DEPARTMENT OF BUILDING FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING UNIVERSITI TEKNOLOGI MARA (PERAK)

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It is recommended that the report of this practical training provided

by

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entitled

CONSTRUCTION OF PAD FOUNDATION

be accepted in partial fulfillment of the requirement for obtaining the Diploma In Building.

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ABSTRACT

Foundation is a part of structure which connects superstructures to the adjacent zone of soil or rock below it. The functions of foundations is to transfer and spread the loads from a structure's columns and walls as well as any load in the structure into the ground without exceeding safe bearing capacity of the soil. This report was conducted for the construction project of bungalow PT 10211 at Teluk Penchalang, Pasir Panjang, Perak. The objectives of this report is to study the process involve on the construction of pad foundation in the construction project. It will focus on the foundations that are built as a structure that supports the load from the structure. Next, determine the problems occurred during the installation of pad foundation, the solutions taken and to investigate the time taken for the installation of pad foundation as it will advance the work in the future projects. This report also refers to the process of construction of pad foundation which consists site clearing, reclamation, marking the area, excavating, setting the reinforced bars, concrete mixing and forming the foundation. Based on the observation, the construction process was ease as the pad foundations has been constructed and it functions as structure's support to bear the load from the structure.

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CONTENTS		PAGE	NO
			i
Acknowledgements			ii
Abstract			iii
Contents			iv
List of Tables			V
List of Figures	\$		
			1
CHAPTER	1.0	INTRODUCTION	1
	1.1	Background and Scope of Study	
	1.2	Objectives	2
	1.3	Methods of Study	2
CHAPTER	2.0	COMPANY BACKGROUND	4
	2.1	Introduction of Company	4
	2.2	Company Profile	5
	2.3	Organization Chart	6
	2.4	List of Project	8
		2.4.1 Completed Projects	8
		2.4.2 Project in Progress	9
CHAPTER	3.0	CASE STUDY	10
	3.1	Introduction to Construction of Pad Foundation	10
	3.2	Construction Method of Pad Foundation	12
	3.3	Problem Occurred and Solution Taken	21
	3.4	Time Taken for Construction of Pad Foundation	23
CHAPTER	4.0	CONCLUSION	26
	4.1	Conclusion	26
100			27
REFERENCES			

CHAPTER 1.0

INTRODUCTION

1.1 Background and Scope of Study

Foundation is a structure, which connects superstructures to the soil or rock below it. The function is to transfer and spread the loads from structure's columns and walls as well as any load in the structure into the ground. Thus, the type of foundation was used on this construction project is pad foundation. This type of foundation is suitable for bungalow construction because it is a low-rise building which cannot bear excessive heavy load. The pad foundation was vital for the bungalow construct as the pad were used to support the building. Thus, the ratio and the strength were tested first according to the drawing plan (Webster and Booker, 2006).

The construction method of pad foundation began with site clearing and reclamation at the area. Then, the workers built a perimeter layout according to the area and marked the position for excavation. Next, the process of excavating and piling which using mangrove wood. Then, the workers built reinforced bars using BRC and are tied with links. The bars are placed into the excavation pit that has been excavated to become footing and stump. Before the construction begins, the concrete must be tested with slump test. After that, the concrete mixture was poured into the excavated pit. Then, the workers built the stump using bricks mix with layers of mortar. Last but not least, the stump were filled with the concrete that has been tested and repeat the process for each foundation.