

Peat Soil Stabilization Methods: A Review

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Abstract : Peat soil is formed naturally through the accumulation of organic matter under water and it consists of more than 75% organic substances. Peat is considered to be in the category of problematic soil, which is not suitable for construction, due to its high compressibility, high moisture content, low shear strength, and low bearing capacity. Since this kind of soil is generally found in many countries and different regions, finding desirable techniques for stabilization of peat is absolutely essential. The purpose of this paper is to review the various techniques applied for stabilizing peat soil and discuss outcomes of its improved mechanical parameters and strength properties. Recognizing characterization of stabilized peat is one of the most significant factors for architectural structures; as a consequence, various strategies for stabilization of this susceptible soil have been examined based on the depth of peat deposit.

Keywords : peat soil, stabilization, depth, strength, unconfined compressive strength (USC)

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