

## ABSTRAK

Judul : Analisis Butir-Butir Pekerjaan Penyebab Perbedaan Nilai Estimasi Biaya Oleh Quantity Surveyor Dengan Realisasi Nilai Bill Of Quantity Kontrak (Studi Kasus : Proyek Apartemen The Residence Thamrin Distrik – Bekasi) . Nama : Mujahid Abdurrachman, NIM : 41115010096, Dosen Pembimbing : Ir. Agus Suroso, MT., 2020.

Beberapa proyek di Indonesia memiliki selisih antara Estimasi Biaya dengan nilai Bill of Quantity, salah satunya proyek Apartemen The Residence Thamrin District - Bekasi. Pada proyek Apartemen The Residence Thamrin District terdapat selisih yang terjadi pada perhitungan estimasi biaya konseptual dengan Bill of Quantity proyek tersebut. Selisih perbedaan antara nilai cost plan dengan Bill of Quantity proyek Apartemen The Residence Thamrin District yaitu Rp 4.789.910.409,- atau sebesar 7,79 %. Faktor penyebab perbedaan adalah pada perhitungan Estimasi Biaya terdapat beberapa item pekerjaan yang belum masuk, terdapat estimasi biaya yang rendah pada beberapa item pekerjaan, adanya peningkatan harga material yang signifikan, dan design struktur yang memiliki rasio yang terlalu tinggi dibandingkan dengan proyek lain yang seharusnya dapat di optimasi. Analisis pekerjaan struktur terdapat butir-butir pekerjaan yang menyebabkan perbedaan antara Estimasi Biaya oleh Quantity Surveyor dengan Bill of Quantity kontrak di antara lain : Beton Raft Pondasi sebesar 34.25%, Beton Retaining Wall sebesar 12.36%, Beton Ramp sebesar 13.91%, Besi Raft Pondasi sebesar 19.55%, Besi Retaining Wall sebesar 8.61%, Besi Ramp sebesar 11.28%, Bekisting Raft Pondasi sebesar 33.21%, Bekisting Retaining Wall sebesar 10.95%, Bekisting Ramp sebesar 15.81%. Dari hasil tersebut di dapatkan deviasi butir pekerjaan yang terbesar pada pekerjaan Beton Raft Pondasi 34.25% sebesar Rp. 2.488.165.724,-. Nilai rasio volume struktur bangunan proyek-proyek Apartemen di Indonesia untuk pekerjaan beton adalah 0.30 m<sup>3</sup>/m<sup>2</sup>-0.50 m<sup>3</sup>/m<sup>2</sup>, sedangkan untuk pekerjaan besi adalah 130 kg/m<sup>3</sup>-150 kg/m<sup>3</sup> dan untuk pekerjaan bekisting adalah 1.80 m<sup>2</sup>/m<sup>2</sup>-2.20 m<sup>2</sup>/m<sup>2</sup>.

Kata kunci : Quantity Surveyor, Bill of Quantity, Estimasi Biaya, Nilai Kontrak, Rasio

## ABSTRACT

*Title: Analysis of Work Points Causes of Difference in Estimated Cost Value by Quantity Surveyors With Realization of Bill Of Quantity Contract Value (Case Study: Apartment Project at The Residence Thamrin District - Bekasi). Name: Mujahid Abdurrachman, NIM: 41115010096, Advisor: Ir. Agus Suroso, MT., 2020.*

*Some projects in Indonesia have the difference between the Estimated Cost and the Bill of Quantity value, one of them is The Residence Thamrin District - Bekasi Apartment project. In The Residence Thamrin District Apartment project there is a difference that occurs in the calculation of conceptual cost estimates with the Bill of Quantity of the project. The difference between the value of the cost plan and the Bill of Quantity of The Residence Thamrin District Apartment project is Rp 4,789,910,409, or 7.79%. Factors causing the difference are in the calculation of Estimated Costs there are some work items that have not been entered, there is a low estimated cost of some work items, a significant increase in material prices, and structural design that has a ratio that is too high compared to other projects that should be able to optimization. Analysis of the structure work there are work items that cause differences between Estimated Costs by the Quantity Surveyor with the Bill of Quantity contracts, among others: Concrete Raft Foundation at 34.25%, Concrete Retaining Wall at 12.36%, Concrete Ramp at 13.91%, Iron Raft Foundation at 19.55%, Iron Retaining Wall at 8.61%, Iron Ramp at 11.28%, Formwork Raft Foundation at 33.21%, Formwork Retaining Wall at 10.95%, Formwork Ramp at 15.81%. From these results the largest work item deviation was obtained in the 34.25% Raft Foundation Concrete work amounting to Rp. 2,488,165,724. The value of the volume ratio of the building structure of Apartment projects in Indonesia for concrete works is 0.30 m<sup>3</sup> / m<sup>2</sup>-0.50 m<sup>3</sup> / m<sup>2</sup>, while for iron works is 130 kg / m<sup>3</sup>-150 kg / m<sup>3</sup> and for formwork work is 1.80 m<sup>2</sup> / m<sup>2</sup>-2.20 m<sup>2</sup> / m<sup>2</sup>.*

*Keywords: Quantity Surveyor, Bill of Quantity, Cost Estimation, Contract Value, Ratio*