

What's Next for Public Safety in the Right-of-Way?

BY WAYNE JENSEN

There is no question that there is a need to develop new strategies to protect the integrity of buried facilities in the public Rights-Of-Way. The number of instances is increasing where damages result in major losses of life. With each event, we hear the public outcry to protect buried facilities for the sake of public safety. The challenge of utility damage prevention professionals everywhere is to uncover new strategies to protect the public and all parties working in and around the public ROW.

Current Status Of Damage Prevention:

The current status of damage prevention in most, if not all, geographies is good enough to keep the rate of damages to buried facilities to less than 1 damage per 1,000 dig tickets. It is interesting that many locating organizations, while all strive for zero damages, will often accept a quality metric for acceptable damage ratios of their locators to be about the same ratio of 1 "at fault damage" per 1,000 locates.

The "Norms" For Damage Prevention:

If the number of damages per 1,000 tickets has been successfully reduced to meet the same quality metric for locating we may have reached the "norms" for acceptable damage rates. This could be preventing us from driving damages to even lower levels. The damage prevention industry is focused on failures to prevent damage, as it should be. However, if we look at the same data as a "success ratio" the industry has eliminated all but one damage per 1,000 episodes of excavating represented by a ticket. If we were talking about aircraft landings at Atlanta's Hartsfield, that rate would mean three crashes per day killing hundreds. That rate is clearly unacceptable for that industry. But in an industry where damage may have life threatening consequences once in 10,000 or maybe 100,000 episodes, we may have reached a level of damage that may be considered "acceptable" by the risk managers of facilities that are buried in the ROW. Acceptable meaning we will not invest more in the effort to prevent damage.

The "cost versus benefit" barrier surfaces when it comes to investment in damage prevention that may be required to improve the quality of utility locating. The quality of utility locating is a direct function of: (1) the quality of information provided to locators; (2) the quality of the technology being used to locate facilities; and (3) the skill of the locator in using the technology. Out of these three areas, almost nothing is being done to improve the quality of data provided locators. We continue to uncover many instances where the utility owner believed their facility was on the other side of the street from where damage occurred. The truth is that improving the quality of buried facility location data is the area of damage pre-



vention which has the most direct bearing on public safety, and it is the area of greatest opportunity for improving public safety.

Critical Drivers For The Adoption Of Best Practices:

There is an increasing public outcry to do more to protect the public with regard to damage prevention, as evidenced by initiation of the Pipeline and Hazardous Materials Safety Administration in 2004. The cost of damage in the court of public opinion will likely drive the next generation of damage prevention. Today, the current condition is that the responsibility for protecting buried facilities has been mostly shifted to the realm of the locator and the excavator. The ability of both parties to prevent damage is largely dependent on the quality of facility location data, which falls into the realm of responsibility of the utility owners.

It is well established that utility owners will not provide SUE services for locates except in very special circumstances. That is easy to understand when the utility is trying to keep the cost of locate tickets in the field down to \$10 when they would have to spend \$100 on a SUE vacuum excavate to verify the location of buried facilities at a single point.

A number of damage prevention professionals, including myself, have put it on the table that public owners should consider funding SUE data recovery for all future projects. It is well documented by the DOT's that the ROI for SUE efforts range from \$4 to \$22 for every dollar spent. However, the resistance remains. The ROI is usually attributed to using high quality utility location data to design around conflicts to avoid the

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high cost of dealing with conflicts during construction. It also has the additional benefit of establishing high quality utility location data for the use of locators and contractors during construction.

What we are finding is that many public owners, both large and small, are more than willing to accept low quality data for design, and see little value in SUE for just damage prevention when they can rely on One Call laws as their damage prevention shield. Additionally, many public owners don't feel they should pay to protect utilities they don't own. We are simply not winning the battle for damage prevention that requires non-existent funds to pay for what many in the public owner community believes is the responsibility of “others.”

Excavators And Damage Prevention:

Professional Excavators are extremely capable of avoiding damage without any locate markings at all. Avoiding damage was a function of digging much slower and with much more care to avoid damage. The advent of locates to protect buried facilities increased the production of excavating dramatically by reducing the space where an excavator had to dig much slower to prevent damage. In the early days of “excavating with locates,” most contractors knew that locating was fuzzy science and would generally verify location of facilities prior to going into full production mode. If there was power or gas indicated in a given area, the contractor would not stop looking until they found such facilities no matter what the locate marks indicated. Times have changed. Attitudes have changed.

Excavators Today:

Now, only a few excavators follow the best practice to “verify the location of facilities indicated in a given area no matter how far off locate marks are.” However, even the few that verify the location of facilities without respect to the inaccuracy of locate marks will not look for a facility in their excavation area if the utility owner states it is on the other side of the street. And, by the same token, the locator will not check to see if a utility is actually in the area of the excavation when the utility has provided them this same information. This exact circumstance comes up often across the nation. Readers need to understand that in many respects we were better off when backhoe operators knew that a utility was in their work space, because as they excavate they can see changes in the color of the disturbed soil as a result of past excavations. Today, backhoe operators pay attention to locate marks, not changes in soil color, to determine the location of buried facilities. Most excavating contractors believe it is their responsibility to exercise “hand-dig” care within the tolerance area defined by One Call laws. My greatest fear is that excavators will “only use hand-dig care” within the tolerance area as required by law.

Public Safety And Damage Prevention:

Increased public safety that results from damage prevention will not change until all stakeholders find a way to work together and share the burden and responsibility. I have worked with utilities in the past when they were in very difficult conflict circumstances and, as a contractor,

got paid to protect their facilities. Fees for the extra cost of protecting buried facilities were many times less than the cost of the utility having to relocate. Some regions pay the contractor to be responsible for locating and protecting facilities. Design build projects are beginning to show us that shared responsibility for damage prevention can work. Design build functionally works on the “no excuses for damage” premise.

If Change Comes It Will Be For The Sake Of Public Safety:

For the “sake of public safety,” I believe that much more can be done. The contractor is the critical stakeholder because they control the backhoe. We all know that the law alone is totally inadequate for taking us to the next level of damage prevention.

What may work to improve damage prevention is the establishment of “Damage Prevention Partnerships” involving all stakeholders on a project-by-project basis. All initiatives to improve data quality for design are years away if initiated today, but partnerships can be developed for our “next projects.” What is being suggested is the establishment of a formal, legal and binding “Partnership Contract” that outlines the roles and responsibilities of all parties to damage prevention. Today, utility relocation agreements are widely used to pay contractors to relocate facilities on behalf of utilities that are known to be in conflict. The partnership agreement would similarly define responsibilities for dealing with what may not be “known” at the onset of construction. Some funding may be required in circumstances where a utility would “want” to pay the contractor to use additional care to prevent damage either because of a conflict or the fact that the utility is unsure of their location data. It would be likely that the services of a SUE organization would be employed to investigate troublesome locates as a part of the Damage Prevention Partnership contract. There may be some instances where no money at all changes hands and the partnership contract would simply outline responsibilities of all parties for damage prevention as it applies to a specific project.

Education Is Critical:

One of the best outreach mechanisms around the country are “Excavator Safety Awareness Events” that are sponsored by the One Call systems and utilities. Universally, these safety awareness events provide excavators with information about the One Call laws of the state and sometimes associated topics. The Damage Prevention Partnership described in this article would make attendance at such events a part of the partnership documents to include all personnel on the project, especially backhoe operators. Very often, projects are of such size that a single project could generate more attendees than typically come to such events.

Having personally attended many of these industry Excavator Safety Awareness events, notably absent are the people from the field. It is always hoped that the people who do attend will take the information back to their people in the field, but it is always feared the information provided doesn't reach the backhoe operator and others. The Partnership would put field workers in the room for Excavator Safety Awareness Events.

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How to Use the CGA Communications Plan

KHRYSANNE KERR, COMMON GROUND ALLIANCE /

In December 2010, Common Ground Alliance (CGA) introduced the very first CGA Communications Plan to the public. CGA designed this document as a reference tool for anyone who works in damage prevention education, not just CGA members. Now, more than midway through 2011, CGA has found this 85-page document is an extremely successful resource to all damage prevention professionals who want to spread the word about safe digging.

The entire plan can be found online at www.call811.com/campaign-materials. It contains a comprehensive 13-month calendar, general 811 talking points, fact sheets, and a graphic standards guide for using the 811 logo and tagline. The plan also features a variety of template communications materials including press releases, media advisories, public service announcements and contributed columns, all intended to be customized according to the user's organization.

Many successful stakeholder campaigns are profiled in the plan with the goal of other stakeholders giving them a try. Each case study covered in the plan contains helpful information including how-to guides, timelines and press-ready material to help anyone successfully reproduce a campaign.

It is also extremely effective to reference the Communications Plan when an unfortunate incident occurs that could have been prevented by a call to 811. In these instances, the Communications Plan can help prepare a media statement that serves as an opportunity to remind the public about calling 811 when the safe digging message is most timely in the media.

Evidence of professionals using the Communications Plan can be found all over the country throughout the year. Most recently, on 8/11



Know what's below. Call before you dig.

Day (Aug. 11), the Communications Plan was used by organizations nationwide for earning media coverage, drafting and placing op-ed columns, creating website advertisements, ordering Call 811 T-shirts, and even creating special 8/11 Day cakes for local media outlets or employees.

In December, CGA will publish a revised Communications Plan for 2012 based on the feedback, success stories, and recommendations received throughout the year. If you have any recommendations or questions about the Communications Plan, please email the CGA staff at 811@commongroundalliance.com. **DP**

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It is envisioned that a Damage Prevention Partnership would establish meetings for both workers and managers that have audience-specific topics to address the unique roles of each in damage prevention. Excavator Safety Awareness events around the country are well attended by representatives of One Call systems and utilities providing attendees the opportunity to create personal relationships that benefit damage prevention. Damage Prevention Partnerships would also include specific locators assigned to the project, to provide the opportunity for relationships to be made that will have a very positive impact a specific project. I believe that this would provide a mechanism for all stakeholders to "act their way into a new way of thinking" with new and better approaches to damage prevention on a project-by-project basis.

One of the flaws of providing education to people you are likely never to see again at awareness events can be overcome when they are associated with a specific project. Industrial trainers all know that in order to determine if any element of training was successful in delivery they must confirm "behavior change" in the field. On a project-by-project basis, all

the stakeholders will have the opportunity to confirm behavior change as a result of training and each stakeholder would be provided guidelines for such documentation. I believe the recovery of project data, including behavior change, will allow us to predict damage based on observed behaviors in time to prevent damage.

The APWA could be the logical forum for exploring this concept of public/private "Damage Prevention Partnerships" initiated on a basis of Public Safety. It is a concept worth exploring because it does not require legislative action, and in the scheme of things the cost to any one party will be minimal and the ROI should be astronomical, especially if we can also protect the lives of the public in our rights-of-way. **DP**

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