

THE EFFORTS TO IMPROVE SHEAR STRENGTH OF CLAY SOIL BY USING PLASTIC TRASH

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ABSTRACT

Plastic trash so often found in Indonesia. Plastic is non-biodegradable material. Plastic trash can to reinforced the clay to increase of the shear strength of clay.

This research uses experiment methods. Clay sample take from Punukan,Wates and Kasongan, Bantu. The research is done by Unconfine Compression test and Direct shear test methods.

The results of this research showed that the addition of small pieeces of the plasic trash in clay : 1) will increase the value of q_u (unconfined compressiv strength) at the rate of 3% of plastic on Kasongan clay, 2) will increase the shear strength angle ϕ if 3% rate of plastic contents. 3) will increase of the soil friction if the small size of Wates clay.

Kata Kunci: *plastic trash, clay, unconfined, direct shear*