

# Geotechnical Properties of Alor Setar Clay Along Jalan Kuala Kedah-Hutan Kampung

*Mohd Farid Ahmad  
Damanhuri Jamalludin  
Eliyani Yazreen A.Rani  
Tuan Juliana Tuan Sulong*

## ABSTRACT

*This research paper is to study the geotechnical properties of clay soil at Alor Setar. The main purpose of this study is to obtain design parameters for Alor Setar clay soil. Based on the study, a local database of design parameters characteristics are presented with some empirical or analytical correlation established to estimate SPT value, index properties and mechanical properties of Alor Setar clay. The data were analyzed and the correlation of each parameter with depth were obtained. Conclusions have been made based on the evaluation and the Alor Setar clay were found to have high moisture content, plastic limit, liquid limit and compression index. The soft clay depth generally down to 8 meter. From the OCR value the clay was found to be lightly overconsolidated. Based on  $C_c$  value, the compressibility potential of Alor Setar clay is high. It is hoped that the outcome from this research work can contribute for future reference.*

**Keywords:** *Alor Setar clay, Geotechnical properties.*