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## (54) Title of the invention : EFFECTS OF GEOGRID REINFORCEMENT ON THE STATIC LIQUEFACTION BEHAVIOR OF GRANULAR FILL BY TRIAXIAL TEST METHOD

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## (57) Abstract:

Granular fill material is used to improve the bearing capacity and liquefaction behavior of soil. In many cases the depth of replaced granular fill becomes very thick, thus lead to the excessive cost. An experimental investigation was initiated to evaluate the effect of geogrid reinforcement. It was observed that the extensile force of the geogrids gradually contributes to the improvement of the reinforced specimens shear strength and the extensile force increased with the increase in the number of Geogrid layers. The findings conclude that the geogs influence the shear behaviour of granular filling and improve the interlocking strength of the fill, thus improving its shear strong. The extensible force provides better interlocking property to the granular filled, leading to the decrease in the pore water pressure.

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