## ABSTRACT

PT.XYZ is a building construction consultant appointed to supervise and manage a rehabilitation project at an elementary school in Bandung. This project is planned to last for 77 days at a cost of Rp. 196,038,361. Based on the results of interviews with PT.XYZ resource persons, this project needs to be accelerated so that it does not interfere with ongoing learning activities and can be immediately used in learning activities. In accelerating the project, this research uses the Crashing method. Crashing method is a method used to reduce work time which will affect the project completion time. One way to reduce work is to add workers to activities that will be accelerated.

In increasing the number of workers, it is necessary to calculate the appropriate number of additional workers in order to avoid swelling in project costs. The design of time and cost in this study uses Critical Path Method (CPM) to find the critical path to the project and Time Cost Trade Off (TCTO) analysis to find the optimal time and cost after acceleration. The results of this study found that by adding 2 workers to the activity of dismantling red brick walls, making 1st floor column formwork, making formwork and 1st floor concrete beams, it can reduce the completion time of the project to 72 days at a cost of Rp. 195,989,821.

## Keywords—[Rehabilitation, Crashing, Optimizing, CPM, TCTO]