DEPARTMENT OF BUILDING SURVEYING FACULTY OF ARCHITECTURE, PLENNING AND SURVEYING

HIGHWAY CONSTRUCTION: THE PREFABRICATION COMPARE TO CONVENTIONAL METHOD WITH SPECIAL REFERS TO SPRINT HIGHWAY OF KUALA LUMPUR "DESIGN AND CONSTRUCTION OF SEGMENTAL BRIDGE RAMPS"

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SYNOPSIS

Since the beginning of the 21st century, as the automobile has offered ever higher levels of mobility in Malaysia especially Kuala Lumpur, vehicle ownership per head of population has increased. Road needs have been strongly influenced by this popularity and also by the mass movement of people to cities and thence to suburban fringes a trend that has led to increasing travel needs and road congestion and to low-density cities, which are difficult to service by public transport. Often the building of new roads to alleviate such problems has encouraged further urban sprawl and yet more road travel. Long-term solutions require the provision of alternatives to all automobile transport, controls over land use, and the proper pricing of road travel. To this end, road managers must be concerned not merely with lines on maps but also with the number, type, speed, and loading of individual vehicles, the safety, comfort, and convenience of the traveling public, and the health and welfare of by standers and adjoining property owners.

Ideally, the development of a major road system is an orderly, continuous process. The process follows several steps, assessing road needs and transport options, planning a system to meet those needs, designing an economically, socially, and environmentally acceptable set of roads. It must also obtaining the required approval and financing, building, operating, maintaining the system, and providing for future extensions and reconstruction.

This dissertation shall focus on highway construction, prefabrication highway construction and its comparative construction. There will special refers to study case that focused to the;

1. Pre-cast for SPRINT Highway at Kuala Lumpur.

2. Conventional method apply for Diamond Interchanges of MRR[®]

Main objective of this research is to test whether the method of construction that had applied for is efficiently in produce speedy, consistently high quality, such as quicker build periods, less reliance on on-site labors and no requirement for scaffolding. It will also concerning of to the matter of overlapped programme, thereby reducing overall site periods. Therefore the measuring determinants of the case study shall be filling the answers to these questions;

1. The project completion by using both construction method

2. The quality of the finish product after site erection

3. Numbers of the method required.

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SYNOPSIS			i.
ACKNOWLEDGEMENT			m.
INDEX			V.
LIST OF TABLES			х.
CHAP	TER 1 :	INTRODUCTION	
1.1	The I	ssue of Study	1
1.2	The C	Dejective of Study	5
1.3	The S	7	
1.4	The F	9	
1.5	The L	10	
1.6	The M	12	
1.7	The S	Sources of Study	14
СНАР	TER 2 :	HIGHWAY IN MALAYSIA	
2.1	Gene	neral View of Highway in Malaysia	
2.2	Cross Section Element of Highway		17
	2.2.1	Two-lane Highway	17
	2.2.2	Three Lane Highway	18
	2.2.3	Divided Highway	18
	2.2.4	Limited Access Highway	19
	2.2.5	Shoulders	19
2.3	Design Standard For Highway in Urban Area		21
	2.3.1	Design Control	21
	2.3.2	Cross Section Element	21
	2.3.3	Elements of Design	22