ABSTRAK

POWER ON EFFECT OF PLASTIC WASTE LAND SILT SUPPORTS

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Garbage is the waste accumulated in number year after year which will be a very complicated problem in Indonesia, especially in big cities such as Bandar Lampung. Population growth led to the increasing amount of garbage per day. There is garbage readily biodegradable and are difficult to decompose. One type of waste that is very difficult to unravel even take hundreds of years is plastic. One proposed solution is the use of plastic waste mixed plastic waste in the pile of soil where retrofitting systems that use plastic flexible regarded as soil reinforcement.

Soil samples used is derived from the silt soil Yoso Mulyo Village, District Metro East, City Metro, Lampung. Waste plastics used is plastic waste that had been destroyed were taken from one of the factories located in Jalan Soekarno Hatta, Bandar Lampung. To determine the increase in the carrying capacity of the soil conducted laboratory experiments of testing the physical properties and mechanical native soil and soil with a mixture of plastic waste.

In the analysis, KAO values obtained from native soil compaction test for 25.5411 %, 0.25 Until plastic mixture; 0.5; 0.75; 0.1 % respectively no significant increase in the value of KAO. CBR value for the native land of 6.1, 0.25 % for mixed plastics; 0.5; 0.75 %; 0.1 %; consecutive no significant kenaiakan. Sliding angle values on native soil 27,5208°, 0.25 for mixed plastics; 0.5; 0.75; 0.1 % respectively there is the rise and optimum mix of plastic waste 0.75%

Keywords: compaction, CBR, friction angle, soil silt, waste plastics