C -16

Exploration of subsurface soil is vital importance in any kind of Civil Engineering construction, in order to identify types of soils underneath and their engineering characteristics. Boring is widely used in exploring the subsurface soils, mainly to identify the soil types and to obtain samples for laboratory testing.

Here, an attempt is made to use the Static Cone Penetrction Test (SCPT) in determining the soil profiles and identifying the soils present. The SCPT apparatus used is a mechanical cone of Dutch type. A large number of SCPT probings has been carried out at sites where boring has been done, so that the SCPT data are available for known soil types. These SCPT data are then plotted according to a standard plot derived by many researches to identify the soils. Different soil types can be identified on this plot when their SCPT data points fall into different bands indicating the type of soil.

From the data available using the standard plot, it can be concluded that the soil types available in Sri Lanka can also be identified by SCPT data. However, the identification of soil type from SCPT data is not accurate as that from bore hole investigation, as visual observation is possible with the latter.