

CERAMAH TEKNIK TECHNICAL TALKS

2. **Laboratory and Field Work for the Assessment of Slope Stability** Mohd Fakhrurrazi bin Ishak (University of Malaysia Pahang)

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Abstract 2: Many steep slopes in residual soils have a deep ground water table. Ground investigation using borehole drilling is usually conducted to collect undisturbed and disturbed samples. In the laboratory, index test such as Atterberg limit, specific gravity, particle size distribution and etc. were conducted to classified soils type. The important parameters in the analysis of slope stability are engineering properties, including geotechnical tests such soil shear strength (CIU, UU & UCT), soil permeability, soil compressibility (settlement & consolidation). Field in-situ strength such as standard penetration test (SPT) does not given soil strength parameter directly but required empirical correlation. The unit weight of soil can be determined by in-situ field density test (sand cone replacement method). In-situ porewater pressure (PWP) can be determined through standpipe piezometers and in-situ negative porewater pressure (matric suction) can be measured by tensiometer. The application of the right or suitable parameter with the right slope stability method, which can replicate the condition of the slope, is very important to produce a reliable slope factor of safety (FOS).