

Utility Mapping Services



Not far below the everyday places we walk and drive exists a maze of utilities. This unseen “super highway” of conduits carry water, sewer, electricity and telephone to our homes and businesses. Utility conflicts can cause delays and service interruptions. Comprehensive and accurate mapping of these vast and complicated networks has become a critical and essential asset to utility providers, general contractors, and municipalities. Our team can identify potential conflicts or impacts for proposed development and utilities improvement projects. Using ground penetrating radar (GPR) has greatly enhanced our utility designating process and with our subsurface utility engineering (SUE) capabilities, we perform underground investigations to locate underground utilities within conflict areas as well as cap rock or strata formations. Our StarVac soft dig vehicle allows us to safely uncover various underground utilities and quickly create enhanced mapping opportunities for our clients.

We have a specially-trained team who hold both state and federal certifications for excavating and covering tasks, operation of heavy equipment and sign placement for gas companies. Our team has extensive experience performing SUE services and operating the StarVAC vehicle equipment. Our team is trained in traditional land surveying, as well as Occupational Safety and Health Administration (OSHA) safety regulations, maintenance of traffic (MOT) regulations, Sunshine State One Call requirements and the other unique aspects of SUE technology. Our custom built StarVAC International diesel truck has a 1200 gallon reservoir, and 300 horsepower diesel engine and double the suction/lift power of traditional machines. We added our StarVAC unit to our existing surveying and mapping capabilities in order to provide our clients with cost-effective solutions.

Subsurface Utility Engineering (SUE)

Subsurface utility engineering has become a necessary and vital tool for new development, utility mapping and improvements. For nearly 10 years, we have used soft dig systems to uncover various underground utilities. Our custom-built StarVac soft dig vehicle uses a 1200-gallon spoil tank and 28 inches of vacuum power to allow us to quickly perform underground investigations, reveal utility lines and produce enhanced mapping. Our services and procedures adhere and comply with the American Society of Civil Engineers’ standard guideline for the collection and depiction of existing subsurface utility data. We offer SUE quality levels A through D, depending on the needs of our clients. We are available day and night with a highly skilled and experienced team of operators. Our service is a rapid-responder to all types of client and project situations.

Ground Penetrating Radar (GPR)

Using electromagnetic pulses or radio waves, GPR can safely show designers, engineers and general contractors what lies below the surface without excavation. GPR is a safe, non-invasive geophysical investigation tool that can locate utilities, rock strata formations and even groundwater tables. We provide our clients with GPR as part of our utility designation service to cut down on the amount of wasted test holes during SUE work.

Utility Coordination

Utility conflicts can cause delays and service interruptions. These problems are often time consuming and expensive. Utility coordinators identify conflicts that occur when planned or proposed utilities impact already in place or existing utilities and improvements. Our team’s meticulous mapping methods, awareness, and coordination of these proposed and existing utilities help engineers, general contractors, utility providers and municipalities reduce conflicts and ultimately minimize or eliminate impacts or delays.

Geographic Information Systems (GIS) Mapping

GIS has raced to the front of cutting edge technologies. Using a combination of interactive digital mapping and database technologies, GIS has quickly become the next generation resource for utility mapping. We offer clients much more than static, paper maps depicting utility networks, systems or circuits. GIS now provides asset management, inventories, systems analysis tools and real time system conditions and monitoring. Using GPS, conventional surveying and subsurface utility engineering, our team can locate and identify the elements, attributes and condition of these networks and offer a true working model to our clients. We offer support, updates and maintenance of our GIS deliverables so our clients have the most current and accurate mapping resources available.