## UNIVERSITI TEKNOLOGI MARA

# ANALYZING CHRONOLOGY OF BUKIT KEPONG ATTACK USING 3D MODEL RECONSTRUCTION OF BUKIT KEPONG POLICE STATION

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Thesis submitted in fulfillment of the requirements for the degree of Bachelor of Surveying Sciences and Geomatics (Honours)

Faculty of Architecture, Planning and Surveying

January 2018

### **AUTHOR'S DECLARATION**

I declare that the work in this disertation was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and is the results of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree or qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Under Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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3D Model Reconstruction of Bukit Kepong Police

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#### **ABSTRACT**

Digital documentation of historic building in Malaysia rarely exists because technology in early time is not capable in providing a decent documentation. Documentation of historic building is necessary in order to conserve the history of the building itself. The conservation of historic building helps public to get better understanding and appreciate the history of the buildings. The purpose of this research is to analyze chronology of Bukit Kepong Police Station attack using 3D model of Bukit Kepong Police Station and its surrounding topography for PDRM's uses by using SketchUp Pro. This research can also serve the purpose in increasing public awareness about history of Bukit Kepong Police Station tragedy. Since the research about historic building in Malaysia is lack, the idea to do this research is come out. The main data required to conduct this research is image of Bukit Kepong Police Station remains and its surrounding topography. This research utilized the images collected into 3D model with the aid of SketchUp Pro software. From the generated 3D model, analysis on the chronology of the incident can be well-studied and can be used as future reference and increase public awareness about this tragic incident. 3D model of historic building can help people to understand better about an object even the object is not accessible. There are two major outcomes in this research which are 3D model of Bukit Kepong Police Station and 3D model of surrounding topography of the historic building.

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