ANALYSIS THE CARRYING CAPACITY OF BORED PILE FOUNDATION IN CONSTRUCTION PROJECT ON POP HOTEL JL. WOLTER MONGONSIDI, BANDAR LAMPUNG

By

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Abstract

Bored pile or also called deep foundation that serves to carry and hold the load acting on it is a load of construction on to the hard ground layer. Every foundation must be support the load to the safety limits, including support the maximum load.

The purpose of this study is to calculate and compare the carrying capacity of the pile from data sondir using Aoki and De Alencar and Mayerhoff method, from data SPT using Reese & Wright and Mayerhoff method. Results of calculation of the carrying capacity of the foundation there are differences values, either views from using calculation method as well as the location of the point in the review. Bored pile bearing capacity is planned for diameters 80cm of 190 ton and for diameters 60 cm of 140 ton. Based on the results of the calculation of the carrying capacity single pile, for data sondir using Aoki and De Alencar method is diameter 80 cm of 123,1155 ton, diameter 60 cm of 69,2525 ton. Data Sondir with Mayerhoff method is diameter 80 cm of 310,181 ton, diameter 60 cm of 179,884 ton. Based on data SPT with Resse & Wright method is diameter 80 cm of 345,9816 ton, diameter 60 cm of 248,2648 ton. Data SPT with Mayerhoff method is diameter 80 cm of 259,9456 ton, diameter 60 cm of 159,7632 ton.

From the calculation of the carrying capacity of bored pile, it is safer wear the carrying capacity using data SPT with Meyerhoff method because more accurate that is diameter 80 cm of 259,9456 ton and diameter 60 cm of 159,7632 ton. Based on the calculation of the carrying capacity of bored pile that has been done, carrying capacity of the planned is less than actual carrying capacity, then the carrying capacity of bored pile foundation meets the requirements of the permitted.

Keywords: bored pile, carrying capacity foundation