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**CONTRACTORS' PERSPECTIVES ON
CONSTRUCTION WASTE MINIMIZATION IN
CONSTRUCTION PROJECTS**

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ABSTRACT

Higher demand in construction sectors in Malaysia have contributed the increasing of construction waste which arise environmental concerns by bringing them for final disposal in landfills. The construction industry contributes a large waste stream due to poor in minimizing construction waste. The problem related to waste minimization such as the weakness of contractor and their practices seen like not standardized pertaining construction waste minimization. Practicing waste minimization is the most desirable method in waste management hierarchy that can be used by companies in reducing the possibility of removal of waste from landfill. There are some issues and problem that prevent the companies to practices waste minimization such as lack of cost, lack of awareness and limited of time to adopt the practice. Due to the urgency to minimize construction waste, it is significant to identify, sources and causes of waste, the strategies and barriers in minimizing construction waste. Thus, this research has been undertaken to assess contractors' perspective on construction waste minimization by identify sources and causes of waste, the extent to which waste minimization strategies are adopted and the barriers that faced in minimizing construction waste.

A total of 115 Questionnaires survey were distributed to contractors engaged in various types of construction project in Kelantan and 46 completed questionnaires were analysed using the Statistical Package for Social Sciences (SPSS). The result indicated 'monitoring laborer's attitudes', ensuring the compliances of the waste management plan and 'site management' are perceived as the three strategies of most important adopt by contractor. Furthermore, lack of financial incentives becomes the most important barriers faced by contractor in minimizing construction waste. Finding from this research will be used to determine effective strategies to minimize waste and solve to the problem related with practicing waste minimization.

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TABLE OF CONTENTS

ABSTRACT	i
ACKNOWLEDGEMENT	ii
TABLE OF CONTENTS	iii
LIST OF FIGURES	viii
LIST OF TABLES.....	ix
LIST OF ABBREVIATIONS.....	x
CHAPTER 1 - INTRODUCTION	1
1.1 Background Of Research.....	1
1.2 Problem Statement	3
1.3 Aim of Research.....	4
1.4 Research Questions	4
1.5 Research Objectives	5
1.6 Scope and Limitation Of Research.....	5
1.7 Statement of Significance	6
1.8 Research Methodology.....	7
1.9 Structure of Dissertation.....	8
1.10 Summary	9

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF RESEARCH

The construction industry is accountable for major generator of material waste as the developing of economics and urbanization increased especially in developing countries. During the past two decades, the volume of material waste has increased significantly due to the increase in the standard of living as well as the natural increase in population. Waste in the construction industry is crucial not only from the perspective of efficiency but also concern has been growing in recent years about the adverse effects of the waste building material on the environment. Construction material waste consists of concrete, bricks, soil, rocks, lumber, masonry, soil, glass, plastics, steel, aluminium, drywall, insulation, plumbing fixtures, electrical materials, asphalt roofing materials, and others.

As one of developing country, Malaysian construction is also facing an increase of the production of building material waste and of accompanying problems of disposal this waste because of poor waste material control in construction sites. In 2012, Malaysia generated approximately 33 000 tonnes of solid waste where in a year before that, the cost to manage solid waste reached RM1135.0 million on government (Wahi et al., 2016). The higher percentage of material waste contribute in construction site concluded by Nagapan et al., (2012a) are concrete with 12.32%, followed with metals (9.62%), bricks (6.54%), plastics (0.43%), woods (69.10%) and others waste (2%). Although the facts that reusing, recycling and reducing material waste have been encouraged by many researchers, disposal in landfill and illegal dumping activity still the most common practice used in construction for the disposal of construction waste.