عنوان مقاله:

Lateral Soil-Pile Stiffness Subjected to Vertical and Lateral Loading

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خلاصه مقاله:

Soil-structure interaction is one of the most important factors in theanalysis; especially for complicated problems such piles aresubjected to different loads. Owing to the sensitivity of pile designand analysis to geometry, loading type and soil behavior, it isunavoidable to consider the soil-structure interaction. Usingsubgrade reaction approach is one of the most practical method inpredicting the deflection and bearing capacity of piles subjected tolateral loads. Therefore, it is necessary to predict the exact value ofmodulus of subgrade reaction. Many full-scale pile test have beenperformed in order to investigate the behavior of lateral resistanceon cast-in-place concrete piles. Finite element (FE) methods)alsocan be applied to predict the variation of horizontal subgradereaction

کلمات کلیدی:

Modulus of horizontal subgrade reaction, Back-analysis method, Lateral pile behavior, Soil-pile interaction

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