UNIVERSITI TEKNOLOGI MARA

ASSESSMENT OF REMOTE SENSING TECHNIQUE FOR FEATURE BOUNDARIES EXTRACTION WITH NATIONAL DIGITAL CADASTRAL DATABASE (NDCDB)

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Thesis submitted in fulfillment of the requirements for the degree of Bachelor Of Surveying Science And Geomatics (Hons.)

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AUTHOR'S DECLARATION

I declare that the work in this thesis 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 Post Graduate, Universiti Teknologi MARA, regulating the conduct of my study and research.

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ABSTRACT

The usefulness of remote sensing in extracting and updating the land information can plays an important role in cadastral surveying (Z. Ali & Ahmed, 2013). Sometimes, traditional fiedwork and manual digitizing for cadastral surveying may difficult to be conducted due to cost, time and labor (Wassie, 2016). The aim of this study to assess the use of remote sensing application in extracting feature boundaries and comparing it with National Digital Cadastral Database (NDCDB). In this study, SPOT 6 satellite image and NDCDB data were used. The SPOT 6 satellite image was obtained from the Remote Sensing Agency Malaysia and NDCDB data acquired from Department of Survey and Mapping. In addition, the software used in this study was ERDAS, MATLAB and ArcGIS. Based on this research, the result showed the accuracy comparison between extracted boundaries of imagery and NDCDB data based on area and perimeter. This research was getting insight the potential of remote sensing technique in extraction of feature boundaries.

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