ABSTRACT

SUPPORT ANALYSIS OF BORED PILE FOUNDATION BUILDING DEVELOPMENT PROJECT C ULIL ALBAB FOUNDATION

Dori Rizky Destriyani
NPM : 1511018

Job training is done with the aim to see firsthand or prove the theory that has been learned during lectures and apply in the real world of work. This practical work has carried out on the Building Construction Project C of the Ulil Albab Foundation. Construction project Building C Ulil Albab Foundation is a school building which has 4 floors including basement, it requires proper foundation planning and carrying capacity to withstand the workload of the building.

The practical work carried out is analyzing and calculating the carrying capacity of the *bored pile* foundation. Calculation of carrying capacity is obtained from the soil condition test in the from of *Cone Penetration Test* (CPT) data. The calculation of CPT uses 2 methods, namely the Schmertmann & Nottingham method, and the Mayerhoff method. Based on the calculation of the bearing capacity of the *bored pile* foundation with the Schmertmann and Nottingham methods, the calculation results for CPT with the lowest carrying capacity is at point S. 02 with a depth of 3 m anda the Qult is 151.825 tons and the highnest carrying capacity is at point S. 01 with depth 6 meters and the Qult is 153.87 tons. Base on the calculation of carrying capacity using the Mayerhoff method, the lowest carrying capacity is found at the point of S. 01 with a depth of 6 m and the Qult is 182.12 tons and the highest carrying capacity is at the point of S. 02 with a depth of 3 m and the Qult of 213.52 tons. The calculation results are taken the smallest so that the foundation can withstand the overall load.

Keywords : *carrying capacity, bored pile foundation, CPT*