FINAL YEAR PROJECT REPORT

ADVANCE DIPLOMA IN CIVIL ENGINEERING

SCHOOL OF ENGINEERING

MARA INSTITUTE OF TECHNOLOGY

TITLE:

AN ANALYSIS OF DELAY FACTORS AFFECTING LABOUR PRODUCTIVITY IN CONSTRUCTION USING MPDM

BY:

NOOR AZIZAH BT. MOHD OTHMAN

JUNE 1992

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ACKNOWLEDGEMENT

Praise be to Allah s.w.t. for giving me the time and ability to complete this thesis, I owe my entire life.

I would like to express my sincere thanks to my adviser Ir. Ariffin Ismail, for all the wise counsel, guidance and encouragement given at various stage of this project.

Thanks are also due to the Department of Development & Maintaince, Staff Of the Department Of Civil Engineering, Ima Concultant Sdn. Bhd., Zainal Consultant Sdn. Bhd. for providing me with relevant datas and information on the study area.

Finally, I wish to express my special gratitude to my parent, family, friends, colleagues, housemates and each individual who has given ideas and assistance directly or indirectly to make this project as success.

ABSTRACT

The construction industry has historically lacked *significant increase in productivity . Several reasons* are often cited for this limited increase in industry productivity. One of the reasons cited is the construction industry inability to model construction productivity .

This thesis focuses on the development of a *pro*ductivity model that provides the average consrtuction firm with a means of measuring, predicting, and improving a given method's productivity. Although the model may not always result in the development of optimal construction method productivity, it does provides the potential for local optimization for a given construction method. The model provides the potential for increases in method productivity.

The model developed referred to as the Method Productivity Delay Model (MPDM), It providees the average construction firm with a means of measuring and predicting construction method productivity. The model fucuses on method productivity parameters that are measurable and controllable by the average construction firm. Method productivity parameters are addressed by documenting productivity delays. The model developed

1.0 INTRODUCTION

There are many differences definition of productivity. It depends on how the owners, the designers, or constructors see it. Owner representatives said productivity is the value recieved for dollars expended. The simplest definition given by participating designers was the man hours per unit of design output. A constructor said that the productivity is output of a piece of equipment (or crew of cookers) to complete a unit of construction. In other words, productivity is defined as the ratio between output and input and industrial productivity is arithmatical ratio between the work produced and the total resources used.

Every definition has a common thrust which relates to striving to produce a constructed works. Thus recognized the need for the systems approach, through improve; Environment , labour, equipment, material and management to produce the constructed works more effectively and efficiently.[5]

An effective construction project, usually subjected to 4 constrains; time, cost, the quantity and quality of the work required [1]. This can be achieved by performing the project activities planning. The activity planning can determine the optimal combination of resources to be used in performing the required quanti-