عنوان مقاله:

Effect of Soil Shear Strength Parameters Anisotropy on the Bearing Capacity of Surface Footings

محل انتشار:

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خلاصه مقاله:

Most soils are anisotropic by nature owing to the sedimentation and deposition process or the particles orientation in a uniform siol layer admitting this natural property as an inherent property natural siols can no longer be assumed to be isotropic as such an assumption maybe a fallacy which may cause over or underestimation of their load carrying capacity the current research is focused on the bearing capacity analysis of anisotropic soils to do so a lower bound estimate of the bearing capacity of anisotropic soils has been analyzed by the finite elements and linear programming technique as the problem is highly non-linear owing to the dependency of the soil shear strength properties on the major principal stress direction an iterative procedure is associated with the conventional linearized yield criterion to facilitate the calculations lower bound estimates of the bearing capacity factors have been presented at the end.

کلمات کلیدی:

bearing capacity ,shear strength anisotropy,lower bound,finite elements and linear programming ,plasticity