

**FACTORS AFFECTING IN THE PREPARATION OF CONSTRUCTION
WORK SCHEDULE**

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**FACTORS AFFECTING IN THE PREPARATION OF CONSTRUCTION
WORK SCHEDULE**

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A project report submitted in partial fulfillment of the requirements for the award of
the degree of Master of Science (Construction Management)

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DEDICATION

Especially to my beloved father, mother, brother,

and all my friends.

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I wish to express my sincere appreciation to my supervisor Professor Dr. Muhd Zaimi Abdul Majid for his effort, encouragement and guidance.

In preparing this project, I was in contact with many industry practitioners. They have given me tips and useful information in order for me to complete the data sourcing. I am very thankful for them.

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ABSTRACT

Construction scheduling is widely used in many construction projects today but there still exists a large disparity in the proper use of this tool. Many projects schedule is created at the beginning of the project and never reviewed or revised until a problem arises. Besides, contractors lack the skills necessary for preparing good construction schedule. Therefore, the objectives of this study are to investigate the factors affecting the preparation of better construction schedule; establish the severity of these factors; and the methods of improvements for preparing better construction schedule. Comprehensive literature review has been conducted to gather the information on the factors affecting the preparation of construction work schedule followed by structured questionnaire distribution as a main tool to gain data to establish the severity of these factors. The data attained were analyzed using average index and frequency analysis. From the analysis highlighted, there were thirty-five (35) factors where these factors were divided into four (4) main categories which were project specific factors, project management, working condition and external environment related factors. Hence, the results showed the top three factors that have the highest rank were complexity of project, identification of critical activities and type of project involved. In conclusion, the study also identified recommendations that can be used by the project participants in order to prepare effective and good construction work schedule in the local construction industry.

ABSTRAK

Penjadualan kerja pembinaan digunakan secara meluas dalam banyak projek-projek pembinaan hari ini tetapi cara penggunaannya masih tidak betul dan tepat. Kebanyakan penjadualan projek dihasilkan pada permulaan projek tidak pernah dikaji atau disemak semula sehingga sesuatu masalah muncul. Selain itu, ramai kontraktor tidak mempunyai kemahiran yang mencukupi dalam penjadualan kerja pembinaan. Oleh demikian, objektif kajian merangkumi penyiasatan factor-faktor dalam mempengaruhi persediaan penjadualan kerja pembinaan yang lebih baik, mengenalpasti tahap kritikal setiap faktor dan pengenalpastian kaedah peningkatan penyediaan jadual kerja pembinaan yang lebih berkesan. Kajian literatur secara komprehensif telah dilakukan untuk mengumpul maklumat mengenai faktor-faktor yang menyebabkan kelemahan prestasi projek pembinaan melalui kajian sebelum ini. Seterusnya, kajian soal selidik telah dilakukan untuk mengumpul data bagi mengenalpasti tahap kritikal setiap faktor. Data-data yang diperolehi dianalisis menggunakan index purata dan analisis frekuensi. Keputusan kajian menunjukkan terdapat 35 faktor penyebab dikenalpasti dimana faktor-faktor itu dibahagikan kepada 4 kategori utama iaitu faktor khusus projek; pengurusan projek; keadaan kerja dan faktor luaran. Dari analisis, 3 faktor utama yang mempunyai tahap kritikal tertinggi adalah kerumitan projek, pengenalpastian aktiviti-aktiviti genting dan jenis projek yang terlibat. Kajian ini juga memberi cadangan-cadangan yang boleh digunakan oleh pihak-pihak yang terlibat dalam projek untuk menyediakan jadual kerja pembinaan yang lebih efektif dan berkesan dalam industri pembinaan tempatan.

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