TOWARDS SUSTAINABLE CONSTRUCTION SOLID WASTE MANAGEMENT IN KLANG VALLEY, SELANGOR

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DECLARATION

"I declare that this final project/dissertation is the result of my own research and all of the sources are acknowledged in the references"

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ABSTRACT

Nowadays, the increasing quantity of construction solid waste has causes serious environmental problem which requires a better solution in handling the wastes that generate. Due to the overwhelming production of the wastes, the conventional method in handling construction solid waste seems to be irrelevant in ensuring sustainability for the waste management in the future For that reason, a proper way of handling construction wastes is significance in reducing the negative impacts towards the environment, social, and economy. Sustainable waste management is introduced to maintain the balance between the environment, social and economic aspects through several ways such as acts implementation, and techniques in managing waste. Therefore, it is essential to identify current waste management system adopted by industry in order to make adjustment and improvement in moving towards sustainable waste management. This paper highlights the current practice of the waste management system implemented in the country focusing in Klang Valley area and the restriction in applying the concept of sustainability into waste management through reviewing past similar researches. This research has conducted a structured interview with the local authorities and also an analysis survey with the selected G7 contractors in Klang Valley. The results obtained show the current waste management systems applied in Malaysia and factors that hinder the concept of sustainability into waste management. It allows a major shift in Malaysia waste management by improvise current waste management technology into more sustainable way.

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CHAPTER 1

INTRODUCTION

1.1 STUDY BACKGROUND

Construction industry has played an important role in the development of Malaysia. Throughout the year, the country has witnessed the prosperity that had been gained from the industry towards the development of nations and also providing the necessary infrastructure and physical structures for activities such as commerce, services and utilities (Papargyropoulou, Preece, Padfield & Anis, 2011). Despite the benefits that come with it, construction industry has also been linked to global warming, environmental pollution and degradation (Jones, 2009). One of the factors that contribute to the problems is the increasing amount of construction solid waste in the country. According to Agyekum, Ayarkwa & Adinyira (2012), construction solid waste materials can be defined as the comprising of unwanted materials generated during construction. Furthermore, pollution caused by construction waste has caused negative impacts towards the environment and leads to economic lose (Esin & Cosgun, 2007). Therefore, to reduce the total amount of wastes generated, an optimal waste management system should be adopted (Piyaphant & Prayong, 2011) in order to achieve sustainability.