

Settlement of Group of Stone Columns

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Abstract : A number of theoretical methods have been developed over the years to calculate the amount settlement of the soil reinforced with group of stone columns. The results deduced from these methods sometimes show large disagreement with the experimental observations. The reason of this divergence might be due to the fact that many of the previous methods assumed the deform shape of the columns which is different with the actual case. A new method to calculate settlement of the ground reinforced with group of stone columns is presented in this paper which overcomes the restrictions made by previous theories. This method is based on results deduced from numerical modeling. Results obtained from the model are validated.

Keywords : stone columns, group, soft soil, settlement, prediction

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