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**ON PERMEABILITY AND STRENGTH CHARACTERISTICS
OF LATERITIC SOILS**

BY

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SYNOPSIS

This study is limited to laboratory investigation on the strength characteristics and permeability of lateritic soils. The testings carried out were CBR and MBR tests, direct shear strength test, air and water permeability tests. The purpose of this study is to examine the influence of confining pressure has on the strength characteristics of lateritic soils. This study also examine the influence of the degree of compaction on the shear strength value. In addition influence of compaction energy and water content on the air and water permeability are examined.

The experimental program on strength characteristics and permeability using lateritic soils taken from construction site near ITM Shah Alam. Three different lateritic soils namely clayey sand, silt of low plasticity and clay of high plasticity were used.

1.0 INTRODUCTION

Lateritic soils generally make a good materials for base construction of light and medium trafficked roads. Lateritic soils have a good stable gradings with a suitable proportion of clayey materials to act as binder(Fekpe,1987(1)).

In Malaysia and elsewhere in the tropics, lateritic soils have been extensively used for base construction, even though the engineering properties of most lateritic soils are normally rated as substandard materials when assessed in accordance with the prevailing technical specification for base, subbase or subgrade. However, the suitability of lateritic soils as a base material depends on its ability to develop a sufficient shear strength under compaction. This would enable them to support the designed traffic loading.