



**DEPARTMENT OF BUILDING  
UNIVERSITI TEKNOLOGI MARA  
(PERAK)**

**UPGRADING ELECTRICAL EQUIPMENT**

**Prepared by:**

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**DEPARTMENT OF BUILDING**  
**FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING**  
**UNIVERSITI TEKNOLOGI MARA**  
**(PERAK)**

**JANUARY 2022**

It is recommended that the report of this practical training provided

**By**

**Muhammad Qayyim bin Ahmad Kussaimi**

**2019446752**

**entitled**

**Upgrading Electrical Equipment**

be accepted in partial fulfillment of requirement has for obtaining Diploma in Building.

Report Supervisor : Dr. Kamarul Syahril bin Haji Kamal

Practical Training Coordinator : Dr. Nor Asma Hafizah Binti Hadzaman

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**STUDENT'S DECLARATION**

I hereby declare that this report is my own work, except for extract and summaries for which the original references stated herein, prepared during a practical training session that I underwent at Nelam Enterprise for duration of 20 weeks starting from 23 August 2021 and ended on 07 January 2022. It is submitted as one of the prerequisite requirements of BGN310 and accepted as a partial fulfillment of the requirements for obtaining the Diploma in Building.

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## **ABSTRACT**

Electricity is an essential part of modern life, and it helps us in many different ways. Electrical wires are the basic unit and used for distributing electricity. There are many types of cables available as their specifications and their categories. So, This report is technically related to projects conducted at Kolam Takungan Seri Johor, which is under Jabatan Pengairan dan Saliran (JPS). This report describes the process of maintaining and upgrading works of Mechanical & Electrical (M&E) equipment and other related works according to the Bills and Quantities Form (BQ) proposed by JPS until Testing and Commissioning. The projects mainly focused on Closed-Circuit Television (CCTV) installation since the previous CCTV at Kolam Takungan Seri Johor was not fully functional. CCTV system significant to JPS to monitor the water level at control gate station just from the control room. This project includes upgrading lighting items and the wiring system following BQ specifications. This is convenient for the JPS to control and monitor the water level while preventing flooding in the city centre.