ABSTRACT

Analysis of Value Engineering is almost always applied to any construction projects. Many projects that have felt the impact of the use of Value Engineering is the cost savings in construction. Savings can be made by changing the initial design and replace it with some alternatives not change the function of the initial design. In this study, the object under study is a girder beam on Bus Rapid Transit project. The initial design used is Box Girder and an alternative to the initial design is the I-Girder and U-Girder. The alternatives are then analyzed and at the end of the study conducted using the Life Cycle Cost with a LCCP Tool program. This method proposes determining the selection of the most cost-effective among several competing alternatives in the cost of the purchase, operation, maintenance, and demolitioning the technical reasons.

Keywords: Value Engineering; Savings; Alternative; Life Cycle Cost.