

SOIL GEO TECHNICAL INVESTIGATION

- **Load Bearing Capacity:**

This test helps in determining the maximum load the soil can withstand.

Test Method: Shear Strength: This test helps in determining the magnitude of the shear stress that a soil can sustain. The shear resistance of soil is a result of friction and interlocking of particles, and possibly cementation or bonding at particle contacts.

Test Method: ASTM D3080

- **Dynamic Core Penetration Test:**

This test helps in determining the compactness of the sub soil layer without making a bore hole. The data obtained by the test provides a continuous record of soil resistance. This is an in-situ dynamic penetration test designed to provide information on the geotechnical engineering properties of soil.

Test Method: BS EN ISO 22476-3 / ASTM D1586 / AS 1289.6.3.1

- **Plate Bearing:**

In the design of shallow foundation or traffic surface, design engineers need to know the bearing capacity of soil underneath. Plate bearing test is carried out in the field to serve this purpose. Results from the test can be used as design parameter or used to confirm the design assumption.

Test Method: BS 1377 Part 9: 1990 Standards.

- **Electrical Resistivity:**

Electrical resistivity of the soil can be considered as a proxy for the spatial and temporal variability of many other soil physical properties (i.e. structure, water content, or fluid composition). Because the method is non-destructive and very sensitive, it offers a very attractive tool for describing the subsurface properties without digging.

Test Method: IS: 15736-2007