CENTRE OF STUDIES FOR QUANTITY SURVEYING

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SURVEYING UNIVERSITI TEKNOLOGI MARA

CAWANGAN SARAWAK

"The adoption of technology on construction waste management in Kelantan''

Final Project submitted in
partial fulfilment of the
requirement for the award of
Bachelor of Quantity
Surveying (Honours)

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(2019888078)

ABSTRACT

There is an increase in the problems of environmental sustainability, such as environmental pollution, air pollution, and water pollution impairment arising from construction waste management. Because of the adverse effects of widespread and uncontrolled disposal of construction waste nowadays, which can have a major impact on the environment and its sustainability, the implementation of technology for construction waste management can reduce the environmental pollution problems that can lead to damage and reduce the pollution arising from that act. The barriers to implementing technology for construction waste management in Kelantan, however, are a lack of modern technology, the cost of the technology, and the lack of a strategy for implementing modern technology. Hence, the aim of this research is to suggest proper solutions to enhance the effectiveness of waste management systems in the construction industry. Surveys were used to collect data for this paper, and questionnaires were distributed to contractors, project managers, architects, and engineers. The outcome of this research will include several capabilities of modern technology that could be applied, challenges in terms of cost and the strategies to implement the technology for construction waste management. It is important to develop and implement technology in Kelantan soon and toward sustainability.

Keywords: Construction waste, challenges, cost, technology, strategies.

ACKNOWLEDGEMENT

In the name of Allah, the Most Gracious and the Most Merciful.

Every big project or small one is successful, largely due to the effort of several wonderful people who have always given their valuable equipment or lent a helping hand. I sincerely appreciate the inspiration, support, and guidance of all those people who have been instrumental in making this dissertation a success.

At this point, I am deeply grateful to my beautiful and helpful supervisor, Dr Sylvia Gala Mong @ Agam, for making the resources available at the right time and providing valuable insights and guidance that led to the successful completion of my dissertation. It also gives me great pleasure to convey my heartfelt gratitude to individuals who formally consented to being questioned and gave me the opportunity to complete sections of the requirements for the discovery of this research.

Special thanks also go to all my instructors for their concerns, critical advice, encouragement, professional remarks, and assistance throughout my research writing. Finally, I would like to express my heartfelt appreciation to my loving family members, seniors, and friends, who were continuous sources of inspiration and support through the dissertation's preparation.

Thank you.

HAZUAN.

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

The construction industry is regarded as a major economic stimulant in Malaysia. However, it also generates waste from construction activities. Construction waste materials are unwanted materials generated during the construction process. Construction waste management is also a problem if not handled properly, as it has a negative impact on the environment, society, and the economy. Therefore, buildings that cause fewer environmental effects by generating less waste are defined as "environmentally friendly" by Tey Jia Sin, et. al. (2016). Waste occurs within the lifecycle of buildings, during the construction, modification, and demolition phases. In many countries, construction waste has become a major environmental issue.

Bukhari K.A. (2013) stated that proper construction waste management will provide economic benefits by decreasing the cost of the project through proper implementation of a waste management plan that could generate less waste from construction projects, resulting in a reduction in disposal costs and landfill charges, eventually cutting down the total project costs. This needs the help of any waste management professional associated with the appropriate method or technology used in the process of achieving sustainability in waste management, Tey Jia Sin, et. al (2016). In short, a method of implementing a progressive waste management program must be incorporated into all sectors in order to build a promising future. As a result, the purpose of this study was to identify the current waste management in Malaysia, as well as the challenges of achieving waste