

Wireless Mapping Stick Provides Accurate Asset Locations

By Ken Wysocky

It's often difficult to determine the exact locations of lateral service connections and other underground infrastructure. Yet knowing the location is critical to avoiding potentially deadly situations, such as sewer lateral cross-bores during gas main installation by horizontal directional drilling.

The Granite XP Wireless GPS Mapping Stick from CUES Inc. addresses this issue. It captures precise global positioning system (GPS) coordinates for specific structures, then transmits them in real time seamlessly into Granite XP inspection software in a computer on a CCTV truck.

The mapping stick works up to 1,500 feet away. The wireless feature provides greater mobility for crews working off-road. When used with an electromagnetic sonde built into a CUES robotic camera, the tool can provide coordinates and line traces for lateral services. The sonde technology can also provide pipeline depth estimates.

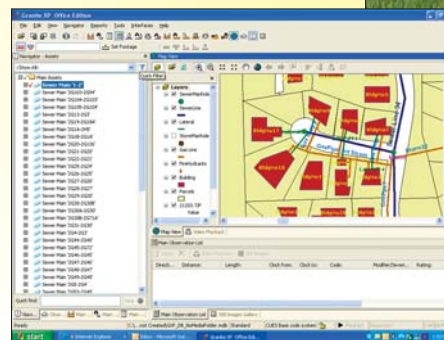
Once a GPS receiver feeds the coordinates to a computer, field crews can see the captured location on a digital map displayed on a computer screen. Each asset — manhole cover, lift station or homeowner's cleanout — can be assigned an identification number and stored in

a geographic information system (GIS) database.

"Thanks to the increasing numbers of satellites, the system locates items with sub-meter accuracy — sometimes within 3 centimeters," notes Joe Purtell, director of the software division at CUES.

"The captured information can be saved forever. Before this technology was available, asset location information was captured in the form of as-built drawings, and the resulting imprecise data could lead to accidents. This system increases the accuracy of where things are located, then locks in the data, making future work easier and safer."

When used as an auditing tool to display various infrastructure layers and their GPS coordinates, the Granite XP software manages inspection processes more safely and effectively. A crew member holding the



Granite XP Wireless GPS Mapping Stick from CUES Inc.

mapping stick appears on the digital map as a blinking light, so field technicians can see if crews are too close to a possible hazard.

Other benefits include fewer service issues for homeowners when lines are jetted; identification of illegal taps; and the ability of water utilities to ascertain probable inflow and infiltration problems. **For information: 800/327-7791; www.cuesinc.com.**

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