

**THE USAGE OF WATER AND DRINKING
WATER SLUDGE AS A MASS CONCRETE**

ZAZUWA IDAYU BINTI ZULKIFLI

**Bachelor Engineering (Hons) (Civil)
UNIVERSITI TEKNOLOGI MARA**

2007

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A MASS CONCRETE**

By

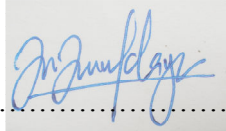
ZAZUWA IDAYU BINTI ZULKIFLI

Report is submitted as
the requirement for the degree of
Bachelor Engineering (Hons) (Civil)

**UNIVERSITI TEKNOLOGI MARA
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DECLARATION BY CANDIDATE

I Zazuwa Idayu Binti Zulkifli, UiTM no. 20023802430 confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.



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(Zauwa Idayu Binti Zulkifli)

08 MAY 2007

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In The Name of Allah, The Most Beneficent and The Most Merciful. All praises to Allah, God of the universe and peace be upon his messenger.

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May The Almighty One shower His blessing upon all of us and make this small effort useful and beneficial for others for future reference.

ABSTRACT

This study has been focus on producing on concrete specimens by adding the drinking water treatment sludge and wastewater sludge as an additive for concrete mix. The sludge used is a dry sludge from Batu Fringgi water treatment plant and Mak Mandin wastewater treatment plant. With the addition of difference proportion (10%, 20%, 30%, 40% and 50%) of sludge as a fine aggregate replacement to amount of concrete, the compressive strength tests were carried out on cubic specimens at age of 4, 7, 14 and 28 days. The results shows that the concrete specimens containing drinking water sludge and wastewater sludge yield lowers compressive strength compare to reference concrete. The strength produced does not achieving the target strength of concrete.