

## **ABSTRACT**

### **THE EFFECT OF COMPRESSIVE STRENGTH AND SHEAR STRENGTH DRY SIDE OF OPTIMUM AND WET SIDE OF OPTIMUM (WET OPTIMUM) ORGANIC SOIL SAMPLE**

By:

ADE SETIAWAN

Organic soils causing many problems for the construction to be built on it, is generally caused by the physical properties of organic soils that have a very high water content and low carrying capacity, so that organic soils have less favorable properties for the construction of civil buildings. In this case, there should be a study of compressive strength and shear strength.

This research was conducted in the laboratory by making a sample of the results of a standard compaction, then the sample is done in Optimum condition Dry side of optimum and Wet side of optimum. On the Dry Side Of Optimum process, sample was given a reduction of 10% of the optimum water content, while the Wet Side Of Optimum given the addition of 10% of the optimum water content, then the sample is done soaking for 4 days after compaction testing standards.

The test results of compressive strength and shear strength shows a sample of soil behavior in an Optimum conditions better than the sample in Dry Side Of Optimum conditions and Wet Side Of Optimum. This is due to the pores of the soil Optimum conditions experienced stability and development of the soil is very minimum to occurs. Compressive strength and shear strength test is to measure how strong soil receiving compressive strength and shear strength given to the soil separated from the grains.

Keywords: Organic Soil, Dry Side Of Optimum, Wet Side Of Optimum, Optimum, Compressive strength and Shear strength.