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### Soil Stabilization by using Industrial Waste Material as a Stabilizer

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**Abstract** : Soil stabilization can be explained as the alteration of the soil properties by chemical or physical means in order to enhance the engineering quality of the soil. The main objectives of the soil stabilization is to increase the bearing capacity of the clay soil, it's resistance to weathering process and soil permeability. The long-term performance of any construction project depends on the soundness of the underlying soils. Unstable clay soils can create significant problems for pavements or structures, Therefore soil stabilization techniques are necessary to ensure the good stability of clay soil so that it can successfully sustain the load of the superstructure especially in case of clay soil which are highly active, also it saves a lot of time and millions of money when compared to the method of cutting out and replacing the unstable soil. This paper deals with the complete analysis of the improvement of clay soil properties and its stabilization using industrial waste sand and lime. The experimentation is carried out keeping 20% of lime as constant and industrial waste sand 10%, 20% and 30%. Disposal of these waste materials is essential as these are causing hazardous effects on the environment. With the same intention literature review is undertaken on utilization of solid waste materials for the stabilization of soils and their performance is discussed.

**Keywords** : Clay Soil, Industrial waste sand, Quarry dust, Stabilization.