Vote Now!

Winner announced
at the Global
Excavation Safety
Conference!

Voting is Open
through Tuesday,
March 1, 2022!



ATSS Foundation Supports Youth through Scholarships, Camps and Education

THE AMERICAN TRAFFIC Safety Services (ATSS) Foundation's two-fold mission is heavily focused on youth.

It offers college scholarships to the dependents of men and women killed or permanently disabled in work zone incidents and travel scholarships so youth who lost a parent, sibling or caregiver in a work zone incident can attend Experience Camps to address their grief in a fun environment.

The Foundation also offers a youth activity book for all children ages 5-8 to provide an engaging way to learn about work zone safety.

The ATSS Foundation is the charitable arm of the American Traffic Safety Services Association (ATSSA) with a mission to promote roadway safety through charitable giving and public awareness campaigns. Established in 1988, its vision is to make roadway safety a cultural priority through Foundation activities with the goal of eliminating work zone deaths.

"We have seen the effect on families of the loss of a husband or wife, father or mother as a result of a work zone tragedy. It's heartbreaking," said Foundation Director Lori Diaz. "That is what spurs The Foundation and its supporters – the desire to help the hurting families and to work toward an end to such deaths and disabling injuries. We are continually looking for ways we can do more."

The Roadway Worker Memorial Scholarship Program provides financial assistance for post-high school education to dependents of roadway workers killed or permanently disabled in roadway work zones. The program is competitive and offers scholarships valued up to \$10,000 per student each year. Applicants who demonstrate a strong commitment to volunteerism may be eligible for an additional \$1,000 in honor of Chuck Bailey, a member of the roadway safety industry who died in 2002.

The program has awarded \$358,000 in assistance through the two scholarships from its inception in 2002 through the 2021-22 academic year.

The academic scholarships are awarded each spring for the following academic year. Applications are due annually by Feb. 15.

The Foundation also offers Experience Camps Travel Scholarships. Experience Camps are a national network of free one-week, overnight summer



Top: Experience Camps are offered to children and teens from grades 4-12. **Left:** Cody Garner, recipient of the Roadway Worker Memorial Scholarship, with Sen. John Boozman of Arkansas. **Right:** Elementary school students in Nevada with their youth activity books.

camp and year-round programs for children and teens (grades 4–12) who have experienced the death of a parent, sibling or primary caregiver. The camps help children address their grief and develop the confidence, skills, and support to move forward with their lives.

Foundation scholarships cover the cost for the child and a guardian to travel to and from the camps, which are located across the country.

Both the Roadway Worker Memorial Scholarship and the Experience Camps Travel Scholarship are possible because of the many individuals, companies and organizations that support The Foundation's work.

Youth activity books provide a fun way for children to learn how to stay safe in roadway work zones. The 32-page books are available for free digital download or hard copy purchase at Foundation.ATSSA.com/YouthActivityBook. They are a great tool for use at home, in schools, after-school care, clubs and anywhere children gather. **DP**





Horizontal Directional Drilling: Its Impact on Utility Location

(Special Issue: Australia 2018)

Author: Innes Fisher

“How helpful that you mention that horizontal directional drilling can greatly reduce installation costs in some areas. I am starting a new business this winter. I will find a great direction drilling service to help as well.” – *Tiff Gregers*

Hidden Damagers of Confined Space

(Summer 2019)

Author: Innes Fisher

“It’s interesting to learn that there are certain gases that can be dangerous in confined spaces. It’s good to know there are companies trained in confined space rescue. I’ll have to look for one near us to have in mind, just in case.” – *Jane Guff*

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Barbco's Head Shaving Fundraiser Supports Childhood Cancer

• BY THOMAS W. SCHMIDT •

THE SECOND Annual St. Baldrick's "Head Shaving" Fundraiser at Barbco, Inc. was a resounding success! Barbco, a manufacturer of capital equipment for the trenchless excavation, horizontal directional drilling, and underground manufacturing industries located in Canton, Ohio, converted their assembly bay into the St. Baldrick Barbershop.

The event, called "Bald is Bad-ass at Barbco," raises funds



for the St. Baldrick's Foundation to help fight Childhood Cancer. The Foundation is a volunteer and donor driven charity committed to finding cures for childhood cancer. The inaugural event, held in 2019, included 34 employees who "braved the shave" to raise \$6,199. Unfortunately, the fundraiser was cancelled in 2020 due to Covid 19 safety considerations. This year, a team of 37 men raised another \$5,306.

Joining Barbco in this fundraiser were the following corporate sponsors: U.S. Shoring & Equipment Company; Trenchless Rental Solutions; SACS Consulting & Investigative Services, Inc.; Midwest Mole; National Tube Supply; Kraft Fluid Systems; Great Work Employment; MECO; Shale Directories; Ohio CAT; Industrial Tube & Supply; Brent Scarbrough & Company; Wolff Brothers Supply; Akron Bearing; and The University Steel Company. **DP**



Readership Survey

Here at **dp-PRO**, we always strive to provide content that is educational, informational and topical. We would like to know what makes **dp-PRO** your industry resource for damage prevention; and how we can continue to improve.



After completing this survey, snap a pic and email it to info@IR-SavingLives.com

1. How many of the last four issues have you read?

- Four
- Three
- Two
- This issue only

2. I prefer to read **dp-PRO**

- Print
- Digital
- Both

3. Including you, how many people typically read your copy of the **dp-PRO**?

- Just me
- 2-3
- 4 or more

4. How would you rate the overall quality of the **dp-PRO** content?

- Excellent
- Very Good
- Average
- Poor

5. Have you ever implemented change at work based on what you learned in the **dp-PRO**?

- Yes
- No

6. How frequently do you visit the **dp-PRO** website?

- 1-3 times per week
- 1-3 times per month
- Less than once per month
- Never

7. Have you ever responded to or researched a company based on their ad in the **dp-PRO**?

- Yes
- No

8. My favorite part(s) of the **dp-PRO** is:

9. I would like to see more articles on:

10. Is there anything else you would like to share?

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We listen. We adapt. We dig in.



"Thanks for a great presentation last week! It was very good, and as the Farm & Ranch Safety Coordinator for NDSU Extension, I look forward to resources like this to help our Extension staff across the state!"
-Extension Agent, Steele County, NDSU

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LOCATING



BY CHRISTOPHER KOCH

Did Someone Say Icky-PIC?

Back in the late 90's, when I first trained as a locate technician, I did my ride-alongs with a retired telephone tech. On our first day together, he took me for a Danish and coffee and then set me to work locating a couple miles of copper phone line in a rural road ditch. By the end of that first day, my brand new work boots had begun to take on orange paint, as had the bottom of my pant legs.

As we worked together over the next several days, my mentor continued to offer me coffee, Danish, and wisdom in equal measures. Those first few days spent locating on a rural phone system are now a quarter of a century behind me, but one nugget he shared stuck with me – “Telephone is a locator’s locate.”

What he meant was that copper telephone, since the cables could be accessed and un-bonded individually within the pedestal, provided the most straightforward, accurate locating that a tech could hope to find. Break the bonds, attach to the cables one by one, and locate them away from the pedestal. What could be easier?

It was a concept that had haunted me every time I struggled with a phone locate for years after. Telephone was supposed to be easy – “the locator’s locate” – but I hated it. All these years later, I’m still not a fan. Not only are telephone pedestals routinely infested with mice, snakes, or wasps, but the cables within them ooze icky-PIC, an insulating gel that, according to Wikipedia, “stains clothing and hands and is very difficult to remove.” For my two cents, that’s being overly nice about it.

As soon as my training was over, I was assigned my own territory where I spent the next few years locating cable TV and electric, neither of which offer much in the way of unbonded locating, but for the most part locate very well and mostly without the hantavirus risk or greasy brown icky-PIC stains. In fact, on the rare occasions I had to locate phone, I often found it frustrating and counterintuitive that although I was unbonding and locating on either low or medium frequencies, I still experienced a lot of bleedover from cable to cable inside the pedestal. It just wasn’t working as slickly as my mentor sold it.

Now that I’ve spent a long time studying locating theory, I think I have the reason pinned down. Although unbonding in the pedestal breaks the electrical connection between the cable sheaths, the pairs within them are still connected. And when applying signal to a metallic sheath that completely surrounds the pairs within it, how much does it really

take for your signal – even at low or medium frequency – to induce on those pairs? (Feedback on this is by the way, happily accepted.) Unbonding is certainly helpful, but it’s not magic. And by the way, good luck closing that pedestal when you’re finished.

With the idea that locating copper phone was somehow supposed to be easier than all other locating available to me, I always felt like a failure



when I struggled on a phone locate. In reality, each system has its positives and negatives (that’s a dad joke for locators), and phone just isn’t as easy as it was originally sold to me.

So now, whenever I see a phone locator in the field, and they’re not hard to spot between the orange boots and the icky-PIC stains, I give them a smile and a friendly honk. They’re more than earning their money tackling “the locator’s locate.” 

Christopher Koch is a training consultant and President of ZoneOne Locating. He is past president of Nulca and worked on both the 2009 and 2015 revisions to the Nulca Professional Competency Standard. He can be reached by email at Christopherkoch@live.com or on Twitter @kochauthor.

THE OPINIONS EXPRESSED IN THIS ARTICLE ARE THOSE OF THE AUTHOR. dp-PRO WELCOMES AND ENCOURAGES ARTICLES AND CORRESPONDENCE FROM ALL POINTS OF VIEW.





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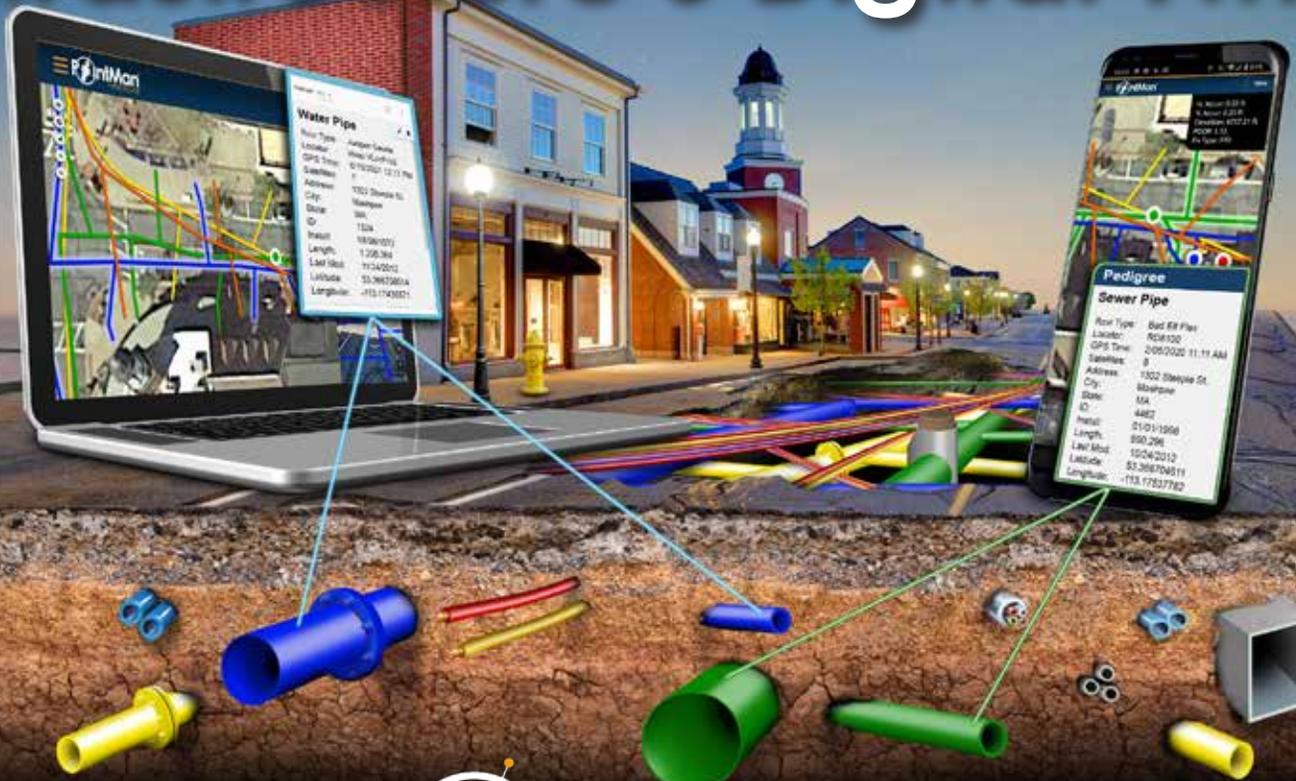
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