

**A CASE STUDY ON SEISMIC LOADING FOR
NORTH BUTTERWORTH CONTAINER
TERMINAL, PENANG PORT**

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**B.ENG (HONS) (CIVIL)
UNIVERSITI TECHNOLOGY MARA
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NORTH BUTTERWORTH CONTAINER TERMINAL,
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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 Ahmad Badli Bin Badaruddin, Uitm no. 2002363796 confirms 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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With the name of Allah S.W.T, the most Beneficent, the most Merciful, the most Gracious, the Dispenser of Grace, Salam to Nabi Muhammad S.A.W. His companion and friends as well to all the people who follow his path.

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ABSTRACT

Many ports around the world lie on seismically active areas. In such cases port structures should be able to withstand earthquake loading and be design accordingly. Port which is integral part of economic life of a nation cannot be left unused or damaged due to earthquake. This study focused on the important to comprehend and to improve the understanding of how the port design has considered earthquake parameter in the port foundation. It will also allow good practice to be recommended based on the available design. North Butterworth Container Terminal (NBCT) is one of the key ports in Malaysia for northern area that supporting the economic and the transportation system. NBCT are selected as focus on this study. The design consideration data was collected to compare with other Malaysia port which is Port of Tanjung Pelepas (PTP) and overseas port which one of it is Tokachi Port. The seismic parameter show that Malaysian Engineer should start the research and study on earthquake design consideration because there is a possibility to face the earthquake according to the experience by Mexico City Earthquake that provides almost similarly design coefficient of Peak Ground Acceleration (PGA) and greater distance from the epicenter compare to NBCT and PTP.