

**DESIGN OF RIGID PAVEMENT THICKNESS USING THE
MANUAL METHOD OF PAVEMENT DESIGN 2017 AND
AASHTO 1993**

(Case Study : The road Sei.Nibung-Sadar Jaya, Subdistrick Siak Kecil)

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ABSTRACT

The road Sei.Nibung-Sadar Jaya, subdistrick Siak Kecil is one of the damaged roads in the district Bengkalis. Roads damaged due to no new road construction. This road is a residential area before entering the oil palm plantation area which is the livelihood of the local population. Therefore the road is always passed by vehicles such as motorbikes, cars, and truck with large loads carrying the fruit of the people who live in the area. This study aims to plan rigid pavement design 2017 and AASHTO 1993. For this study 200 mm plate thickness was obtained for the MDPJ 2017 and 210 mm for the AASHTO 1993 method. The difference between these two methods is due to differences in input parameters of the two methods namely, the AASHTO 1993 method takes into account the overall standart deviation parameters and the drainage coefficient. For the manual method of road pavement design 2017 the value of traffic load which is used as a design reference is the comparison of the stresses between the axis repetitions and the permottted reps, while the AASHTO 1993 method the value of traffic loads which is the design reference is the cumulative standart load (W18) that occurs.

Keywords : Rigid pavement, MDPJ method 2017, the AASHTO method 1993.