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LIME STABILIZATION OF SOILS

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Project Report

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S U M M A R Y

This project, as it is obvious by the title is about stabilization of soils using lime.

An account on soil stabilization and the various methods used is given in chapter one as well as some special stabilization methods.

In chapter two it is discussed how certain soil properties are influenced by stabilization. As it can be seen volume stability, strength, permeability and durability are the properties that are most influenced.

Then, chapter three elaborates on soil stabilization using lime. In this chapter the history of lime stabilization is firstly stated and then the chemical reactions involved in stabilization are analysed. Application of lime stabilization is also discussed. Properties and characteristics of lime-treated soils are examined and finally the soil-lime mixture design and the most important mixture design procedures are analysed.

The last chapter, chapter four, is about the construction methods and equipment used in soil stabilization using lime. The construction steps are described analytically and the advantages and disadvantages of different types of application are listed.

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