

SOIL-MECHANICS LABORATORY

LABORATORY-ORIENTED TESTING

- Sieve analysis and hydrometer tests for finding out grain size of soil.
- Specific gravity, Natural moisture content, unit weight.
- Atterberg limits, i.e. Liquid limit, plastic limit and Shrinkage limit.
- Proctor compaction test (Standard).
- Determination of Density index (Relative density of cohesion less soil).
- Permeability testing by constant head and variable head method.
- Determination of shear strength parameters of a specimen by Unconfined compression test (Undisturbed & re-molded).
- Determination of shear strength parameters of a specimen by Tri-axial compression test (UU/CU/CD).
- Determination of shear strength parameters of a specimen by Direct shear test, and Laboratory Vane shear test.
- One dimensional consolidation test by oedometer.
- California Bearing Ratio tests.
- Bearing Capacity Determination
- Complete Soil Test Report based on in-situ soil collected

FIELD ORIENTED TESTING

- Standard Penetration test by split spoon sampler in the bore hole.
- In-situ dry density of soil (Core cutter method).
- Field density test by sand replacement method for finding out field moisture content and field density.

