

# Geophysical Engineering Services

Geophysical investigation and geotechnical equipment can provide many of the answers engineers require to solve complex engineering problems. Geophysical engineering services provide a fundamental role in making a geohazard assessment early in a project – ideally in the planning stage –to maintain both safety and cost control in the project's life-cycle.



## THE Applus+ SOLUTION

Applus+ RTD's geophysical investigation teams use the latest geotechnical instrumentation to collect high-quality data and provide pertinent information to engineers on the design of their structures. Through an early investment in geophysical engineering services, projects can benefit from a more detailed analysis of the subsurface conditions and integrate these results with traditional geotechnical data. Applus+ RTD offers the ability to provide all of these services to our clients.

Highlights of deploying geophysical engineering services from Applus+ include:

- Non-destructive technology
- State-of-the-art geotechnical instrumentation and equipment
- Robust design data
- Risk reduction through detailed geohazard assessment
- Value engineering

Applus+ RTD can work with clients to design customised geophysical surveys that will provide geophysical data to assist in soil characterisation and subsurface conditions of the sites.

## Target customers

Many engineering projects in a range of sectors could benefit from a quality surveys in geophysics. From construction and infrastructure to energy and transportation projects, geophysics can provide vital information about subsurface conditions.

Geophysical services are of benefit over the complete life-cycle of a project. Engineering geophysics plays an important role in project planning by providing engineers with valuable data to use in their initial designs. Such data can be used in soil characterization and to determine rock properties for a new building design or to evaluate a future right-of-way for unknown geological hazards.

Engineering geophysics also plays a key role during a project's construction phase. Services such as vibration condition monitoring and ground penetrating radar can assist contractors in determining risks to the project with better geohazard assessment.

Finally, geophysical engineering services can be used during project completion and throughout the maintenance life-cycle of the structure or site. Examples include: quality-control surveys to determine concrete thickness and rebar placement.

## Key customer benefits

The main benefit of performing geophysical investigation studies is the positive impact they can have on a project's design and execution, which ultimately results in cost savings and reduced risk to the client. In addition, Applus+ RTD's services in environmental and engineering geophysics are environmentally sensitive, tailored to a client's specific needs and carried out quickly. By combining different geophysical technologies, Applus+ RTD can provide a complete picture of the subsurface to facilitate clients with their projects.