Utility Mapping

Utility mapping is critical to safeguarding subsurface construction and activity. Accurately identifying subsurface utilities and other foreign obstructions allows our clients to operate safely and reduce risk. Prior to any subsurface work, a thorough utility-mapping survey should be conducted to identify utilities in the work area. After the utility mapping has been performed, Applus+ can assemble the recorded data into a Geographic Information System (GIS) format in accordance with client requirements. This information can be used by both the engineers and site construction personnel to stay safe and avoid costly mistakes.

THE Applus+ SOLUTION

The Applus+ Geophysics group employs an integrated approach to utility mapping. We treat the utility-mapping process as a whole, beginning with visual observations, followed by cutting-edge instrumentation and trained personnel.

Our utility-locating equipment includes cable and pipe locators based on electromagnetic principles and dual-frequency ground-penetrating radar (GPR). The field results are combined with global positioning system (GPS) data to produce detailed, easy-to-use maps and digital data of the subsurface utility assets. Based on site-specific conditions, our field technicians use state-of-the-art techniques to locate target utilities. By taking a comprehensive approach to each site, we increase detection and precision capability. After the utility mapping has been performed, Applus+ assembles the recorded data into a deliverable Geographic Information System (GIS) format in accordance with client requirements.

Target customers
Utility mapping surveys should be performed before any subsurface work is to be performed. Accurately locating subsurface utilities and obstructions is critical to the safeguarding of people and assets. Clients may also introduce a utility-mapping survey during the design stage of a project to accurately determine any subsurface conditions that may affect design decisions, a service that can save time and money if conducted before the construction process.

Key customer benefits

The main benefits of a properly executed utility-mapping survey are safety and risk reduction. A secondary advantage is a reduction in unanticipated underground construction changes due to unknown utilities in the work area.

Clients gain an understanding of their worksite’s subsurface and the limitations this imposes.