Trimble Solutions:

» Geospatial data collection
Trimble® TerraFlex™ software

LOCATING BURIED UTILITIES — THE DELIVERABLE DIFFERENCE

Integrated Scanning Solutions (ISS) helps construction contractors locate underground utilities, delivering results via comprehensive utility maps.

THE CHALLENGE
Before any construction project begins, contractors must verify where utility assets are buried on the job site.

SOLUTION
ISS uses Trimble® TerraFlex™ software to record underground utility locations, and delivers the results as a valuable, easy-to-read utility map.

RESULTS
ISS benefits its customers with a unique, practical deliverable, and gives itself a competitive business advantage.

Overview
Before construction begins on a site, it is important that all underground utilities are located. Buried utilities—such as sewer and septic systems; water pipes; and lines for gas, electricity, telecommunications and cable TV—are easily damaged. This can result in harm to people or property, disrupted services and costly fines.

Operating out of North and South Carolina, USA, Integrated Scanning Solutions (ISS) is a company that uses ground-penetrating radar and other technologies to provide underground utility location services. Company President, Mitch Ross, recognized that clients would benefit from being able to read the location of buried utilities on a site map.
As he explains, “A comprehensive utility map, whether digital or paper, is an invaluable reference throughout the construction process, especially to the construction manager. However, few companies like ours are able to deliver results as a quality map.” ISS therefore adopted Trimble TerraFlex, a mobile app for collecting geospatial data. The app runs on a variety of devices, helping mobile teams to collect data quickly, efficiently, and in an organized way.

ISS employs the app on job sites that are smaller than one acre. They run the app on smartphones, but if greater accuracy is needed, they use a Trimble GeoExplorer® data collector. Staff begin by creating a project for the job site. They then create data collection forms for four to six buried utility types and assign each form to an appropriate user.

Before locating utilities, ISS uses the app to record information gathered on a site walk with the client. “We collect simple points and take pictures, all in the same form we’ll use for the job. It’s really helpful for referring back to what the client said,” says Ross.

ISS crew mark or flag the location of utilities on the ground, then collect the information in the app. Recording points, lines or areas; they indicate location, depth and feature type. Ross also requires at least one geo-referenced photo on the form.

“Once the data is entered, I get online straightaway,” says Ross. “I access the TerraFlex Web site and start generating our deliverables.” Once his project data is uploaded to the TerraFlex Web site, Ross exports it into a .kmz file. His clients open this file in Google Earth, where they can view the information on screen, or print it as a map.

Not only are the map deliverables that ISS offers unique; they are also offered to clients without an upcharge. For the same cost, ISS’s clients are receiving value they would normally pay extra for.

ISS adopted TerraFlex to improve their deliverables, but the app has also standardized their workflow for each project from start to finish. It gives ISS a recognized procedure to follow and allows them to track everything they do. Says Ross, “This app gives us quality assurance and peace of mind, as well as a competitive advantage.”

“Our utility maps give contractors fast visibility to buried gas, electric, sewer, water, or irrigation lines. To construction managers these maps are a safety net; to us as a service provider they are a due diligence.”

Mitch Ross, Company President, Integrated Scanning Solutions