

## GUIDE TO GEOTECHNICAL SERVICES

Geotechnical services fall into two categories

1. Geotechnical Investigation
2. Pile Testing & Monitoring

### Definition of Geotechnical Investigation

Geotechnical investigations are undertaken to obtain information on the physical and chemical properties of soil and rock. Various excavation and drilling techniques are employed to obtain geotechnical parameters which are then used in the design of geotechnical structures such as foundations, earthworks, dams etc.

### Type of Drilling Techniques for Geotechnical Investigations

- Trial pits
- Window sampling
- Dynamic probing
- Cable percussion drilling
- Rotary drilling
- Vetrak® CP rig



### Definition of Pile Testing & Monitoring

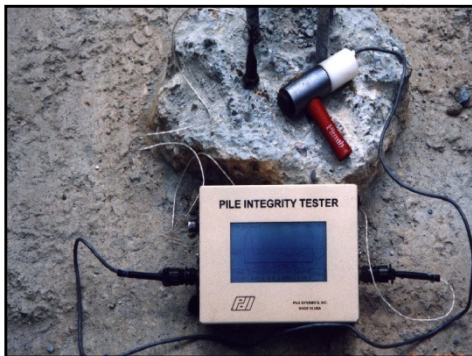
Pile testing and monitoring is carried out to assess the performance of the foundation prior to construction. Pile performance can be assessed in terms of bearing capacity, load deflection and integrity.

### Types of Pile Testing & Monitoring

- Static load testing
- Dynamic load testing (CAPWAP)
- Pile integrity testing
- Vibration monitoring



*Static load testing*



*Integrity testing*



*Dynamic load testing*