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## Analysis of Bored Piles with and without Geogrid in a Selected Area in Kocaeli/Turkey

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**Abstract :** Kocaeli/TURKEY district in which wastewater held in a chosen field increased property has made piling in order to improve the ground under the aeration basin. In this study, the degree of improvement the ground after bored piling held in the field were investigated. In this context, improving the ground before and after the investigation was carried out and that the solution values obtained by the finite element method analysis using Plaxis program have been made. The diffuses in the aeration basin whose treatment is to aide is influenced with and without geogrid on the ground. On the ground been improved, for the purpose of control of manufactured bored piles, pile continuity, and pile load tests were made. Taking into consideration both the data in the field as well as dynamic loads in the aeration basic, an analysis was made on Plaxis program and compared the data obtained from the analysis result and data obtained in the field.

Keywords: geogrid, bored pile, soil improvement, plaxis

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