

**STUDY ON THE PROPERTIES OF SOIL MIXTURE
BETWEEN SHREDDED TIRE AND
COHESIVE FRICTIONAL SOIL**

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**B.Eng (Hons) (Civil)
UNIVERSITI TEKNOLOGI MARA
2005**

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By

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**UNIVERSITI TEKNOLOGI MARA
MARCH 2005**

DECLARATION

I Mohammad Shafawi bin Abdullah, 2001668860 confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.

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ACKNOWLEDGEMENT

In the name of Allah, most gracious and most merciful, with His permission, the proposal of the project has been successfully completed. Praised to Prophet Muhammad, his companions and to those who are on the path as what he preached upon, may Allah almighty keep us blessing and tenders.

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ABSTRACT

The trend in the used of waste materials such as Fly Ash, Fluorogypsum, and Shredded Tire as mixers with the soil in the modern engineering construction shows the awareness and responsibility among researchers and engineers in protecting and improving the quality of environment. Thus, its behavior in stabilizing the soil needs to be understood clearly. In this project, the characteristic of the soil mixture shredded tire mixes with cohesive frictional soil were studied. Standard testing according to the British Standard for soil properties were carried out on the mixtures of cohesive frictional soil on the mixtures of cohesive frictional soil and shredded tires which are 10%, 30%, 50% and 70% of dry weight of cohesive soil. Tests also conducted on 100% of shredded tires and 100% of cohesive frictional soil for control purpose. Based on the result obtained, it was found that for 10% mixture of shredded tires, shear strength of materials increased around 3.2% and the density reduced around 11.25% from 100% of cohesive frictional soil. For other mixtures, it shown that both of shear strength and density reduced from 100% of cohesive frictional soil.