

**UNIVERSITI TEKNOLOGI MARA**

**TECHNICAL REPORT**

**PARKING SPACE OPTIMAL DESIGN BY BINGLE'S  
PARALLELOGRAM CONCEPT IN PARKING LOT**

**(P22S18)**

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## **ABSTRACT**

Nowadays, the lack of sufficient parking spaces can cause congestion especially in an urban area because of the number of cars has rapidly increased. Thus, this project had done on how to overcome this problem by optimizing the number of a parking lot. By using the parallelogram concept that proposed by Bingle, the parking lot of Pejabat Pos Seremban was selected as a scope for our project. There were three factors involved in this concept which the length, width and angle of the parking lot. The angle of the parking lot was assigned as a main factor that influence the number of parking lot and the type of parking are categorized into three types. As a result, the angles that the most appropriate to use for the parking lot in Pejabat Pos Seremban are  $45^\circ$  and  $90^\circ$  which can contribute a greater number of parking lots. The AutoCAD software was used to design the parking lot of Pejabat Pos Seremban based on the angles that obtained from this result. In the future, the other factors such as length, width, or access lane of any width of a parking lot need to be emphasized so that an accurate result can be obtained.