

d/p-PRO™

2022 SPECIAL EDITION: LOCATE

Saving Lives Through Education



APRIL 24-30
2022

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Tampa, Florida
February 14-16

2023

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SPOTLIGHT:

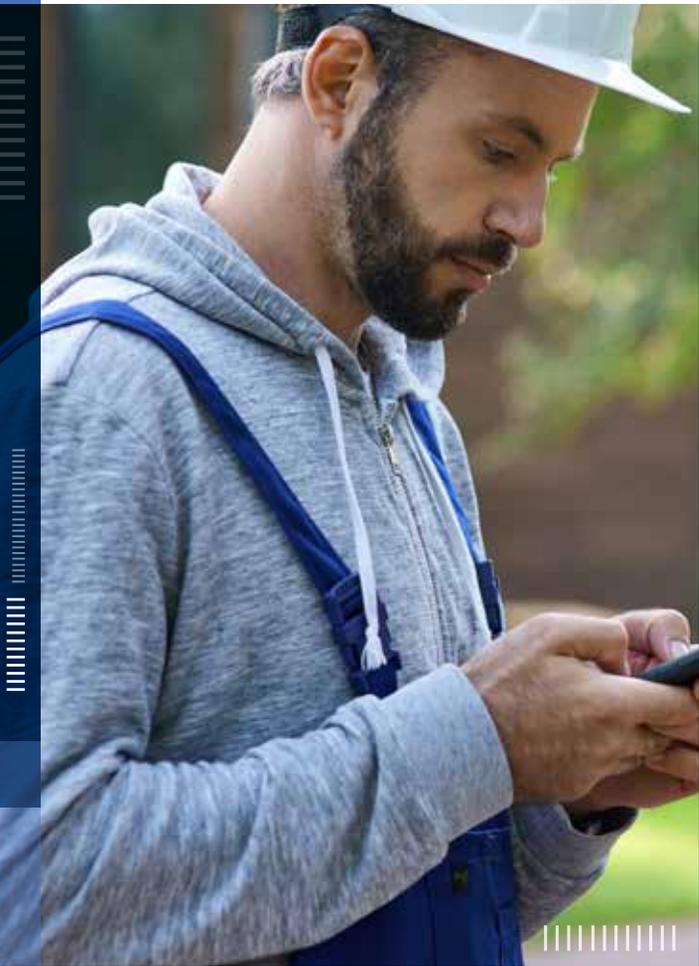
- 6 Tips to Ease Claims Damage Headaches //
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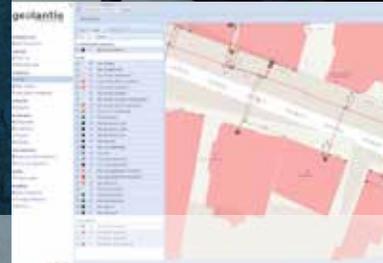
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For protecting the safety of our communities and preventing damage to the critical infrastructure which delivers the utility services every business and home rely upon every day.

For your dedication to performing safe and accurate work, often in the harshest of conditions and whenever emergencies arise.

For being the foundation of our company and the heart of our USIC team.

HERE'S TO YOU!

FROM OUR FAMILY OF COMPANIES



ON TARGET

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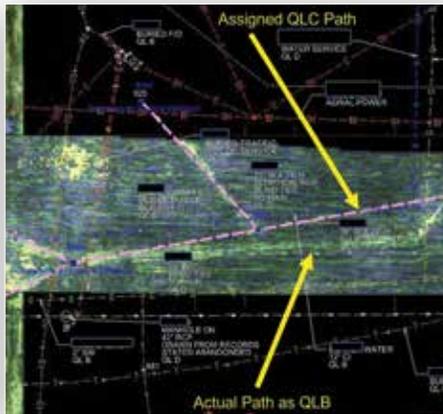
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FROM THE PUBLISHER



BY SCOTT LANDES

DAMAGE PREVENTION without Locators would be as effective as a Car without Wheels

If you are reading this article, you probably have a great deal of respect for the role locators play in keeping excavators and the public safe. However, there is a huge percentage of people in the public – and even the industry – who have no idea how vital their role is. Getting people to request a locate is obviously extremely important, but if the locate is not accurate the risk of damage and injury is high. This disconnect between the weight of locators' responsibilities and the recognition of that role is why we created Locator Safety & Appreciation Week (LSAW) back in 2014. This year LSAW is being held April 24 – 30.

Being a locator is a challenging job which can combine incredible time pressure with the need for accuracy. Add to that the fact that the locate technician may be working at -10°F with 20 mph winds, or in 110°F heat. Some locates are near or on busy roadways where technicians must keep their head up to watch for traffic while also looking down at their equipment. These factors, and many more, make learning how to locate well a difficult task. It takes time, diligent practice, and grit to become a good locate technician. All these factors also make it exceedingly difficult to find, hire, and keep good locate technicians.

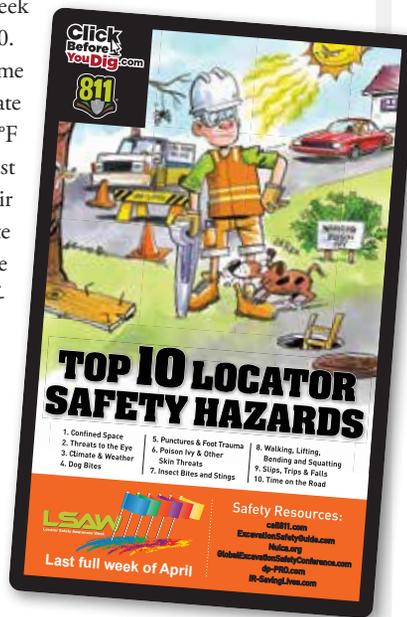
This year, we launched the Global Locate Masters (GLM) competition to display locators' skills and to encourage continual learning. The Locate Rodeo has been the traditional way for locators to compete, but rodeos are difficult to conduct, time consuming, and they can be impacted by weather. The Global Locate Masters takes skills competition to a next level! This unique competition tests the abilities of top locate technicians from around the world using UTTO's VR simulators. These simulators create complex locate experiences in an immersive environment that challenge a technician's training, skill, experience, and the attention to detail required for a successful locate.

The Global Locate Masters gives technicians the unprecedented opportunity to highlight their skills in front of a live audience of peers and industry leaders and evaluate their performance against other competitors. The competition recognizes, rewards, and shines a spotlight on the world's best utility locating professionals by putting on display the years of experience, critical thinking, and mental agility each competitor brings to complete quality locates in a timely manner.

This past January, right here in Minnesota, a group came together to put on a state version of the GLM. This was a tremendously successful event driven by the efforts of Barb Cederberg of Gopher State One Call, Justin Larson with Xcel Energy, Mike Mendiola of MNOPS, and Steve Olinger with CenterPoint Energy. You could see how excited and competitive the technicians were, especially when their score flashed up on the screen. After they completed a run, Tom Orth of UTTO offered insights on where they lost points and how they could have done a better locate. You can check out the full story and learn how to put on a GLM qualifying event in your area on page 30.

In Phoenix, at the GLM Championship, the competition was held in a 30' x 30' area on the Expo floor so competitors got lots of visibility. This was a great way to highlight the important role locate technicians play while adding some fun to the expo. Non-competitors also had a chance to try out the UTTO simulator and learn more about how locating technology works. To see the top three winners of the 2022 GLM go to page 28.

I urge you to go to LocatorSafety.com to see all the free tools and learn how to celebrate LSAW in your company this year. 



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LOCATE

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Session Presenter: Andy Kitson, Murphy Geospatial, GPR Consortium

AI and GPR

Session Presenter: Paul Mukai, Business Development Catalyst, PVM Associates

Bedrock Mapping Study with GPR and Geospatial Mapping Techniques

Session Presenters: John Gallegos, CSTI, David Acosta, CSTI and Joey Gallegos, CSTI

**GPR Technology in Support of Search and Rescue Operations of
Victims in the Earthquake of September 19, 2017**

Session Presenter: Alejandra Vera, Rocher Ingenieria SA

Underground Damage Prevention.

The Intersection Between Traditional Surveying and Modern Mapping Methods

Session Presenters: Michael Twohig, Daniel Bigman

More to come!

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HOT #TAGS



#GlobalESC

The damage prevention industry gathered in Phoenix, AZ in early March to take part in Global Excavation Safety Conference 2022. Over the course of three incredible days, old friends reunited, new technology was showcased, and hundreds of hours of education was shared.



#GlobalESC



#GlobalESC

WHAT'S TRENDING



Follow these companies on Facebook

Locator Safety & Appreciation Week (LSAW)

- April 24-30, 2022

Locator Safety & Appreciation Week celebrates the essential work of utility locate technicians around the world. Every year, during the last full week of April, LSAW provides an opportunity for all excavation interest groups to recognize and share an appreciation for a too-often underappreciated role in the excavation process.

Visit LocatorSafety.com to download the full 2022 LSAW media kit and to share your company's LSAW story.

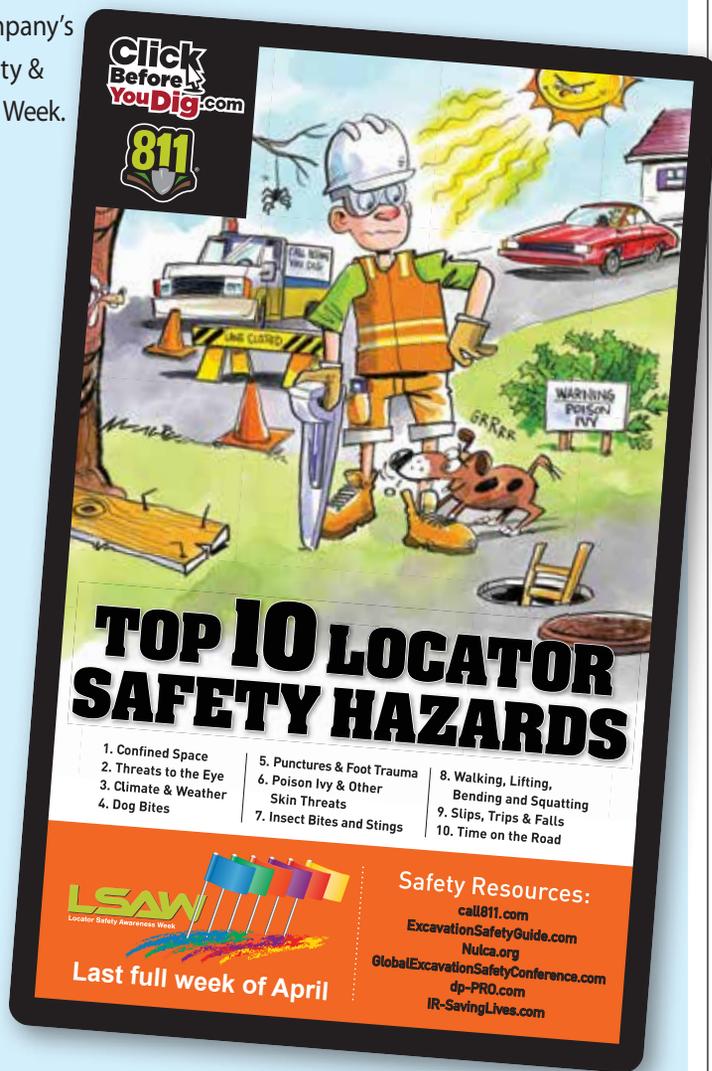




SOCIAL INITIATIVE

#LSAW

Use the #LSAW hashtag to share your appreciation for utility locators on social media. Following the hashtag is also a great way to see how the rest of the industry is celebrating Locator Safety & Appreciation Week! Looking for more ideas? Visit LocatorSafety.com and start building a plan for your company's Locator Safety & Appreciation Week.



TOP 10 LOCATOR SAFETY HAZARDS

1. Confined Space
2. Threats to the Eye
3. Climate & Weather
4. Dog Bites
5. Punctures & Foot Trauma
6. Poison Ivy & Other Skin Threats
7. Insect Bites and Stings
8. Walking, Lifting, Bending and Squatting
9. Slips, Trips & Falls
10. Time on the Road

Safety Resources:

- call811.com
- ExcavationSafetyGuide.com
- Nulca.org
- GlobalExcavationSafetyConference.com
- dp-PRO.com
- IR-SavingLives.com

Last full week of April

WHAT DO YOU THINK?

How would you like to see LSAW grow in the coming years? We're looking for your ideas! Fill out the brief "The Future of LSAW" survey on [Locator-Safety.com](http://LocatorSafety.com) to help build a better Locator Safety & Appreciation Week.

To answer click **HERE**

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

Spring Issue Results:

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

- A) Yes, (77%)
- B) No, (23%)

featuredgroup

The Cable Vine Facebook Group

The Cable Vine Facebook Group includes utility locators and damage prevention professionals with over eight thousand members. From the private group's description:

"This group is for all locators. Just know that this group was created for the locator that is out there doing the dirty work. The locator whose office is the cab of a truck."





Joe Rubbelke

Committed to Excellence

IF YOU LOOKED UP JOE RUBBELKE ON LINKEDIN, IT WOULD TELL YOU HE IS A DIRECTOR FOR UTILITYLOGIC, A MINNESOTA-BASED COMPANY THAT PROVIDES INNOVATIVE PRODUCTS, TECHNICAL ASSISTANCE AND TRAINING TO THE UTILITY LOCATING INDUSTRY. IT WOULD ALSO TELL YOU THAT PRIOR TO JOINING UTILITYLOGIC IN 2017, HE ALSO WORKED FOR THE MINNESOTA WASTEWATER OPERATORS ASSOCIATION.

But LinkedIn really doesn't do justice to telling you what Joe Rubbelke is really like... or what his peers think of him!

"Joe is engaged, committed, knowledgeable and compassionate," explained Barbara Cederberg, Executive Director for Gopher State One Call. "He is committed to excellence by serving the people in our industry."

"Joe is dedicated, observant, thorough and authentic," according to Paul Teicher, Territory Manager for UtilityLogic. "I've known Joe for over 20 years. We met at training workshops and his dedication to the industry has always been an inspiration to me. When you need him... he shows up!"

Joe presents and instructs on utility locating, tracer wire installation and trench safety at dozens of workshops, conferences, and technical training events across the various industries (gas, electric, communications, water and sewer). He is also well-known for providing lectures, presentations and exhibits on safe excavation/confined space entry.

“His leadership, helpfulness and can-do attitude make a positive difference every day.”

"Joe has gone all-in when it comes to supporting the Gopher State One Call GPS enabled locating device pilot project," Cederberg continued. "His leadership, helpfulness and can-do attitude make a positive difference every day."

"Joe is known for his knowledge as a tracer wire spec and wastewater master," said Lori Blair, Executive Director



for the Minnesota Rural Water Association.

He is a co-author of the Minnesota Rural Water Tracer Wire Specification used in all 50 states and four additional countries. He has participated in training sessions about the Minnesota Tracer Wire Specification across the nation and at their National Rural Water Conference. He is also a sought-after presenter and instructor on utility locating and tracer wire installation around the country.

Joe is a member and Past President of Minnesota Wastewater Operators Association (MWOA), and member of the Advisory Board for the Water Operations Program at Vermilion College. In his "spare time," Joe is a volunteer member of the Minnesota Underground Utilities Mapping Project Team (UUMPT) and also volunteers with a group that supports local military members and their families.

Joe Rubbelke is not only a worthy selection as *dp-PRO's* Damage Prevention Hero, but he is a well-respected industry leader that is 100% committed to damage prevention safety standards. **DP**



LOCATOR SAFETY & APPRECIATION WEEK

APRIL 24 - 30, 2022

SHARE YOUR STORY



LSAW comes once a year – The last week of April – It's the perfect time to show appreciation for these unsung heroes of the damage prevention industry. Whether the gesture is big or small, use the week to show locators that we're aware and appreciative of their essential role. 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.

Have a great idea? Share ways you have or plan to appreciate locators at your job! Visit LocatorSafety.com to submit your locator appreciation story.

LSAW
Locator Safety & Appreciation Week™



LocatorSafety.com

Q How can Contractors Mitigate Risk on Trenchless Pipeline Projects?

BY James H. Anspach & Tom Olson

RISK ON TRENCHLESS PROJECTS comes in various forms: subgrade investigation, design, contract language, trenchless method selection, and execution. How contractors can mitigate this risk varies.

While a contractor normally will not perform the subgrade investigation, the contractor can advise the engineer on how this should be performed, and why. Insofar as unforeseen underground utilities and untimely utility relocation are the most common cause of delay on highway-heavy projects, the engineer should follow ASCE 38. This should begin with a solid records research (including the project owner's records as well as the utility companies' records) and visual observation of the site. The engineer should then utilize Multi-Channel Ground Penetrating Radar, combined with pipe and cable locators, and perhaps even Time Domain Electromagnetics. Synthesizing all this data enables the engineer to assign a Utility Quality Level (B, C, or D) to the utilities (x, y and z) and other obstacles, and characterize the soil conditions. If financially feasible, the investigation results should be included as part of a Geotechnical Baseline Report. With an accurate subgrade profile and input from the geotechnical engineer on how this profile could affect both design and construction, risk is significantly mitigated. The engineer and contractor can choose the proper bore bath and trenchless method, respectively.

A key component of this risk mitigation is the contractor's evaluation of the subgrade information, as well as the contractor's right to rely upon that information. Notably, sometimes the subgrade profile information is not actually included in the contract documents; it is only available "upon request." The contractor must ensure that it gets the information and fully reviews it to select the proper trenchless method. If the information is based on soil borings, contractors must evaluate whether and to what extent the borings properly correspond to the horizontal and vertical location of the bore path. As a matter of law, the less subgrade information given, the less right the contractor has to rely upon it (i.e. there is greater risk). The same is true if the information presents inconsistent subgrade conditions. In addition, engineers regularly include disclaimers (e.g. "owner does not guarantee accuracy of information") that purport to limit or sometimes preclude reliance. Insofar as disclaimers are typically set forth in the Supplemental or Special Conditions, contractors need to ensure they obtain and review these contract sections. And to further mitigate related risk, contractors should obtain legal advice on whether and to what extent disclaimers are enforceable within the states in which they are/may be working.

In addition to reviewing the subgrade information and the right to rely upon that information, the contractor should determine if the trenchless



design is clear. Has the engineer defined what trenchless method to use or is it up to the contractor's discretion? This can be tricky in that sometimes engineers use language which could be interpreted either way (e.g. "Jack and Bore"). To mitigate risk, contractors should seek written clarification before bidding.

To further mitigate risk, contractors need to review the General Conditions as well as the Special and Supplemental Conditions to determine what their rights are in the event they encounter subgrade conditions different than indicated in the contract documents or otherwise normally encountered. Is there a differing site or changed condition clause? Assuming there is such a clause, which is typical, what are the related procedural obligations? One of the biggest failures contractors make to not mitigate risk is failing to follow these obligations. This includes providing written notice and stopping work in the affected area until the engineers investigate the alleged differing site condition.

Upon entering the actual construction phase, the contractor should compare the marks on the ground placed by utility owners' One Call operations to that of the utilities on the construction plans. If there are errors or omissions, addressing and resolving them early eliminates headaches later on.

With a proper roadmap in place, contractors can significantly mitigate risk on trenchless projects. **DP**

James H. Anspach, PG (r), Dist.M.ASCE, A.A. Professor, Civil, Construction and Environmental Engineering Department, Iowa State University. Tom Olson, Partner, Olson Construction Law.

LEADING PEOPLE



BY MONICA WOFFORD, CSP

Been in MY Boots Lately?

CHANCES ARE IT DOES not require news of patriotic truckers, carried jerry cans like a scene from a movie, stand-offs in foreign countries, or some new alphabetically named strain of a virus to convince you the world has gone trucking crazy, and many have lost their trucking mind.

Read that again. Did you consider swapping out two letters? Amazing how much of a difference two small letters could make, isn't it? Now, apply the same idea to two small words or even to one or two seemingly small decisions. What if those who lead those who do the locating transpose two numbers on today's work order?

When leaders have spent years leading, their skills receive development in that area. Their familiarity is no longer in performing the task or using the equipment and the awareness they have of the impact of those seemingly small decisions can often appear to be missing. In fact, that awareness likely IS missing if the last time they walked in your shoes or strode in the dirt to do a location of anything below the surface was a decade ago or longer. The dirt hasn't changed, and the boots are probably still the same, but out of touch is the reality and well, if the boot fits, what do you do about it? Throwing a fit might get them to ask you to quit. Stewing over it and staying quiet does no good for anyone, you included. There must be better options and, in fact, here are three of them.

Mark Your Lines

When the call comes in, the order goes out and you receive the request to go find cables, lines, pipes or other goodies just below the surface. You gather all the right colored flags, ensure you've got the right equipment, hop in the truck, and get to locating. What you don't do is set the orange flags at a higher level than the blue or green ones. What you don't do is declare whose flag placement is more valid or more important. You locate the information with no emotion, no ego, and likely no conflict. It's the function of the locator's job and position.

When decisions are made by the higher up who may not have walked a mile in your boots, mark your lines in much the same way that you would for the client. Prepare your case. Gather your information. Mark out the pros and cons or consequences and then and only then, share the information in the same method void of emotion, with which you'd share information on a request to locate. Locate the problem. Avoid causing a new one.

Dig Carefully

People, and this includes all leaders, can get rather territorial and

defensive about being called on the carpet or being accused of creating a problem on purpose. Dig into this issue carefully. Those you report to don't like being pointed out or called out with the intent to make them look dumb or at least completely misinformed.

Check your motive for making mention of a possible poor decision, bad choice, or with either, possibly unforeseen consequences. If those who lead you have made a decision that makes it clear they've not walked a mile in your boots for a minute, dig carefully around the issue of them having every right to make a leadership decision and the issue of the fact that such a decision may have missed a few important areas of impact. Use tact. Use discretion.

Relocate When Necessary

In some situations, your information gathered on a locate job may cause the client to relocate their project. That is not an easy conversation to have should you be the one who must have it, however, imagine inviting your boss to relocate his or her desired project or direction based on your newly announced information?

Most would choose that client chat if given the option. The truth is there may be times in which consequences or not and negative impact from someone who seems out of touch or not, you may need to choose to relocate your frustration or set it aside all together. Be willing to make that one of your options. Even if you've marked your lines and gathered information with precision, saying nothing may still be the best option. Even if you've danced around the issue, kept your emotions off the property, and not gone off the reservation as you dug carefully into how to approach the issue, relocating your desire to speak up about it to another, less controversial topic, may still be your best decision.

A leader, boss, or manager may be faced with needs that outweigh the inconvenience of those with boots on the ground and doing the job in the field. It doesn't mean they don't care. Sometimes it just means stuff changed. It may feel for a moment like the whole world has lost its trucking senses, but what it likely means is the change just needs a minute to settle and that once it does, your boots will once again get to do what they were made for ... walking that future build location. **DP**

Monica Wofford, CSP is a leadership development specialist, keynote speaker, and executive coach. For more information on her books, training firm or coaching services, call 1-866-382-0121, or go to www.ContagiousCompanies.com.

You Spoke. We Listened.

Global ESC 2023 is Heading Back to Tampa.

Tampa, FL | February 14 - 16, 2023



3

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80+

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Education



120+

Exhibits



1,300

Estimated
Attendees



1

Global
Conference

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

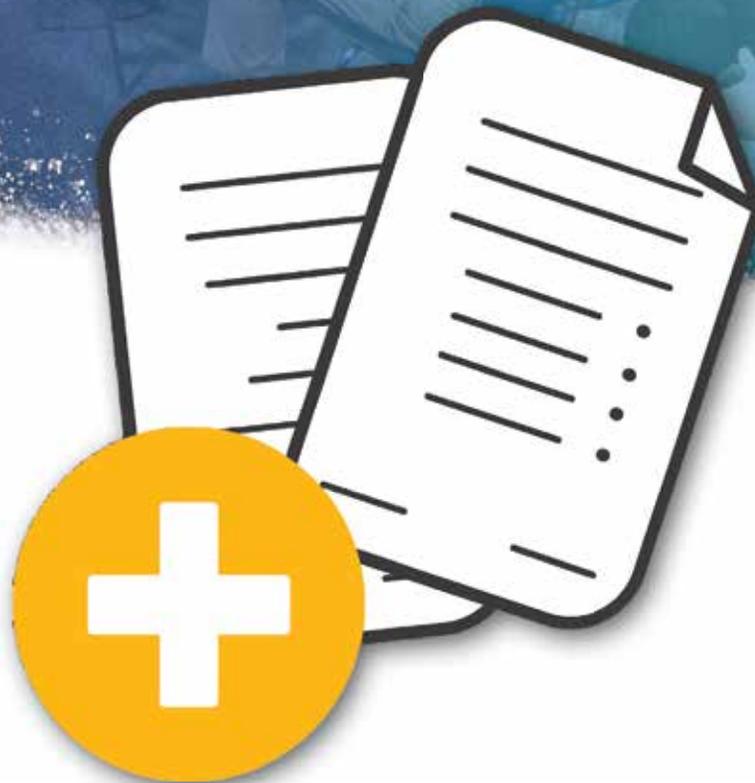
too close to National Safe Digging Month and the start of construction season. With that in mind, Global ESC 2023 will take place February 14-16, creating a perfect launching point for a safe and productive season to follow.

Stay tuned for more information.

GlobalExcavationSafetyConference.com

Submit an Abstract for Global ESC 2023.

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Becoming a speaker today adds your voice to the conversations that will change the industry tomorrow. Global ESC attracts every stakeholder group in damage prevention, creating a diversity of interests, perspectives and motivations that are the backbone of the conference. Do you have a unique perspective for the industry?

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NEWS

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BLACKSTONE Acquires Irth Solutions

Blackstone Energy Partners announced in December an agreement to acquire Irth Solutions, a provider of cloud-based software solutions that automate processes for damage prevention and asset protection across critical network infrastructure. In addition, Irth collects and analyzes operational and environmental data and runs risk management analytics for its customer base across the energy, utilities, telecom and media end-markets.

Kush Patel, Managing Director of Blackstone, said: "Irth is well-positioned to benefit from the tailwinds impacting each of the company's end-markets. Irth can be a key partner for electric utilities, telecom companies and energy infrastructure operators."

Irth Solutions will retain its name and continue to operate independently as a Blackstone portfolio company.

Glen Cook Wins Synaco Safety Award

Glen Cook, a Principal Community Safety Specialist, won the prestigious Synaco Safety Award at the 2021 Queensland Community Achievement Awards in November. Cook has been working as an electrician for over 29 years within the construction and utilities industries. Cook was also named Health and Safety Professional of the Year in June 2020.

He has been a first responder to serious injury/burns and fatalities due to third party accidental contact with powerlines. Glen works tirelessly to share safety messages and highlight the very real consequences of powerline safety accidents.



IUB RECEIVES TOP SCORES IN PHMSA EVALUATION

The Iowa Utilities Board (IUB) received top scores from federal evaluators for its 2020 pipeline safety program activities. The evaluation was conducted in September by the Pipeline and Hazardous Materials Safety Administration (PHMSA).

The evaluation included assessment of the overall performance of the state's pipeline safety program and an electronic review of annual progress report documents, pipeline program procedures and records. The IUB Gas Pipeline Safety Program received a program evaluation score of 100 out of 100 points, and the IUB progress report scored 50 out of 50 possible points.

OHIO ANNOUNCES PARTNERSHIP GRANTS

The state of Ohio recently announced the 13 recipients of the industry sector partnership grants. The Stark County Manufacturing Workforce Development Partnership (SC-MWDP) was awarded the maximum amount of \$100,000 for a "Spark Grant." The Spark Grant provides seed funding for emerging sector partnerships to fund start-up activities and become self-sustaining.

SCMWDP is a collaborative effort formed in March 2021 between Stark County manufacturers, education and training providers, and community stakeholders who are invested in improving the county's workforce. The funds will be used to build membership, promote manufacturing as a viable career pathway and conduct outreach and training for entry level careers in manufacturing.

According to Thomas Schmidt, Vice President, Business Development for Barbc0, Inc., a manufacturer of capital equipment for the trenchless excavation, horizontal drilling and underground manufacturing industries, the Grant will help ensure that manufacturers have a voice and an active role in solving the challenges related to attracting, hiring, training, and retaining a qualified workforce. 



Locating Practices Root Causes

WANT TO KNOW MORE?
ACCESS THE ENTIRE 2020
REPORT AT CGA-DIRT.COM

Root Cause	Percentage
Locator Error	38%
Abandoned Facilities	26%
Not Marked/Incomplete Marks	16%
Maps/Records Incorrect	11%
Unlocatable/Tracer Wire Issue	9%

“3 out of 4 Excavation Safety Guide readers kept and used the guide for the entire year”

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LOCATOR SAFETY & APPRECIATION WEEK 2022:

How You and Your Company can Celebrate



**Progress is made possible
through accurate marks**



Locator Safety & Appreciation Week

April 24 - 30

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, infrastructure is a hot topic, with billions of dollars being poured into maintaining and updating infrastructure across the country. For that reason, LSAW 2022 is all about recognizing just how much of the work around us – from roadways, to utilities, to landscape projects – is made possible by the initial work of locate technicians. Progress is made possible through their accurate marks!

How You can Celebrate LSAW

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 just a few ideas:

1. 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.
2. 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. The more creative, the better.
3. 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.

4. 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.

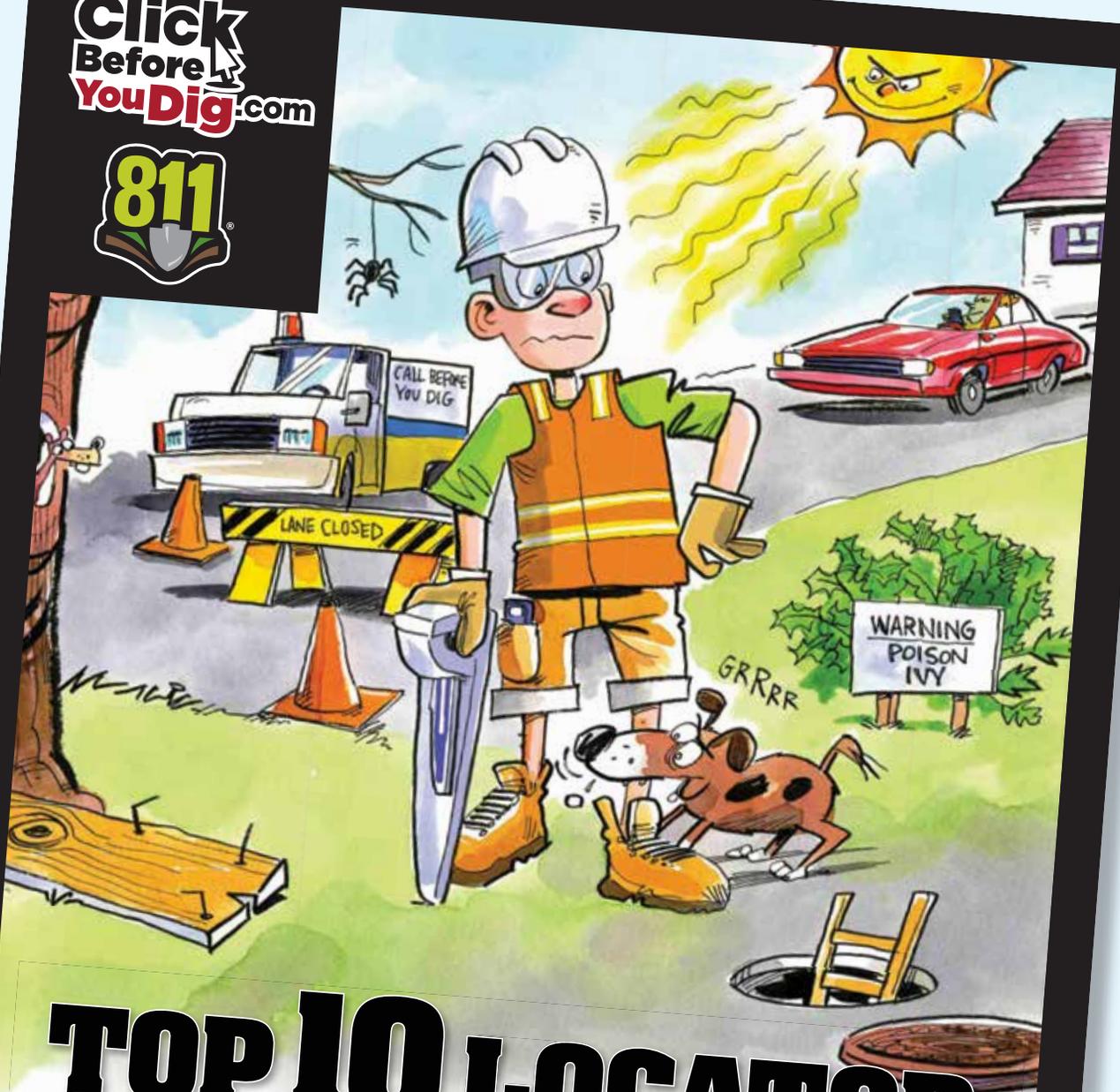
5. Reach out to the media to get some local coverage. Even a small notice in a newspaper or a 30-second story on a local television or radio station can help educate the community at large about the valuable role that locators play in keeping neighborhoods safe. Many people are curious about the meaning of paint marks and flags, and LSAW is a wonderful time to teach the public about what locators do. It's also a perfect opportunity 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.locatorsafety.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**



Click
Before
You Dig.com



TOP 10 LOCATOR SAFETY HAZARDS

1. Confined Space
2. Threats to the Eye
3. Climate & Weather
4. Dog Bites
5. Punctures & Foot Trauma
6. Poison Ivy & Other Skin Threats
7. Insect Bites and Stings
8. Walking, Lifting, Bending and Squatting
9. Slips, Trips & Falls
10. Time on the Road

LSAW
Locator Safety Awareness Week

Last full week of April

Safety Resources:

call811.com
ExcavationSafetyGuide.com
Nulca.org
GlobalExcavationSafetyConference.com
dp-PRO.com
IR-SavingLives.com



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



LOOK UP & LIVE

“Look up and live,” is a notable quote when it comes to powerline safety all over the world. It is easy to say, but in practice it can be difficult for workers to see powerlines and recognize the danger.

“I knew that powerline was there, I just didn’t see it!” I hear this phrase almost every day from workers who have been extremely lucky to survive an accidental contact with overhead powerlines. Usually the machinery is not so lucky with tremendous damage to tires, hydraulics and electrical elements of the vehicle.

Why does this Happen?

Why do these incidents occur so regularly when the powerline infrastructure is so visible, and why don’t people see them? Have you ever missed seeing a cyclist when arriving at an intersection? Why didn’t you see them? Were you looking for vehicles or a cyclist? Despite what most people think, our eyes do not work like a video camera capturing everything and sending that info to our brain. If you haven’t identified what you are looking for it can be easily overlooked and is known as “inattention blindness.” Inattention blindness occurs when the brain is focused on a specific task, and the eyes and brain miss a fully visible hazard, such as powerlines.

Adequate Planning

Let’s talk about underground powerlines for a second. Underground powerlines are not visible but are damaged far less often, why is that? It’s because we cannot see them so we then formulate a plan to work safely near them by using tools such as One Call / 811 or Dial/Click Before You Dig. Formulating a simple plan helps us identify the hazard and has significantly reduced the chance of accidental contact with underground utilities.

So, what happens for overhead powerlines? Most businesses generally rely on workers to see the powerlines and identify the hazard when they arrive onsite. This is when inattention blindness comes in, blocking the fully visible powerline to the worker until it’s too late.

This is where the Lookupandlive.com app has assisted in helping businesses and workers to allow forward planning and work safely near overhead powerlines. For example, construction companies can now investigate at the planning stages of a project what powerline

hazards will be onsite and what controls, such as relocating or undergrounding of powerlines, may need to occur without holding up work (because we all know “time is money”). The lookupandlive.com app can also be used reactively for firefighters and emergency service workers to identify voltages and powerlines after an incident so they can be aware of the electrical hazard.



The lookupandlive.com app has been a successful innovation in Australia with many utilities in many states now sharing their powerline spatial data onto the app. The app has been accessed over 100,000 times in the last year and there have been 20,000 downloads of the app to devices. **DP**

The Lookupandlive.com app has received many innovation and safety awards and recently received the Safety Excellence Award at the Australian Workplace Health and Safety Awards in 2021.

6 Tips to Ease Claims Damage Headaches

BY JONATHAN MUSGROVE

Everyone knows how important it is to avoid the damage and disruption of vital services such as water and internet—our communities depend on locate professionals as their first line of defense against these disruptions. What you may not know is when damage happens, your locate evidence is crucial in determining who is responsible for the damage and who should pay for repairs.

Most of the time, damage claims are resolved by people who were never on-site. Therefore, it's critically important to have a thorough body of evidence to prove liability. Minimal or incomplete information causes challenges for everyone involved and delays claim resolution! What can you do to help claims representatives determine who is at fault for damage? Below are six tips to implement that greatly improves the claims process, brings clarity to the situation, and protects you and your organization.

1. Use the Force - Rely on your Training.

Locate technicians who conduct their work by the book reduce the likelihood of error. In addition to formal education and training, utilize

“GOOD, OR BETTER YET, GREAT PHOTOGRAPHIC EVIDENCE PRIOR TO EXCAVATION OR CONSTRUCTION HELPS RECREATE THE SCENE BEFORE A DAMAGE. WE HAVE ALL BEEN CAPTIVATED BY BEFORE-AND-AFTER PHOTOS. PRE- AND POST-DAMAGE PHOTOS ARE EQUALLY REVEALING AND NECESSARY.”

best practices you've learned through practical, on-the-job scenarios. Plus, don't forget to go back to the basics and reference a plat map for the area you're working.

2. Embrace Your Inner Artist - Take Photos.

Be sure to capture the entire scope of the job. Take photos of EVERYTHING, especially landmarks for easy reference. Utilize the “clock method,” which involves taking four or more photos from one point in a circle, imitating the position of hours on a clock. By creating a library of images and data, you are helping preserve evidence and create an indisputable record of the scene. For comparison, recall a conversation with a friend about your latest fishing trip. On that trip you might have caught a real trophy fish. Do you simply describe this fish? Absolutely not! You immediately bring up five, or perhaps 10, photos taken from nearly every angle to help illustrate the magnitude of such a significant catch? Good, or better yet, great photographic evidence prior to excavation or construction helps recreate the scene before a damage. We have all have been captivated by before-and-after photos. Pre- and post-damage photos are equally revealing and necessary.

3. Its Chess not Checkers – Think Ahead.

Review the description of work on the locate ticket. Is there incoming weather? Will your marks be destroyed during construction? Are you near a heavily populated area? If so, take a measurement off the road or easement as another identifier. Taking this extra step is helpful to the construction team, and it proves you did a thorough job in providing the information necessary to complete repairs.

4. Remember Grade School? Time to Take Notes.

If you're able to have a conversation with the foreman or lead on the construction site to discuss your locate marks, write down your recollection of the conversation in your notes.

Your conversation can be an opportunity to clarify different points of contention and nuances of the job, which helps prevent damage. If damage occurs, having a documented account of your conversation can prove the foreman received ac-

curate information. Additionally, should damage occur, this will further help prove liability.

5. What happens when we ASSUME? Well...

Be sure to review two items on the locate ticket: the full scope of the request and the description of work. Don't assume you know where the work on the site will occur. For example, you may be asked to locate the entire property for the installation of a water line at a private residence. The ticket states the contractor plans to relocate the water line. Don't assume the water line will be installed at the front of the property and call it a day! Be thorough. Remember the ticket – the goal is to locate the entire property. You don't want the job lead to guess the locations of the line throughout the property.

6. You're the Bookend - Keep Repair Costs in Mind.

As noted earlier, most claims are resolved by individuals who are never on-site. Providing solid evidence is critical to help your company avoid being found liable for damage and having to pay the invoice for repairs. Damage and the subsequent repairs can negatively impact your company's finances (not to mention your employment). While it seems like your job is only at the beginning of a project, it's not! Locate companies are involved from start to finish. Actively working to help reduce repair costs for your company is important to the bottom line. Healthier finances lead to the purchase of new supplies, hiring personnel, and most importantly increased wages, among other benefits.

Implementing these six tips into your work process is crucial to the claims process. Your work helps professionals determine fault and resolve claims quickly. Damage during excavation is inevitable, but you can help prevent the headache of liability. **DP**

Jonathan Musgrove, Vice President of Operations at Claims Management Resources (CMR), is an acknowledged leader in the field of property damage claims recovery for governmental agencies and self-insured organizations in the utility industry. Jonathan has over 26 years of experience as a locate technician and property/casualty adjuster. For more resources, visit cmrclaims.com/blog.

Advances in GPR Array Data Processing a Boost to AR

BY MATTHEW J. WOLF

It was not many years ago the first ads ran on television broadcasts for persons donning headsets for gaming and other activities. For some of us of a certain stature (euphemism for a bit older than many), it reminds us of how futuristic the “Jetsons” and other entertainment from our youth really were. It is also a reminder that if it is dreamed it can be become a reality-virtually!

Today the range of visualization tools is expanding and what seemed out of reach for most consumers, products such as HoloLens and Google Glasses, are not as cost prohibitive as one would think. In addition, visualization tools for both the above and below ground are now available for platforms such as smart phones and tablets in Android, IOs, and Windows. All of these are equally capable to display subsurface utility data with the aid of GIS and other software platforms. This coincides as well to accessibility and affordability of GPS systems and integration of GPS into several devices either directly or through NTRIP or VRS correction services as well as GNSS. Without real time positioning to sub-meter to sub-centimeter, the ability to point the device and traverse the site while tracking the subsurface image superimposed into the real world would be prohibitive.

The real issue discussed in one of my previous articles is that the data displayed must be obtained at some point in the field through the SUE standard of care or through an accurate as-built drawing. As-builts are often akin to a Unicorn most of the time and verification as to the accuracy is usually unknown or suspect at best. It is imperative that the data quality be known by the end user as these tools continue to become more mainstream. James Anspach, Distinguished Member of ASCE, Chair of ASCE 38-22 (the update to the SUE standard 38-02) poses the risk this way, “These visualizations have tre-

mendous value but false assurances in the data will outweigh the One Call statutes to control it. It is all about the fidelity of the data and if you don’t own the providence of the data... you are relying on data that could ultimately hurt you in some way.” There is no doubt it is human nature to accept a reality that looks like just that reality. However, in the future perhaps there will be a method to qualify these visualizations in real time so there are no misperceptions of the accuracy of the information.

Over time the acceptance and pervasive use of the new “As-Built” standard, ASCE 75 *Standard Guideline for Recording and Exchanging Utility Infrastructure Data*, will add value to the infor-

may also be limited unless there is a mandate for the installed documentation survey by the governing authority of the project willing to pay for it. One would hope, over time, the standard is universally embraced and these data become part of the mix in the AR solution of the future. The existing and emerging tech for capture of installed utilities from LiDAR and 3D photogrammetry and a combination thereof are exciting and may eventually replace traditional survey instruments.

Perhaps by the time of this article publication of 38-22, the *Standard Guideline for Investigating and Documenting Existing Utilities* will officially be released as the updated version of 38-02.

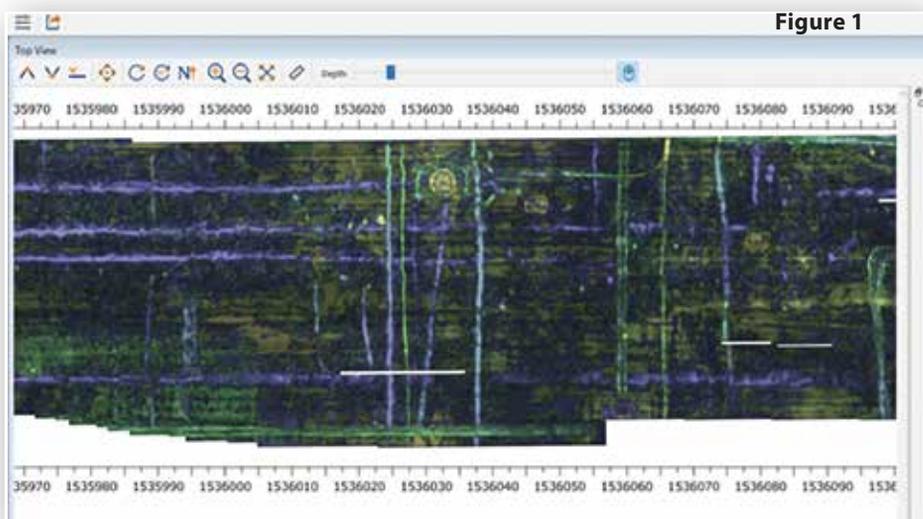


Figure 1. Raptor OspreyView Data Courtesy of GEL Solutions LLC and David Evans & Associates, 2nd Ave Spokane WA. Image of utilities from surface to approximate depth of three meters.

mation obtained through a QLD records search in terms of assured accuracy from a survey at the time of installation. This will be over years due to the magnitude of projects and the time necessary to incorporate the data for many corridors project-by-project. The standard can only address parts of the corridor that are in the scope of the project, moreover participation

The updated “22” incorporates 3D MCGPR or GPR arrays and provides guidance on 3D models perfectly timed for the advances in AR and GPR arrays.

The updated SUE is a leap forward and will be instrumental in qualifying the data downstream to the AR world. Processing and visualization of

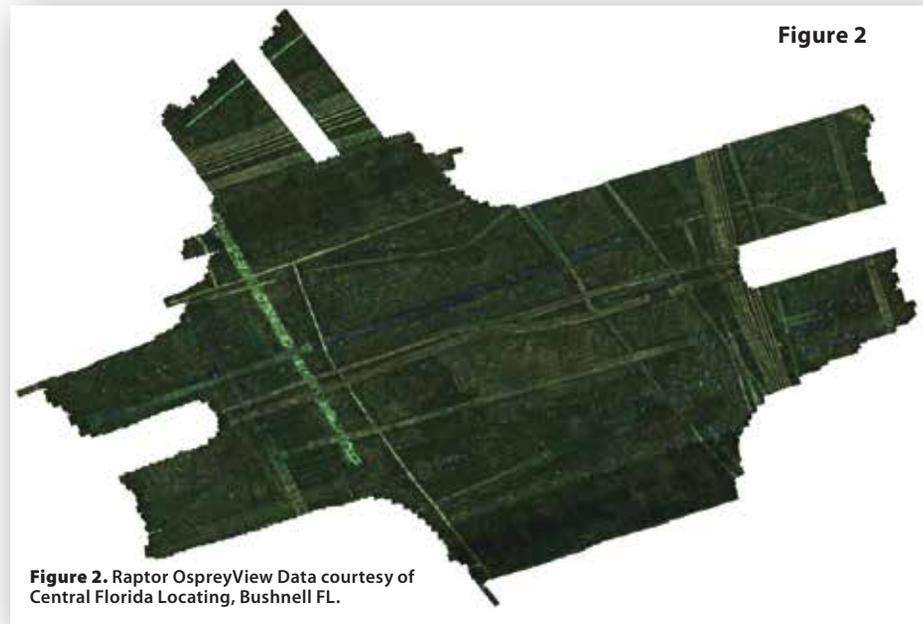


Figure 2. Raptor OspreyView Data courtesy of Central Florida Locating, Bushnell FL.

array data in of itself is also approaching the AR realm at least as a QLB representation. Last year, ImpulseRadar developed and released Osprey View software for treatment of data collected with the Raptor high-speed GPR array. Processed GPR array data can be viewed as a complete range of data from the surface to the detection limits of the radar energy. The visualization is a virtual image as if one were looking at a street corridor vacuum excavated in its entirety in favorable GPR soil conditions. **Figure 1** clearly illustrates how this visualization tool mimics AR from the manholes down to the maximum array penetration depth of close to three meters. One could argue this is reality, but not physically contacting these utilities qualifies them as QLB regardless under the SUE standard. Remarkably, these data were collected at posted city speed limits.

Figure 2 illustrates the high resolution achievable with MCGPR arrays clearly disseminating the numerous of conduits installed as well as other underground assets through a major intersection in Bushnell, Florida. Until recently, visualization of this clarity was not achievable for the SUE professional and certainly not achievable with 2D GPR systems.

Utility Mapping Services, Inc., a Montana-based subsurface utility engineering firm, provides advanced utility mapping services primarily throughout the western U.S. The soils in this vast region range from ideal to poor for GPR.

However, according to Clifford Meis, PE and project lead on many Raptor array subsurface mapping projects, “Even in the most difficult conditions the use of OspreyView visualization enhances trench lines previously or until now

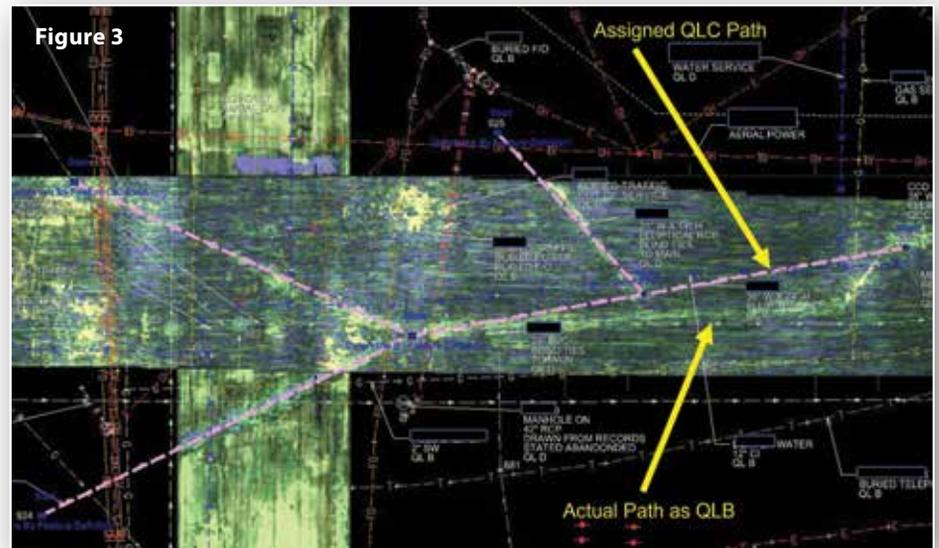


Figure 3. Raptor OspreyView Data courtesy of Utility Mapping Services, Inc., Clancy, MT. Imaging tool clearly shows unanticipated route of sewer line not manhole-to-manhole, which is a reasonable professional judgment as a QLC segment.

not as clearly distinguished in the data volume.” According to Mr. Meis, this was clear on a recent project as access into manholes for the gravity sewer system does not guarantee the ability to discern the alignment. He explained that “They attempted to note the relative pipe projections visually, but as nonconductive pipes, we are limited in practical methods to map them (we

did not run rodder or a sonde due to traffic considerations) and the difference of a few degrees is difficult to visually discern.”

Based on the limited information from a visual inspection from the surface due to the inability to invasively enter the sewer system, the assumed QLC segment assigned transected manhole-to-manhole, a reasonable professional judgement call in most circumstances. However, it became clear from the array data processed with OspreyView that the segment was not as one would have judged. In **Figure 3** the pink dashed line is the prescribed QLC segment prior to the array imaging. Based on the processed subsurface image, it is clear that a QLB segment should follow the unanticipated indirect route of this line. Mr. Meis adds that, “In this business we see a lot of creative field engineering and plumbing and this is no exception.”

Seeing is believing as they say, but all stakeholders in the subsurface utility investigation business need to make sure we have a firm grip on reality when peering through the virtual or aug-

mented lenses of whatever device is used. The future is now, and it is truly exciting to be living in the burgeoning age of digital visualizations of both the above- and below-ground world. **DP**

Matthew J. Wolf is President of ImpulseRadar USA, Inc. He can be reached at matthew.wolf@impulseradar.se.

Global Locate Masters – A Champion is Crowned

HOSTED BY UTTO • SPONSORED BY USIC

The Inaugural Global Locate Masters took place in Phoenix, AZ at Global Excavation Safety Conference 2022. This unique competition, using UTTO's Virtual Locate Simulator, drew utility locators from around the nation looking to test their skills against the best in the business. Attendees of the Global Excavation Safety Conference got a front row seat to the action as qualifiers competed across two days on the Exhibition Floor.

ORIGINS OF THE GLOBAL LOCATE MASTERS

The Global Locate Masters was created by Infrastructure Resources, UTTO Technologies, and Ron Peterson. The primary reason being the field locate technician deserves to be celebrated for more than a lack of mistakes. Naturally, the damage prevention industry focuses on damages (or the lack thereof). The second reason, and most practically, traditional locate competitions have been difficult logistically. The locations must be carefully selected and are inflexible once chosen, competitors cannot watch



one another perform the locate without gaining advantage, and gathering spectators is a challenge. The Global Locate Masters aims to celebrate the excellence that makes so many locates go right. A reliable accurate locate is the culmination of a locate technician's skill, years of experience, and diligence. The best of the best deserve every opportunity to showcase those skills on a stage for the rest of the industry to see.

ABOUT THE TECH: UTTO'S VIRTUAL LOCATE SIMULATOR

The UTTO Virtual Locate Simulator creates complex locate experiences in an immersive environment that challenge a technician's training, skill, experience and the attention to detail required for a successful locate. The locate device behaves as if it were detecting pipes and cables under true electromagnetic signal conditions (both simple and complex).

The benefits of the Virtual Locate Simulator include:

- Accelerate the training process while improving training quality
- Compatible and functional with any chosen locate device
- Simulate a variety of buried asset types, such as pipelines, cables, etc.
- Train and locate in an immersive 3D environment without risking assets in the field
- Get rid of the need to "shotgun" for months at a time with another technician
- Multiple "real world" electromagnetic scenarios stored
- Trainer selects "locate scenarios" from a variety of difficulties
- Tricky interference signals for beginner, intermediate, and advanced courses
- Evaluation and score of training performance



CONGRATULATIONS TO THE TOP 3

First Place: Pat Bellacero, Mule Services

"At first, I was hesitant to compete. Locating is my profession and passion. I was encouraged to enter by my boss at Mule Services. The VR setup was amazing. I wasn't sure what to expect, but it really



felt like a field locate. As in a normal locate, procedures had to be followed. I was super excited, and it was a great feeling."

Second Place: Mike Malone, Premier Infrastructure

"I had a great time representing my company at the 2022 Global Locate Masters, it was an absolute honor to finish among the top 5 of the best locators in the country. To be measured on the accuracy of a locate and the science and dynamics that go into



Third Place: Chad Andrea, CenterPoint Energy

"I wanted to thank you for the opportunity to participate in the Global Locate Masters. Making it into the finals was an exciting experience. The competition was also a good reminder that there are more things to learn and there is more room to improve. I enjoyed meeting competitors from around the country and will do my best to return and get that trophy next year!"

correctly marking an underground facility is not something that can be easily calculated, but the team at UTTO were more than up to the challenge. I cannot say enough about the excellence in both their presentation of the event and the product they have put into the hands of utility workers. The fact that they made it a point to not only acknowledge the skill it takes to mark underground utilities, but to highlight these skills with a competition and awards was amazing."

Congratulations to Pat Bellacero of Mule Services, the 2022 Global Locate Masters Champion. Pat holds the title of Global Locate Masters champion, becomes the spokesperson until next year's competition, and will have his name engraved on the official GLM trophy! This honor includes interviews for magazine features, publicity quotes in social media to promote excellence in locating, and recognition of this

achievement, along with company recognition, in all 2022 media coverage associated with the Global Locate Masters.

Pat is an incredible spokesperson for the utility locating profession. Not only does he bring a passion for the craft to the field, but his excellence also clearly shines through in his performance. Perhaps most telling is the fact that Pat had not previously used the UTTO Virtual Locate Simulator prior to the event. That speaks to the transferability of Pat's skills and the quality of the simulator experience.

GLOBAL LOCATE MASTERS 2023

Throw your hat in the ring for 2023 as The Global Locate Masters comes to Tampa, FL for Global Excavation Safety Conference 2023! To hold a regional GLM competition send an email to Scott@IR-SavingLives.com. Details on qualifying for the 2023 GLM are coming soon! Stay tuned to GlobalLocateMasters.com. **DP**



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

Enhance your public awareness efforts with a unique, engaging approach to rural outreach. The Pipeline Ag Safety Alliance works closely with the National Association of County Agricultural Agents to help deliver safe digging education to farmers and ranchers across the nation. Tracking our "educate the educator" approach with annual documentation, we realize there is no one size fits all.

Learn more at
PipelineAgSafetyAlliance.com

Let's
Grow
Safely Together



The Global Locate Summit

SPONSORED BY KORTERRA & LSAW

Moderator:

- Ron Peterson - Executive Director, Nulca

Panelists:

- Jim Plasyński - Chief Revenue Officer, KorTerra
- Donavon Busta - Regional Operations Manager, Blood Hound
- Shawn Hailey, President, LineQuest LLC

Record breaking locate ticket numbers are hitting Notification Centers across the country. With that there's been a natural increase in the demand for consistent, high performing locate technicians in the field to perform those locates. It's long been an issue, but never has it been more at the forefront: What is the best approach for attracting and keeping good locators?

Jim Plasyński of KorTerra, Donavon Busta of Blood Hound, and Shawn Haily of LineQuest LLC – with the moderating guidance of Ron Peterson of Nulca – explored that question at The Global Locate Summit during Global Excavation Safety Conference 2022 in Phoenix.

THE ISSUES

Hiring

- Locate Technician pay, in general, is low. While there are notable exceptions to this, the sentiment from locators themselves is that the pay is low.
- Attrition happens as early as the training process. Ron Peterson notes a previous experience of hiring 16 locators, losing 8 during training, then another 4 more once actual field work began. Retaining just 25% of hires is wasteful and discouraging.

Unfriendly Laws

- States with no limits on the scope of a locate can create difficult or even impossible conditions for a locate. Donavon Busta of Blood Hound notes Texas law, which puts no limit on the scope of a locate. A locate could be requested for 100 miles, which would require the entire 100 miles to be located in just two business days. These re-



The Global Locate Summit moderator, Ron Peterson.

quests put undo stress on locate companies who are trying to manage the workforce.

Technical Issues

- 65% of buried utilities are private facilities, which are not covered by an 811 call. These are less likely to be identified by permanent markers and may require GPR to locate.

Leadership

- Having well trained managers is a key to keeping locate technicians. This means that it is critical to have a first layer of managers that are well trained as good leaders.
- Ongoing training can be an issue. Process and policy changes require updated training.
- Leadership leans in and takes full ownership of a stressful situation on a damage when a locator performed their job appropriately.

Stress

- There can be a great deal of stress associated with being a locate technician which can make it hard to keep them.
- Trying to determine which candidates can handle the stress of locating during the interview process is important, but difficult.
- Locate technicians paint/flag and leave, and are not present during excavation. Any uncertainty, even if small, can cause large amounts of stress.
- High workloads and busy seasons.

- Hard conditions. Working occurs on or near roads and in inclement weather.
- Persistent fear of contributing to an expensive damage or an injury if they mislocate a facility. Per an audience member, there was a \$2,000,000 damage claim paid on a sewer line damage in CA. This was the result of a bad locate. There is a persistent issue in the profession that stems from only being recognized or acknowledged when something goes wrong.

POSSIBLE SOLUTIONS

The issue of locator retention isn't likely to be solved simply nor swiftly, but the panelists had a few ideas that could begin to address the issue.

1. Use social media to acknowledge the crucial work that locate technicians perform every day. Even a small gesture can instill the deserved pride in the locate profession that is deserved. A great place to start is celebrating Locator Safety & Appreciation Week (LSAW). Learn more at LocatorSafety.com.
2. Keep locators at the same pay rate to avoid job hopping and discontent.
3. Empower private locators to sell services and earn commission.
4. Reduce individual ticket volumes by reducing the number of facilities managed per locator.
5. Establish a moratorium on contract locate customers hiring the best locators away from their contract locators. This poaching practice has put extra pressure on the contract locators to keep hiring.
6. Better trained managers that operate as good leaders.
7. Ongoing training from good management. Many of the field frustrations could be solved with higher competence and efficiency. That comes with training. **DP**

Have an idea to address attraction and retention issues in utility locating? We'd love to hear it! Email info@ir-savinglives.com with your name and idea(s).

Louisiana811 Locator of the Year Winners

Each year Louisiana811 (LA811) recognizes a standout with their Locator of the Year Award. Nominations are accepted allowing excavators and member utilities to nominate a locator who has gone above and beyond in providing safe, excellent service.

The 2021 LA811 Locator of the Year winners are Jason Raffray, Entergy Gas (large member company winner) and John Jackins, Stake Center (contract locator winner). Prizes include \$100 in cash, a customized hardhat, bragging rights, recognition through LA811, entrance for the winner and one guest to the Louisiana Damage Prevention Summit, and a LA811 gift basket.

All nominees for the award must be employed by a LA811 member or a contract locator employed by a member company, and they must meet the following criteria:

- Minimum of two years locating experience in Louisiana
- Employed by a member company during the calendar year
- Completed minimum number of locates (500 for small classification; 3,500 for large classification; 500 for contract locator)
- Had ZERO "At Fault" damages
- Had ZERO Safety Violations
- Established proactive relationships in damage prevention

John Jackins was nominated by Selina Gerald of Livewire Communications. "John is always willing to go the extra mile when performing locates. He will always let us know if there are any issues," she said. "He is very personable and our entire crew loves when he is locating our jobs. If we ever have a problem, we can call John and he is always quick to answer our calls."

Jason Raffray was nominated by Michelle Blanchard, Region Manager of Entergy Gas. Jason has been working for Entergy for almost 15 years, first as a Gas Construction and Maintenance Mechanic before moving to the Gas Damage Prevention Group in 2016.

"Jason has completed over 8,000 tickets in 2021. He is a skilled locator that always looks at the big picture, such as taking action to correct measurement records and creating jobs to get test leads installed when locate tone is weak," Blanchard said. "Jason is a hard-working, skilled, ded-



icated team player. He provides technical training and assistance to the entire Damage Prevention Team."

The Entergy Gas Damage Prevention Team was essential in supporting restoration efforts following Hurricane Ida, a powerful category 4 hurricane that struck Orleans Parish in late August (2021). The Damage Prevention Team worked hundreds of emergency tickets and Jason was key to the efforts. He was able to push through the difficulties and pull in needed resources like hydro-vac trucks to get the job done. He also coordinated and communicated with the electric line workers to make sure there were no excavation damages to gas facilities following the hurricane.

LA811 congratulates both Jason and John for earning the 2021 Locator of the Year Awards! 

Global Excavation Safety Conference 2022: A Warm Reunion in Arizona

• BY STAFF •

IT HAD BEEN TWO YEARS SINCE the damage prevention industry gathered for an Excavation Safety Conference (Global ESC). In that time, plenty had changed. New industry associations came to life, work from home standards transformed entire sectors, dig tickets hit all time highs, and virtual meetings came in and out of fashion a dozen times. What didn't change in those two years were the connections people have with each other in this industry – Connections formed due to a shared passion for saving lives through damage prevention. Global Excavation Safety Conference 2022 met in Phoenix, AZ from March 1-3 and it served as a jubilant return to live events for many of the attendees and exhibitors.



Education Reigns Supreme

Beyond granting the opportunity to see friends in-person for the first time in years, Global ESC opened the floor to speakers who delivered an incredible array of education to attendees. From in-depth explorations of the future of underground mapping with Michael Twohig to the perception shifting talks by Dr. Kathy Gruver, speakers truly had something for every stakeholder and knowledge level. With concurrent sessions throughout all three days of the conference, not a moment went by that you couldn't duck into a room and learn something new and interesting.

*Interested in speaking at Global ESC 2023?
Contact Karin Strub at Karin@ir-savinglives.com!*

Workshops Dive Deeper

Workshops were hosted throughout the week of Global ESC for those who wanted to take a more hands-on approach to learning. Craig Reed of Radio-detection, Ron Peterson of Ron Peterson Consulting, Bob Nighswonger of Utility Training Academy, and Mark Bruce of Cross Bore Safety Association brought their expertise to workshop participants.

Summits Open the Conversation

 **Excavator Perspective Summit, Sponsored by Badger**
What steps can be taken to improve communication?

 **Electric Safety Summit, Sponsored by KorTerra**
What are the best practices for damage prevention after a disaster?

 **Fiber Optic Asset Protection Summit, Sponsored by NTDP**
Should we be looking up as well as looking down?

 **Facility Notification Center Summit**
What is the role of a Notification Center in impacting legislation and education? Does it improve damage prevention?

 **Pipeline Safety & Awareness Summit**
How can field data be used to drive actions across the company?

 **Global Locate Summit**
What is the best approach for attracting and keeping good locators?

 **Water & Sewer Infrastructure Protection Summit**
What does responsible potholing look like?

Industry Summits proved to be the jazz ensemble of Global ESC's concert line-up! The summit panel members had fascinating, free flowing conversations with each other and audience members. These exchanges had everyone wishing each 45-minute summit could last just a bit longer. Interested in learning more about what was discussed at each of the summits? Summaries of each summit will be available shortly at dp-PRO.com.



George Kemp Named Damage Prevention Hero of the Year
The annual Wednesday Night Networking Event brought attendees and exhibitors alike to The Duce, where everyone had the pleasure of witnessing the





“I had a great time at the Global Excavation Safety Conference. I appreciated the varied perspectives and content that was offered.”

- Tiffany Lindsey, Diggers Hotline



pandemic was with our friends in Arizona, as they were our hosts back at our very first Conference in 2006. Their continued support and endorsement of the Global Excavation Safety Conference is appreciated by all of us.

first Damage Prevention Hero of the YEAR Award presented to Metronet's George Kemp! George was selected democratically by his peers during a three-month voting period. And it's no wonder -- His passion for saving lives is evident to anyone who hears him speak.

George Kemp: *“Thank you Infrastructure Resources! It is a great honor and very humbling to receive this great recognition. Metronet's commitment to safety and the commitment to safety of those who serve with me on boards like Indiana 811 help drive my passion for safety. Thank you to everyone who voted for me!”*

We can always do something more towards safety! A commitment to safety is a commitment to saving lives!”

Congratulations as well to all of the Damage Prevention Hero of the Year nominees: Kelley Heinz of ComEd, Richard Broome of LinesearchbeforeUdig, Bruce Campbell of MISS DIG 811, and Dora Parks of One Call Concepts. You all clearly inspire your peers immensely, and your leadership in the industry is indispensable. Read more about all the nominees at dp-pro.com/dp-pro-hero-of-the-year-voting.

Thank you to Arizona 811

We thank our hosts at Arizona 811 for their gracious welcome back to the Grand Canyon State! It is fitting to us that our first live Conference back after the



Global ESC is Your Conference. Help Build an Even Better 2023.

For 17 years, IR's Excavation Safety Conferences have been the damage prevention industry's premier event. It's been a hub of groundbreaking education, the stage for new technology announcements, and a gathering place for the relationships we value all year round. It's become those things because of feedback from attendees and exhibitors who have truly molded the event over the years.



Global ESC 2022 came after a two-year lull in live events and the mere fact that we were all together again was elating. Fresh off of the event, we think it's the perfect time to place our fingers on the pulse of the industry to see if we can take 2023 to another level. We started that process with the venue. As per request, Global ESC 2023 is headed back to Tampa, FL! That's where you come in. **DP**

Visit GlobalExcavationSafetyConference.com/Build2023 or use the QR code to contribute to the building of Global ESC 2023. Thank you for being a part of this great community!





THANKS to our Speakers!

Dr. Ahmed Al-Bayati, Lawrence Technical University

William Alex, Henkels & McCoy Group, Inc.

Steve Allen, Budco Inc.

Dr. Sam Ariaratnam, Arizona State University

Tina Beach, CHS, Inc.

Charles Bell, VACMASTERS

Travis Beran, Subsurface Solutions, LLC

Larry Berwanger, Badger Daylighting

Sam Bloedow, Thrievon Information & Technology

Susan Bohl, OKIE811, FNCA

Brice Box, Kinder Morgan

John Brix, Professional Speaker

Mark Bruce, Cross Bore Safety Association

Annie Burns, UTTO

Donavon Busta, Blood Hound, LLC

Bruce Campbell, MISS DIG 811

Paul Carette, FlagShooter Inc.

Michelle Cechowski, East Central Florida LEPC Staff

AJ Clark, Badger Daylighting™

Mark Congdon, Hydromax USA

Wylie Davidson, Wylie Davidson, LLC

Tom DeWitte, Esri

Dave Dryden, Sensors & Software Inc.

Robert Edwards, Citizens Energy Group

Mark Frost, JULIE, Inc.

Taylor Fudge, Claims Management Resources (CMR)

Sandi Garrick, Markham Contracting

Dr. Kathy Gruver, Professional Speaker, Author, Coach

Alan Haddy, UTTO

Shawn Hailey, LineQuest LLC

Thomas Hall, KorTerra, Inc

JJ Harrison, Professional Rodeo Clown & 811 Ambassador

Erin Hayes, Kingsbrook Rural Water

Kelley Heinz, ComEd

Jack Jackson, SafeStart®

Eric Jacobs, Nicor Gas/Southern Company Gas

Ed Jarrett, ALLO Communications

George Kemp, MetroNet

Mike Kemper, Mears Group, Inc

Bill Kiger, Pennsylvania 811

Larry Krummert, Mears Group, Inc

Chief Jonathan Lamm, City of Cocoa, Florida

Scott Landes, Infrastructure Resources, LLC

Eric Larson, Illinois American Water

Terri Larson, Larson Communications

Roger Lipscomb, OHIO811

Jeff Lyons, AEC Solutions, Inc. (Builterra.com)

Bruce Magee, United Rentals

Jason Manning, PelicanCorp

Julien Marin, Urbint

Ryan Martin, Phillips 66

Christopher McDermott, AT&T

Cliff Meidl, Cliff Meidl Enterprises

Ketha Molina, Texas 811, Leading Women of Damage Prevention

Kevin Moore, Hinshaw & Culbertson LLP

Dr. Christie Murray, ROSEN, USA

Bob Nighswonger, Utility Training Academy (UTA)

Anand Nukala, Irth Solutions

Alejandra Ocano-Gonzalez, Arizona 811

Louis Panzer, North Carolina 811

Jordan Partlow, Blood Hound, LLC

Michael Pegam, PelicanCorp

Matthew Peterson, Chicago Department of Transportation

Ron Peterson, Nulca, Ron Peterson Consulting

Jim Plasynski, KorTerra

Craig Potts, Drain Tile Safety Coalition

Jennifer Pratt, Damage Prevention Council of Texas

Whitney Price, Infrastructure Resources, LLC

Tracy Pursell, Blood Hound, LLC

Craig Reed, Radiodetection

Michaela Renner, Talygen

Duane Rodgers, PelicanCorp

Ricky Rollins, Ricky Rollins Safety Speeches

Roger Sampson, New York 811

Lindsay Sander, Sander Resources

Gary Schafer, Radiodetection

Brandon Schroeder, Believe in Safety, LLC

Chad Shannon, MEA Energy Association

Forrest Sim, GPR Consortium

John Sparks, Texas 811

Andrea Stainback, Lumen Technologies

Jeremy Suard, Exodigo

Mike Sullivan, Utility Safety Partners

Joe Tantarelli, SafeStart®

Christopher Thome, Rhino Marking & Protection Systems

Kesley Tweed, Pipeline Association for Public Awareness (PAPA)

Michael Twohig, DGT Associates

Meghan Wade, Georgia 811

Jemmie Wang, BizMetrix Consulting, LLC

Tammy Wilfong, Verizon

Jim Willis, In-Dev Specialists, Inc.

Misty Wise, South Carolina 811

Matthew Wolf, ImpulseRadar USA, Inc.

Thomas Young, PelicanCorp 

Infrastructure
Resources
LLC





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?

CONTACT DETAILS

Name: _____

Job Title: _____

Company: _____

Contact me by: _____

Phone _____

Email _____

Complete this survey, or any of our industry surveys, online at dp-pro.com/survey.

Dealing with Mental Illness: A Journey to Health and Healing

• BY CHRISTI MCLAIN •

I'D LIKE TO SHARE a personal story about myself with you all. This is separate from my role at Texas811. I make this clear distinction because I want this to be associated with me, Christi Mclain, and not my organization.

I lived with my mom growing up. She did her best to care for me, but unfortunately, I suffered physical and sexual abuse at the hands of two stepfathers. As you can imagine, this caused a great deal of emotional damage to me. I began to experience depression and anxiety as a teenager which led to me moving in with my birth father. In the ninth grade, after one of my father's verbally abusive episodes, I decided life was no longer worth living. I swallowed a handful of sleeping pills and began to cry. Something prompted me to alert my stepmother of what I had done so she could take me to the hospital. I remember waking up to the doctor saying if we had been 20 minutes later, I would not be here today to share my story. Sadly, in October of 2008, I lost my mother to suicide. Through years of counseling and many nights of praying and standing firm in my faith, and with the support from family, I have been able to recover from the trauma I experienced as a child. While I still battle anxiety, depression, and at times suicidal thoughts, I am more equipped to fight these battles.

You may be wondering, "Why share such a personal struggle?" On September 1, 2021, on my way home after hearing a presentation about suicide in the workplace and how the presenter himself struggled with this, I felt something inside me say it is time to start sharing your journey and help others. Since then, I've had the opportunity to share my story at a local coffee shop, high school, and my church youth group.

I hold this topic close to my heart and helping others battling this fight is my purpose in life. There is so much shame associated with mental illness and sexual abuse and so I share my story for two reasons. One, I hope to help others who have experienced this type of trauma or who struggles with mental illness feel like they do not have to hide behind the shame anymore. With sexual abuse, it is not our shame to bear. With mental illness, there is no shame in taking care of yourself and speaking up when you feel hopeless and lost. The second reason I share my

Need Help?

National Suicide Prevention Lifeline:
1-800-273-TALK (1-800-273-8255)

24/7 Crisis Text Line: Text HOME to 741741

Veterans Crisis Line: 1-800-273-8255 #1
or Text to 838255

For more information, visit the National Suicide Prevention Lifeline:
<https://suicidepreventionlifeline.org/>

Risk Factors for Suicide

- Health conditions
- Social risk factors
 - Poverty
 - Minority Race
- Stressful life events
 - Divorce
 - Death of someone close
 - New school
 - Breakup
- Mental health conditions
- Trauma
 - Physical, emotional, verbal, or sexual abuse
 - Neglect or rejection
- Hormone imbalances
- Peer pressure
- Addictions
- Social media/Technology
- Bullying/Cyberbullying

Know the Signs and Symptoms

- Thoughts of hurting or killing yourself
- Looking for ways to kill yourself
- Talking about death, dying, or suicide
- Self destructive behavior: drug/alcohol abuse or weapons
- Feelings of hopelessness or like there's no way out
- Rage, anger, anxiety, agitation, sleeplessness, mood swings
- Feeling like there's no reason to live
- Withdrawing from family or friends
- Self-harm such as cutting, anorexia, or bulimia

What can you do when you feel like giving up?

- Fight like your life depends on it
- Meditate, Create quiet time for yourself, or pray
- Journal
- Reach out for help
- **DO NOT GIVE UP**



What can you do to help a loved one?

- Know the signs and symptoms...and don't ignore them.
- Talk to them about how they're feeling and listen to them without judgment.
- Pray for them and with them.
- Offer to get them help or go with them to get help.
- Encourage them. Remind them of who they are and why people love them.
- **DON'T GIVE UP ON THEM...even when it gets messy.**

#StopSuicide

story is to give hope and to help others realize they have a purpose in life. I spent years asking, "Why did this happen to me?" Once I realized I could not change the past, I began to realize I can use the past to change the future.

If you are struggling with mental illness, please reach out for help. If you would like to know more about my story, please reach out to me on LinkedIn.

This article is dedicated to my mother and everyone who struggles with mental illness as well as my granny and husband of 18 years for their support and unconditional love.

Below are some additional resources that have helped me in my journey to health and healing.

- Dr. Julie Smith on YouTube
- Listen to uplifting, positive music
- Connect with a local church or your home church
- Reach out to friends or family members you trust

- Employee Assistance Programs
- Professional Counselor
- Books:
 - *Crash the Chatterbox* by Steven Furtick
 - *Battlefield of the Mind* by Joyce Meyer 

Raptor 3D GPR Array

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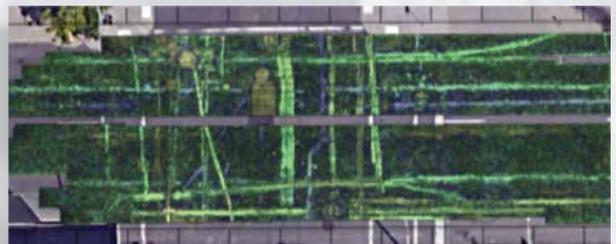
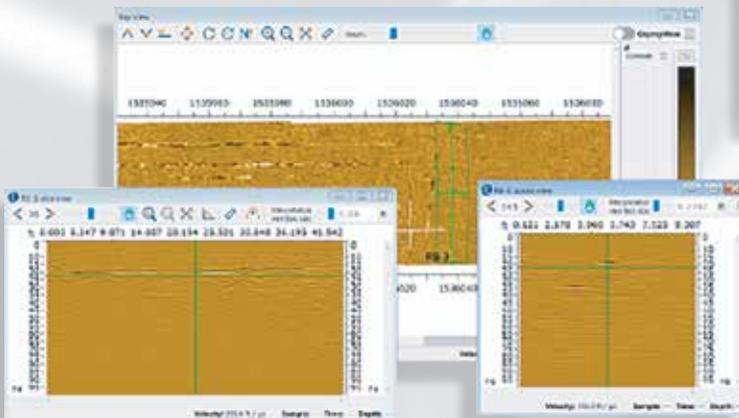
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- Seamless Integration RTK GPS and Total Station
- Setup in Minutes
- Interchangeable 8-Channel Cart Included with Purchase of 18-Ch system
- Easy Graphical Mapping Nav Display



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AZUCA Arizona Chapter of NUCA

Representing Utility and Excavation Contractors

• BY CHRISTINE BARNES •

THE ARIZONA UTILITY Contractors Association (AZUCA) rejoined the National Utility Contractors Association in April of 2021 and formed AZUCA Arizona Chapter of NUCA. The combined associations now have over 40 member companies with 20 of those being contractors. Since April of 2021, the association has held a successful Golf Tournament in Flagstaff, had a speaker breakfast to discuss contract negotiation and industry material delays, and held the first annual meeting as AZUCA Arizona Chapter of NUCA where the 2022 Board of Directors were installed. The association received its Charter back at the National Convention March 4, 2022.



“We are very excited to welcome back Arizona utility construction members to NUCA. Working together will help both our organizations give more back to the industry and improve our membership services,” said NUCA CEO Doug Carlson. “Engaging more Arizona members in our many benefits and industry programs equals a bigger positive impact at both the National and state and local levels.”



Left to Right: Senator Mark Kelly, Christine Barnes, Andrew Bock.

“AZUCA members are excited to broaden our scope of service to our members and our local communities,” said AZUCA President Clint Overton. “With the new National affiliation assisting our chapter’s membership network, we can now have a greater impact for the industry and our members.” The Arizona Chapter held its first event as a newly rejoined NUCA Chapter in July at a golf outing in Flagstaff. The event had over 100 participants which is more than the event has had in the last few years. “We are well positioned to continue bringing our members together throughout the pandemic, and now we want to position them for greater prosperity and a louder legislative voice in the future,” said Overton.

The association meets monthly with the board of directors. The Safety, Governmental Affairs, Events, Membership and Scholarship committees have reformed with enthusiasm. The association would like to continue with trainings/events/meetings on a quarterly basis. AZUCA Arizona Chapter of NUCA was able to award seven scholarships to deserving AZUCA Arizona Chapter of NUCA member dependents in August and September of 2021.

On a National level, AZUCA members attended the Washington Summit

in early November 2021. In person meetings were held with both Senator Kelly and Senator Sinema’s offices, as well as Congresswoman Lesko and Congressman Biggs’ offices. The association was advocating for the Core Infrastructure Bill, which was passed just a few days after the meetings, focusing on broadband and workforce development. NUCA’s rejuvenated affiliation in Arizona promises to open more doors for AZUCA Arizona Chapter of NUCA members over the years ahead. AZUCA members are automatically NUCA National members with full benefits.

The AZUCA Arizona Chapter of NUCA Board of Directors would like to be an industry resource for its members. The AZUCA Arizona Chapter of NUCA Board of Directors is comprised of:

President	Clint Overton, VW Connect
Vice President	Justin Platchek, BPG Designs
Treasurer/Secretary	Jared Asay, Conover Asay CPAs
Associate Vice President	Larry Antolik, Vermeer
Immediate Past President	Arvid Veidmark III, SSC Underground
Director	Scott Bates, Core and Main
Director	Robert Hill, CenturyLink
Director	Austin Stadeli, B-Line Directional Drilling
Director	Aric Smith, Achen-Gardner Construction
Director	Andrew Uster, Assured Partners 

Christine Barnes is the Executive Director of AZUCA Arizona Chapter of NUCA. She can be reached at (970) 376-1190 or Christine@nuca.com. For more information, check out www.azuca.org.





Pre-Excavation Checklist Before **EVERY** Excavation

IN THE OFFICE

- Review all drawings, plans, engineering blueprints for existing buried facilities
- Proposed excavation area has been marked in white paint and/or flags
- Call 811 at least 2-3 business days before excavation (check your state One Call laws)
- Locate ticket number is posted at the work location
- Onsite meeting scheduled with all high profile facilities in locate area (gas/oil pipelines, high-voltage cables, fiber optic)

ONSITE

Complete a pre-excavation walkthrough of the entire jobsite and adjacent areas

Visual Inspection of Jobsite: Permanent markers:

- Signs or marking posts
 - Pavement markers (stamped nails, pavement decals, A-tags™)
 - Surface markers
- Other surface signage for landscaped areas
- Locate marks
- Consult any maps or field sketches of the location
- Identify all services to buildings such as:
 - Gas meters
 - Farm taps

- Pipeline valves
- Cable pedestals
- Electric cables
- Water valves
- Telephone closures

- Look for evidence of trench lines from previous excavation
- Look for cleared pipeline ROWs
- Talk with the property owner or general contractor to identify potential private facilities that may not be marked:
 - Lighting
 - Outbuildings
 - Pools/Spas
 - Irrigation
 - Sewer laterals
 - Propane tanks
 - Communications lines

Document of Jobsite:

- Compare actual jobsite to One Call ticket
 - One Call ticket covers the scope of the work
 - One Call ticket "Work to Begin" date is valid
 - All utilities have responded
 - All facilities are marked within the excavation area
- Photograph the jobsite
 - Locate marks and flags from 360° at varying distances for perspective
 - Permanent signage and location relative to the dig area:

- Note location, height, and operator of overhead lines
- Note all required safety signage
- Video and/or sketches where pertinent

BEFORE YOU DIG

- Review safety information with anyone working the job
- Confirm with facility owner vacuum or hydro excavation is scheduled for all pipelines impacted
- Locations for hand digging within the tolerance zone are noted
- Representatives for all critical facilities are present
- Emergency equipment available when hazardous atmospheres are potentially present
- List of all emergency contact numbers for assets in and adjacent to the dig zone is readily available
- The location and route to the nearest hospital is known by onsite supervisors

This document is provided for informational purposes only and does not constitute professional advice. It is intended to be used as a guide in the development of a checklist specific to your situation and may not be inclusive of all pre-excavation activities required of your situation. Consult your company's appropriate management before implementation. Excavation Safety Guide, its employees and agents accept no liability and disclaim all responsibility for the consequences of acting or refraining from acting, in reliance of the information contained in this document or for any decision based on it, or for any consequential, special, incidental or punitive damage to any person or entity for any matter relating to the contents of this document.

CCGA Best Practice Committee Pushes Forward

• GORDON CAMPBELL, TECHNICAL TRAINING SPECIALIST, AECON UTILITIES •

DESPITE THE PANDEMIC that has affected all our lives, the important work of damage prevention in Canada continued the past two years at the Canadian Common Ground Alliance (CCGA). Forced to move in-person meetings online and the local restrictions that impacted the Regional Partners ability to meet, the national Best Practice Committee continued to push forward the development of several best practices. In early 2022, the CCGA will proudly release one of its signature publications, *Best Practices*, version 4.0.

The CCGA Best Practice Committee does the important work of reviewing suggested changes to the National Best Practices and taking part in the consensus-based process that determines what our guiding best practices will be. It is critical to the integrity of that process that the highest number of stakeholder groups possible are represented at the table. No single interest group can fully understand the most important elements in keeping people safe, so every group's viewpoint needs to be considered.

A best practice is by definition a proven methodology or technique that most reliably gets to the desired result. A commitment to implementing best practices means a commitment to use all knowledge and technology available to be successful.

Several important new and revised best practices were reviewed and passed by consensus in 2021:

- BP 4-16 - Marking Preservation - A statement on how to preserve locate marks and avoid unnecessary remarks. Defining the steps necessary to adequately protect the marks.
- BP 4-11 - Locate Verification - A statement on providing clarity around what constitutes a complete locate package. Adding the locate confirmation page can reduce the confusion over which utilities were notified and which ones might have been overlooked.
- Glossary - Added a definition for hand digging which matches the CSA Z247 definition of hand digging. Z247 states that hand digging is "any movement of earth using a hand shovel," and "this does not include using picks, bars, stakes, or other earth-piercing devices." It also defines the hand expose zone as the "area around the



underground infrastructure where ground disturbance by mechanical equipment cannot take place until the underground infrastructure has been exposed by safe ground disturbance practices such as hand digging or vacuum excavation."

- BP 4-2 - Privately Owned Facility Awareness - A statement on awareness of private facilities and the steps to take to identify them. Privately owned buried facilities are typically not marked by representatives of the public utility owners beyond the demarcation point for each utility. The excavator should have all known private facilities in and near the work area identified, located, and marked prior to excavation activities.

During 2021, several members of the committee participated in a government-sponsored workshop on underground strikes. Based on the list of controls/solutions provided by the subject matter experts from industry, research, and government (regulator), the number one action item was "Develop best

practice guidelines for planning and working in the vicinity of underground utilities." This includes roles and responsibilities to promote accountability among supervisors and workers as well as One Call, utility owners and municipalities.

What we're Working on in 2022

The CCGA Marketing & Education Committee is undertaking a review of the CCGA Best Practices section 7.0 which describes Public Education Best Practices on Damage Prevention. The last revision made to this section occurred in 2010, long before the advent of social media, the rise of YouTube, the use of podcasts and other current communication methods. Several proposals have been submitted to modernize existing practices by creating "continuing awareness communication plans."



In Summary

The pandemic has restricted all types of industry meetings and groups. If it was not for the dedication of the members of the CCGA Best Practice Committee and the continued shared responsibility of the Regional Partners, we would not have been able to deliver what we did in 2021. **DP**

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Here's what 2022 looks like for FlagShooter, Inc.

New	As Always
Pin Flag sizes available	Short lead times
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LOCATING



BY CHRISTOPHER KOCH

STOP, DROP, AND ROLL

I've been training locators for over 20 years now, a good amount of that time having been spent training technicians outside of my own company. Seeing how a variety of different organizations handle similar tasks offers a lot of insight into the culture of my trade.

One of the things I've noticed over the years is how differently inductive locating is handled from one group to the next. As a quick review, a transmitter can be used to apply signal to a conductor in one of three ways: direct connection (conductive locating), close induction (use of the coupling clamp), and induction (also called transmitter induction or "dropping the box").

The Common Ground Alliance Best Practices for Locating and Marking 4.12 places a hierarchical preference on active signal application methods ranking them in order of direct connect, then clamping, and finally induction, stating that induction "usually results in a weak signal that will 'bleed over' to any conductor in the area". I'm already on the record as disagreeing with this particular Best Practice because it ignores the situational benefits of inductive locating which can make both clamping and transmitter induction better choices than direct connection on some locates.

Culturally, the bias against inductive locating was made clear to me some years back when I was training a group of techs employed by a mid-sized contract locator. After discussing inductive locating as part of my theory lecture, I was approached on the next break by a manager who told me that his organization didn't allow their techs to locate inductively. He followed up by telling me it was a fireable offense.

Another time, while performing field audits as a consultant for a small contract locator, I discovered a mislocate by a tech and called him back to the site to demonstrate how I was able to accurately locate the line using my coupling clamp. He watched me do it and then said, "We don't have those. We locate everything by direct connect."

While the clamp is an expensive accessory with limited applications, most transmitters can easily be used in the inductive mode on settings as low as 33kHz. Many multi-frequency sets include 82kHz or 200kHz which provide even better results, and for maximum utility in inductive locating, 480kHz transmitters are available.

What's so great about inductive locating at higher frequencies? First, inductive locating allows for more flexibility in signal application since the user is not limited by the length of their leads or the availability of a physical access point. Second, the ability to

place a signal at various locations along the linear run of a conductor can provide the strongest signal where it's most needed, allow the technician to "steer" signal through areas of congestion, and because of the directional nature of the transmitter's internal antenna, provide an opportunity to identify parallel conductors in some conditions.

Obviously, using inductive locating can cause problems, especially the misidentification of conductors due to bleedover. But the same high frequencies that cause bleedover onto unwanted conductors can also

"I'm already on the record as disagreeing with this Best Practice because it ignores the situational benefits of inductive locating..."

help identify conductors that might otherwise go undetected within the area of a locate. And the capacitance which lays at the heart of the bleedover problem is extremely useful in overcoming resistance in stubborn conductors.

In short, inductive locating can be a wonderful tool for tackling a variety of locating situations. As a private locator, I use it daily to locate lot lighting, irrigation controls, and power to outbuildings and sheds.

There are some great tutorials on inductive locating available on YouTube, and your instrument manufacturer can provide information on how (and when) to use induction to get the most out of your locator. If you're inclined to be nervous or hostile about inductive locating, I get it. But maybe it's time to examine where it might fit into your organization's damage prevention strategy. **DP**

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.

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