



The Miss Utility Insider

A Publication of the Heavy Construction Contractors Association



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HCCA Participates In Miss Utility GPS Pilot Project

Introduction

Effective and accurate communication between industry stakeholders is the key to eliminating damages to underground utilities due to mechanical digging.

Two years ago, many operator utilities were concerned with the method that excavators were using to notify contract operators of upcoming excavations. In general, the utilities noted that the written descriptions of jobsites were sometimes very broad and required contract locators to mark large areas that were not critical to the jobsite. This increased cost to the operator and “tied-up” locator firm’s field personnel who were already overburdened by ticket requests.

The proposed solution to these problems was thought to rest in the utilization of technology that would better “pinpoint” the proposed area of excavation. In addition, this technology would speed up the time needed to relay the information to the excavator and provide a more “real-time” reporting procedure.

To excavate safely, the excavator, the operators, and the Miss Utility Call Center must continue to communicate effectively throughout the life of the project. Easy, efficient communication of underground facilities is the key to safety, productivity, and elimination of damage.

Prompted by a few gas, oil, and fuel pipeline utilities that do business in the Commonwealth, a

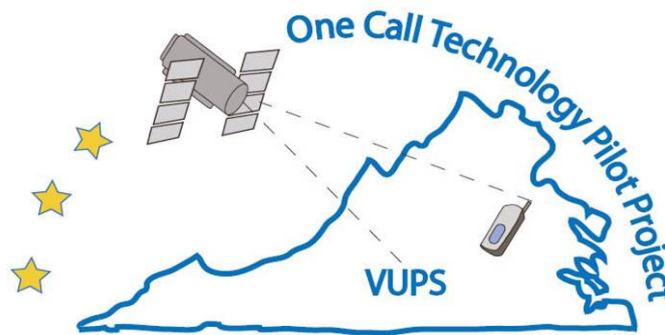
study was undertaken in cooperation with the Virginia State Corporation Commission’s Department of Railroad and Underground Safety to research, develop and implement technologies that appear to have great potential to significantly enhance the communication of accurate information between excavators and underground facility locators/operators. The official name of the joint initiative was

established as the Virginia One Call Technology Pilot Project.

History

The kick-off meeting for the pilot project was held in Arlington, Virginia on May 26, 2005. The invitation to

participate in the pilot program was a call for a collaborative effort between representatives of utility operators, excavator associations, contract locators, one call centers, and the appropriate state and federal agencies to further enhance the damage prevention process. Participants at this meeting included Kinder Morgan, Colonial Pipeline, Duke Energy, Columbia Gas, Verizon, MCI, Washington Gas, Dominion Power, Utiliquest, Consolidated Utility Services (formerly ProMark), Common Ground Alliance (CGA), Interstate Natural Gas Association of America (INGAA), American Gas Association (AGA), Associated General Contractors of America (AGC), National Utility Contractors Association (NUCA), Virginia State Corporation Commission (VASCC), Virginia Utility Protection Service (VUPS), Pennsylvania One Call and the Office of Pipeline Safety (OPS). During this meeting, the participants discussed the overall (continued on page 2)



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goal of the project, reviewed Virginia's damage prevention program results, and discussed technologies that could improve the one-call process.

Since that initial meeting, there have been several committees formed to address specific aspects of the project. At this point, project goals have been identified, a business case has been prepared, and initial funding has been secured. Hardware and software vendors have been selected for the project, contracts have been drafted and signed, software applications have been developed, and handheld devices have been selected. Test and control areas have been selected in northern Virginia for the project and a group of excavators have been selected as participants. Many of these excavators are HCCA member firms who excavate in the area of study.

Pilot Project Overview

Over-notification occurs when utility operators receive a transmission from the notification center to respond to an excavation ticket, but they do not have any utility lines in the area. Over-notification may occur when a utility operator has selected grids that cover too large of an area, when the notification center's maps do not have adequate resolution to properly capture the specific work location, or when the grids chosen to define the area of excavation are selected in error.

If erroneous grid selection occurs, there is an increased chance that a utility operator with facilities in the proposed work area will not be notified and damage to those facilities may result. The Common Ground Alliance One Call Systems International (OCSI) statistical data collected from 25 states across the country shows a total of over 15 million locate requests to one-call centers in 2004. Depending on the location, one may assume that as many 5 outgoing notices might be sent to individual utility operators.

Depending on the nature of the individual utility operator's facilities, over-notification may affect as many 40%-60% of those tickets. This same data also indicates that there were vague or incorrect excavation location descriptions on approximately 2% of the total outgoing tickets.

The goal of the Pilot Project is to test the use of technologies during the locate request process. The combination of global positioning technology and geo-codes within GIS systems provides an opportunity to investigate the costs and benefits of improved data collection from the excavation site when a request for excavation is initiated.

By collecting non-moveable points that can be reproduced with a variety of devices, It is expectation of the study that this technology will ensure more accurate transmittal of proposed excavation locations. This will hopefully reduce unnecessary and redundant marking that is currently being done by contract locators and improve overall efficiency of the process.

Enhanced Notification Process for Excavators during the Pilot Project

Several different solutions are planned for the Pilot Project. The GPS devices range from low cost recreational grade handheld GPS devices to high cost sub-meter accurate units (3 feet or less). The excavator may collect the GPS coordinates and transmit them to a JAVA enabled cell phone or PC using Bluetooth Technology, or manually enter them. For those using a GPS and JAVA enabled Smartphone solution, there is only one device needed.

There are three different methods that an excavator may utilize to define their excavation site with GPS coordinates. First, they may take a single point reading and define a buffer (radial footage) around that single point. Next, they may take multiple points in a line (such as a proposed ditch route). Last, they (continued on page 3)

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can walk the perimeter of their site while collecting multiple points and form a polygon to capture an entire site.

Once the coordinates are selected, the excavator may transmit the information to the Miss Utility Call Center and the corresponding map is automatically selected and transmitted back to the excavator to view and verify the location. The Miss Utility Call Center will then determine the affected utility operators and transmit notices of proposed excavation to the operators whose utilities could be affected.

Applicable operators will respond to the ticket using GPS coordinates provided by the excavator to ensure the site location and mark utility lines. Once marking is complete, the appropriate response will be posted to the Positive Response System and the excavator may receive the responses directly to PC, or mobile handheld device.

Benefits

By making sure that contract locators are sent to the correct locations, locate accuracy can be enhanced which will translate into a faster response time by the utility locators and a decrease in the incidence of excavation damage to partially or unmarked lines.

Fewer damaged utility lines means reduced chance of injury, fatality, property and equipment damage, economic loss, environmental damage and downtime expenses.

Study results should be available in the fall of 2007. The HCCA would like to thank the many contractor member firms who have participated in the pilot study. Through your participation it is hoped that more accurate information will reach our members faster and reduce our wait to dig.

FCC Launches “811” National Miss Utility Phone Number

811

A new federally-mandated FCC designated N-11 number

The new 811 number is a national “Call Before You Dig” phone number designated by the FCC to eliminate the confusion of multiple “Call Before You Dig” numbers and help save lives by minimizing damages to underground utilities.

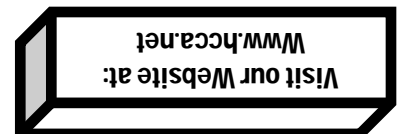
One easy phone call to 811 quickly begins the process of getting underground utility lines marked.

When you call 811 in Virginia, the Miss Utility of Virginia One Call Center personnel will then notify affected utility companies, who will send crews to mark underground lines for free.

If you are calling from a telephone in another state to request marking of a jobsite located in Virginia, you will still need to use the toll free number – 800-552-7001 in Virginia.

For a national one call center directory, visit www.call811.com

The HCCA is a regional, independent chapter of the National Utility Contractors Association (NUCA). Founded in 1957, HCCA has grown from representing only water & sewer contractors to a vital organization representing a cross-section of contractors, suppliers, professionals, and municipal members who share an interest in water, sewer, storm, road construction, site engineering, and site development. The HCCA serves as your liaison at the federal, state, and local levels. Through our close affiliation with NUCA and our partnership with the Virginia Utility and Heavy Construction Contractors Council (VUHCC), the HCCA leads a united front working to increase funding for all forms of infrastructure construction. Take the opportunity to get active in this very vibrant, active group of concerned industry professionals.



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Damage Awareness Education

It is with great enthusiasm that Virginia Utility Protection Service announces the launch of the Virginia Damage Education Awareness Program (DEAP) in Virginia.

The purpose of this program is to track public awareness and educational efforts throughout the state. Your participation will help display the public awareness efforts made by ALL stakeholders in Virginia. It will allow companies to consolidate their damage prevention and education efforts into a single cohesive report. It will allow users to view efforts by other companies so that efforts are not duplicated, thus wasting time and money. It will identify areas where too little emphasis is being focused. The reports generated will track the yearly dollars spent on damage prevention. It will

also report events by time of year and locality.

Future enhancements may include General Education Credit reports to apply for State Corporation Commission Education credits AND Incorporate VUPS ticket volumes with geographical areas.

To participate please contact Blair Stewart, VUPS Public Awareness & Training Regional Coordinator for Northern Virginia and he will assist you in getting an account so that you can start using the software.

Blair's email is

bstewart@vups.org

Or you can reach him by calling
(571) 431-7535