ABSTRAK

Judul: Analisis Daya Dukung Fondasi Tiang Bor (Bored Pile) Studi Kasus Proyek Kiara Artha Park Bandung, Nama: Putra Adi Setyanegara, NIM: 41115120181, Dosen Pembimbing: Ir. Desiana Vidayanti, MT.

Tujuan dari Tugas akhir ini adalah menghitung dan membandingkan daya dukung vertical tiang bor berdasarkan data N-SPT dan membandingkan dengan rumus Meyerhof, Reese O'Neill, dan Reese Wright, sedangkan dari data loading test melakukan interpretasi menggunakan metode Davisson dan metode Mazurkiewicz

Hasil perhitungan daya dukung ultimit pada titik TP-1 menggunakan metode Meyerhoff sebesar 1750,86 ton, rumus Reese & O'Neill 1224,6 ton, rumus Reese & Wright 1313,9, pada titik TP-2 menggunakan Meyerhoff 1897,19 ton, rumus Reese & O'Neill 1247,4 ton, rumus Reese & Wright 1256,8 ton, pada titik TP-3 menggunakan rumus Meyerhoff 1800,48 ton, rumus Reese & O'Neill 1233,9 ton, rumus Reese & Wright 1153,8 ton.

Hasil Interpretasi daya dukung dari hasil loading test pada TP-1 menggunakan metode Davisson 1500 ton, dengan metode Mazurkiewicz 1497 ton, pada TP-2 menggunakan metode Davisson 1440 ton, dengan metode Mazurkiewicz 1643 ton, pada TP-3 menggunakan metode Davisson 1463 ton, dengan metode Mazurkiewicz 1906 ton.

Perbandingan perhitungan daya dukung secara analitis berdasarkan N-SPT dengan interpretasi daya dukung loading test pada TP-1 dan TP-2, perhitungan daya dukung tiang bor menggunakan metode Reese & Wright paling mendekati hasil interpretasi rata-rata metode Davisson dan Mazurkiewicz, sedangkan pada TP-3 perhitungan Meyerhoff yang paling mendekati hasil interpretasi rata-rata Davisson dan Mazurkiewicz

Kata kunci: daya dukung N-SPT interpretasi loading test, loading test

ABSTRACT

Title: Analysis of the Bored Pile Foundation Support Case Study of the Kiara Artha Park Bandung Project, Name: Putra Adi Setyanegara, NIM: 41115120181, Supervisor: Ir. Desiana Vidayanti, MT.

The purpose of this final project is to calculate and compare the carrying capacity of the vertical bored pile based on N-SPT data and compare with the formula Meyerhof, Reese O'Neill, and Reese Wright, while from the data loading test do the interpretation using the Davisson method and Mazurkiewicz method

The results of the ultimate bearing capacity calculation at point TP-1 use the Meyerhoff method of 1750.86 tons, the Reese & O'Neill formula 1224.6 tons, the Reese & Wright formula 1313.9, at the TP-2 point using Meyerhoff 1897.19 tons, Reese & O'Neill's formula 1247.4 tons, Reese & Wright's formula 1256.8 tons, at point TP-3 using the Meyerhoff formula 1800.48 tons, Reese & O'Neill's formula 1233.9 tons, Reese & Wright's formula 1153, 8 tons.

Results The interpretation of the carrying capacity of the results of loading tests on TP-1 using the Davisson method 1500 tons, with the Mazurkiewicz method 1497 tons, on the TP-2 using the Davisson method 1440 tons, with the Mazurkiewicz 1643 tons method, on the TP-3 using the Davisson method 1463 tons, by the 1906 Mazurkiewicz method.

Comparison of analytical carrying capacity based on N-SPT with interpretation of loading test carrying capacity on TP-1 and TP-2, the calculation of carrying capacity of drill piles using the Reese & Wright method is the closest to the results of the mean interpretation of the Davisson and Mazurkiewicz methods, whereas in TP -3 Meyerhoff's calculations are the closest to the results of Davisson and Mazurkiewicz's average interpretation

Keywords: carrying capacity of N-SPT interpretation of loading test, loading