

Barrette of Over 50,000 kN Ultimate Capacity Constructed in the Multi-Layered Soil of Bangkok

Narong Thasnanipan*, Zaw Zaw Aye** and Wanchai Teeparaksa, Ph. D.***

*Managing Director, **Project Manager, SEAFCO Co., Ltd., 26/10 Rarm Intra 109 Rd., Bangchan, Klong Sam Wah, Bangkok 10510, Thailand, Tel. (662) 9190090, Fax. (662) 9190098, seafco@seafco.co.th, www.seafco.co.th

***Professor, Department of Civil Engineering, Chulalongkorn University, Bangkok, Thailand, fcewtp@eng/chula.ac.th

Abstract

A static load test carried out on barrette having cross sectional size of 1.5 m x 3.0 m seated at 57 m below ground level is presented in this paper. Over 50,000 kN load was applied to evaluate the performance of this fully instrumented barrette. The load applied on barrette with a reaction frame “tower” capacity of 60,000 kN was claimed to be one of the highest test loads in the region. The test results were compared with those from the instrumented load test on bored pile of diameter 1.5 m with the same length, being located 30 m away. Since bored pile and barrette were constructed by different method and the parameters such as construction time, pile shape, slurry properties etc, were considerably different, results from the load tests have provided a unique opportunity to assess the extent of difference in behavior.