

3D Modeling of Tunis Soft Soil Settlement Reinforced with Plastic Wastes

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Abstract : The Tunis soft soils present a difficult challenge as construction sites and for Geotechnical works. Currently, different techniques are used to improve such soil properties taking into account the environmental considerations. One of the recent methods is involving plastic wastes as a reinforcing materials. The present study pertains to the development of a numerical model for predicting the behavior of Tunis Soft soil (TSS) improved with recycled Monobloc chair wastes. 3D numerical models for unreinforced TSS and reinforced TSS aims to evaluate settlement reduction and the values of consolidation times in oedometer conditions.

Keywords : Tunis soft soil, settlement, plastic wastes, finite-difference, FLAC3D modeling

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