

Using Micro-Pile Systems to Stabilize the Loaded Slopes

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Abstract

This article reviews the impact of micro-piles on slope stabilization, under the effect of foundation loading. In this study several parameters such as type of dusty materials and the configuration and position of micro-piles are investigated and the impact of these variables on slope stability are examined based on the three dimensional numerical modeling. Loaded slope is simulated with finite differences software, flac 3d, that has more accurate and reliable results compare to two dimensional models. This compares safety factors of stability with and without micropile. As expected, applying increased confidence factor and reduced the amount of displacement of the as well as sustainability become more.

Keyword: *safety factor, finite differences.*