

**THE APPLICATION OF
ROLLER COMPACTED CONCRETE (RCC)
IN DAM CONSTRUCTION**

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**B.Eng (Hons)(Civil)
UNIVERSITI TEKNOLOGI MARA
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IN DAM CONSTRUCTION**

By

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Report is submitted as
The requirement for the degree of
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DECLARATION BY THE CANDIDATE

I am Amalina Amirah Bt Abu Bakar, UiTM no.:2002611817 declared that this thesis is the result of my own work, except the ideas and summaries which I have clarified their sources. The appropriate credit has been given where reference has been made to the work of others. The work has not been accepted for any degree and is not currently submitted in candidature of any degree.

Signed :.....

Date :.....

ACKNOWLEDGEMENT

From deep of my heart, praise to Allah, the Almighty who is the most merciful. Nothing may take place without His leave. I express my heartiest indebtedness to my family for the tender care and affection.

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ABSTRACT

Roller Compacted Concrete (RCC) is a no-slump, dry mix of cement, fine aggregate, coarse aggregate, and fly ash. It is a new technology but develop rapidly in the world. It draws on concepts from the technology of concrete gravity dams and earth-fill embankment dams. On 1982 the first RCC dam was built. The main advantage of the RCC dam is economics due to reduced forming, placement and compaction costs. In Malaysia from years ago until now, it is depending on hydro power plant to generate electric and also as a water resource. The purpose of this study is to give an overview to the application of RCC in dam construction besides to enhance knowledge about dam as a hydraulic structure. It is an effort to produce overview criteria in constructing RCC dam and to compare the design criteria between RCC dams and conventional concrete (CVC) dam. Thus, it is expect that in future, this beneficial study will be continued in finding more details about constructing RCC dam especially to be applied in Malaysia.