

USE OF GEO-ANCHOR TO IMPROVE THE STABILITY OF RETAINING WALLS

Prepared by: Chiong Swee Hua

ABSTRACT

Landslide in residual soils or weathered rocks is generally rain induced and shallow. After a heavy rainstorm, or a series of heavy rainstorms, the soil becomes saturated or almost saturated because of the infiltration of rainwater into the ground, so the negative pore pressure originally present in the soil are eliminated or drastically reduced, causing a large reduction in the effective stress and of the shear strength. The slope may then become unstable and may fail.

There are many methods used for the stabilisation of slope, embankments constructed on soft clay and of retaining walls. These methods may be adopted singly or in combination. The choice depends primarily on the cost and the consequences of failure. The following methods below are the commonly used slope stabilisation methods in Southeast Asia.