

COMPARISON OF SOIL PROPERTIES COLLECTED FROM NALGONDA, RANGA REDDY, HYDERABAD AND CHECKING ITS SUITABILITY FOR CONSTRUCTION

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ABSTRACT

The occurrence and distribution of soils in nature varies from location to location. The type of soil depends on the rock type, its mineral constituents, and the climate regime of the area. Soils are used as construction materials. Geotechnical properties of soils influence the stability of civil engineering structures.

So, soil sampling and testing is one of the most important steps to attain success in construction projects. Soil testing provides information on type of soil, bearing capacity of soil, compaction, etc. An unprecedented amount of construction projects has been delayed amount of construction projects has been collected from the proposed areas to check suitability for the construction.

Tests such as natural moisture content, particle size analysis, soil fraction retained on 4.75mm ISS, soil fraction passing 4.75mm ISS, Atterberg's limits, specific gravity, shear test, direct shear test, consolidation test and different free swell test are done for testing the suitability and stability of soil for the construction.

KEYWORDS: *Shear Strength, Consolidation, Bearing Capacity, Permeability*