

## ABSTRACT

### ***Analysis of Project Completion Time Acceleration Plan Using Crash Program Method (Case Study: Mitra10 Bintaro Construction Project)***

Ilham Agus Wibowo <sup>1)</sup>, Lukas Beladi Sihombing <sup>2)</sup>, Harianto Hardjasaputra <sup>2)</sup>

<sup>1)</sup> *Student of Civil Engineering Department, Universitas Pembangunan Jaya*

<sup>2)</sup> *Lecturer of Civil Engineering Department, Universitas Pembangunan Jaya*

*Project scheduling plays an important role in ensuring the success of construction projects so that delays do not occur. The case of delays occurred in the Mitra10 Bintaro development project. The delay can be overcome by the acceleration method. In this study, the crash program method was used with an alternative acceleration, namely the addition of 20%, 40%, 60% workforce and the application of a work shift system of 2 shifts in one day. This study aims to determine the value of an effective and efficient acceleration alternative. There are two analyzes carried out, namely on the work that is on the critical path and on all remaining structural and architectural works. From the results of the analysis that has been carried out, the results with the fastest duration and cost-effective results are obtained, namely the alternative of implementing a work shift system of 2 shifts for all remaining work, the duration of the project can be accelerated to 72 days with a total cost of all remaining work being more efficient, namely IDR 62. 100,561,644.80 compared to other alternatives. Therefore, implementing a work shift system for all remaining work is the most effective and efficient planning solution because it has a greater percentage of project acceleration duration and has a more efficient percentage of total development costs.*

**Keywords:** *Crash Program, Acceleration Alternative, Addition of Workforce, Implementation of Work Shift System*

*Libraries* : 22

*Publication Years* : 1984 – 2022