

# Utility Mapping

The utility mapping delivered by Applus+ provides a critical service for safeguarding subsurface construction and activity.

Subsurface mapping can accurately identify utilities and other foreign obstructions and 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. GIS mapping information can be used by both the engineers and site construction personnel to stay safe and avoid costly mistakes.



## THE Applus+ SOLUTION

The Applus+ Group's geophysical and geotechnical teams employ an integrated approach to utility mapping. We treat the utility mapping process as a whole, beginning with visual observation, followed by surveys with innovative geotechnical instrumentation which is deployed by personnel well-trained in GIS utility mapping.

The underground utility mapping services from Applus+ include 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 the latest tools in precision utility mapping 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

Accurately locating subsurface utilities and obstruction is critical to the safeguarding of people and assets. Utility mapping surveys is performed before any subsurface work for new construction or facility modifications. Clients may also introduce utility mapping to survey during the design stage of a project (FEED) to accurately determine any subsurface conditions that may affect design decisions, and our services in subsurface mapping allow clients to save time and money when conducted prior to the construction process.

## Key customer benefits

The services for utility mapping at Applus+ provide safeguards to risk and personnel safety and a reduction in unanticipated underground construction changes due to unknown utilities in the work area. Through our expertise in surveying and geomatics, clients gain an understanding of their worksite's subsurface and the limitations these impose.