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THE POTENTIAL SOLUTION FOR WORKMANSHIP ISSUES IN CIVIL ENGINEERING PROJECTS

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ABSTRACT

Common issues in the construction industry are failures and defects. Most defects identified were caused by workmanship issues that are very difficult to avoid in the construction industry. This problem is becoming quite worrying because it creates other problems in constructing construction projects. Poor workmanship often contributed to many difficulties such as project delays, rework and poor quality of work. Since many previous research studies on the workmanship issues in building works, the workmanship issues in civil engineering projects are very scarce. Thus, this study aims to suggest potential solutions to minimize workmanship issues in civil engineering projects. To achieve the aim of the study, a set of online questionnaires in Google Form has been distributed through email to G7 Civil Engineering contractors who are certified with Construction Industry Development Board (CIDB). The findings were analyzed by using descriptive analysis. The data collected related to the factors contributing to workmanship issues in civil engineering projects and the potential solutions to minimize this problem can be used to improve workmanship issues in the construction industry. The factors identified were poor project management, lack of skill and experience, insufficient funding, unsuitable material, complex role of the subcontractor, language barrier and lack of communication, poor weather condition and inadequate time to complete the projects. The solutions to minimize workmanship issues are strict supervision, proper training and education, proper communication by all parties involved, proper construction management, proper manpower management and proper design. A conclusion has been made and recommendations for future research have been provided. This study will be an eye-opener to the Civil Engineering Contractors to manage the workmanship issues from the commencement of construction. Hence, this will provide the improvement of the workmanship issues and poor quality of projects.

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TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND OF RESEARCH

According to Wong (2016), construction industry in Malaysia has lagged behind in improving the quality. This industry faces a lot of problem such as high fragmentation, instability, lack of standards, poor quality, lack of standards and low productivity. According to Gashi (2018), one of the challenges for the construction industry in constructing a new building or any other civil engineering project from scratch is that designers may create novelty ideas, but they are frequently built on-site by unskilled workers. The unique and sometimes complex nature of the construction industry comes from the fact that a significant number of diverse professional groups have various interests and requirements, which frequently conflict with each other (Gashi, 2018). The construction industry involves a complex activity in which well-trained workforces are required from the design, approval, supervision, and construction stages. According to Othuman Mydin, et al. (2014), workmanship is the expertise of various workers in an occupation or trade based on their experience or career. The workmanship is defined as quality put into creating a product or completing a project. It can be determined by the individual's skills, the nature of the items, and the art applied in their use.

However, the construction industry is a precarious sector. According to Othuman Mydin et al. (2014), the construction industry has suffered several setbacks, such as a decline in quality performance, increased costs, and delays in construction projects. Nevertheless, failures and defects are the common issues in the construction industry. Most defects identified were caused by workmanship issues. According to