عنوان مقاله:

Finite element numerical modeling of geogrid-reinforced shallow foundation's behavior on loose soils

محل انتشار:

نویسنده:

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خلاصه مقاله:

Investigating of foundations actions on soil is one of the most important topics in geotechnical engineering. This behavior indicates the stability conditions of the foundation under structure loading on the foundation and soil responses. In this regard, the foundation's behavior is affected by soil behavior and failure is likely. In recent years, the use of soil reinforced stabilization is considered as the most successful procedure to increase bearing capacity and reduce foundation's settlements. In this paper by using finite element numerical modeling, attempted to evaluate the behavior of the geogrid-reinforced soil which conducted by Plaxis2D software. For this purpose, with the series of modeling, the soil- foundation behavior for both unarmed and reinforced conditions has been evaluated and the of geogrids performance was estimated. Based on the results of modeling, it has been determined that the geogrids has a good ability to improve and stabilize soil conditions.

کلمات کلیدی:

Numerical modeling, Finite Element Method, Geotextile, Shallow foundation, PLAXIS

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