

## Evaluation of Soil Modulus Variation by IS 2911 and Broms Method

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**Abstract :** The pile of 2.4 m diameter is subjected to lateral loads and moments. These lateral loads are caused due to wind/wave forces when used in foundations of various structures such as bridge piers and high rise towers exhibiting deflections with depth. The research scientist and developer has studied and developed various procedures to evaluate the coefficient of soil modulus variation ( $n_h$ ), using various methods. These are verified for slender piles in sand with various diameters up to 2.4 m. The subject explains about simplified approach of the theoretical values using IS procedure and Broms method and compared with actual field soil pressure/displacement distributions measured in mono-pile along its length and across the diameter.

**Keywords :** bridge pier, lateral loads, mono-pile, slender piles

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