

## ABSTRACT

### **COMPARATIVE ANALYSIS OF STRUCTURAL COSTS ON BASIC DESIGN AND DETAIL ENGINEERING DESIGN ON SYEKH MUHAMMAD BIN ZAYED ELEVATED ROAD**

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*Basic design is the initial stage in designing infrastructure, while Detail Engineering Design is a working drawing that has gone through a process of revision and adjustment to field conditions. Bidding documents usually refer to a basic design which is considered insufficient to describe technical conditions, so that the auction winner makes changes which results in an addition to the contract value (KPK, 2023). However, the PUPR Ministry has developed innovative design and build methods that pay more attention to efficiency in terms of time and cost. The Sheikh Muhammad Bin Zayed Flyover Project (MBZ) is an infrastructure project using the Design and Build Method. Basic Design is usually done at an early stage and involves lower costs and shorter time. On the other hand, Detail Engineering Design requires a higher cost and takes longer time because it involves more detailed work and in-depth analysis. The author conducted a cost comparison analysis on the Basic Design and Detail Engineering Design drawings using unit price analysis in accordance with the guidelines of the Ministry of Public Works and Public Housing Number 1 of 2022 concerning Guidelines for Preparing Estimated Costs for Construction Work in the Field of Public Works and Public Housing, from the research carried out resulted in a Basic Design cost that 39% higher than the Detailed Engineering Design Fee.*

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