

**COST ANALYSIS FRAMEWORK FOR SEDIMENT
MANAGEMENT IN RESERVOIR INFRASTRUCTURE**

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A Thesis submitted in fulfillment
of the requirements for the award of the degree of
Master of Science (Construction Contract Management)

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ACKNOWLEDGMENT

Alhamdulillah I prayed to Allah SWT, because only upon His mercy and grace, this thesis can be completed. Greeting and Shalawat, I wish upon the Prophet Muhammad, may his shafa'at help us.

I am indebted to my project supervisor, Assoc. Prof Zakaria Mohd Yusof for his support, advice and encouragement from start until the completion of this project.

I am also indebted to Ministry of Public Works Indonesia for funding my master study. Management Perum Jasa Tirta I Malang that has give me permission for this master study. In particular, I would like to show my gratitude to Ir. Syamsul Bachri Dipl. Ph, Ir. Harianto Dipl. HE, Ir. Vonny C. Setiawati MT, Firman S. Efendi S.Si, Ir. Hermien Indraswari MT, Inni Dian Rohani, ST, Drs. Syaiful Hidayat and for everyone for supporting me during my study in UTM. Librarians at UTM and Geotechnical Division of Institute of Road Engineering also deserve special thanks for their assistance in supplying the relevant literatures.

My fellow postgraduate students should also be recognized for their support. My sincere appreciation also extends to all my colleagues and others who have provided assistance at various occasions. Their views and tips are useful indeed. Unfortunately, it is not possible to list all of them in this limited space. I am grateful to all my family members.

ABSTRACT

Water is importance element for the continuity of the life of human being. Generally, the human being was created and had settled down in orders to get basic needs in daily life. . In the present day, the scarcity of water due to human population increase, climate changes, drought, environment change, etc., causes need to store the freshwater is very importance and urgently and the build of dam reservoir is the one answer for that problem. The biggest problem that occurs in the dam reservoir is sedimentation. Sedimentation problem can make reduce gross storage of dam reservoir. Sedimentation management is one way of maintenance process for make sediment removal in dam reservoir. Maintenance cost for that dam reservoir can't direct separately, because that social function and business benefit working together. The cost analysis framework was undertaken to identifies and describe the estimated costs associated with the baseline , development and alternatives, and calculates comparative costs between them, also integration of risk factor management approaches into routine practice for the pilot teams. Because of that, is importance to know component cost and development of component cost that used for make cost analysis. In this research that to get guidance for make cost analysis base on component cost and also to developed, that type of research is develop theory and model, base on studies of published material and compare between theoretical. Research finding that almost eighty percent (80%) most of respondent that involved in cost analysis or cost estimate agree that practically to make framework for cost analysis is importance that the beginning, component cost base on theory and furthermore to make guidance is combine component cost in theory and practically, beside depend on the drawing, specification or other thing that needed for make cost analysis.

Keyword : Cost analysis framework, Sedimentation management, Cost estimate, and Maintenance cost