FLEXIBLE PAVEMENT PLANNING ANALYSIS FOR
DIPONEGORO ROAD, BATAM CITY

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ABSTRACT

In the research conducted by the writer, the aim is to examine the thickness of the road using flexible pavement method, identifying the layers that is going to be used in the planning of the road using flexible pavement method and finding out the volume of the material that will be used for planning the flexible pavement road on Diponegoro Road (Sei Harapan Crossroad – Basecamp Batu Aji Crossroad), Batam City. The road often experiences traffic jams due to heavy vehicles breaking down so a new pathway will be made to solve the problems. Therefore, the authors will use the component analysis method to plan the new pathway.

The author's research method is carried out by collecting work data in the field and then recalculating it according to existing methods with reference to SNI. The data that is collected are the daily traffic data of Diponegoro Road year 2017, rainfall data of Batam City, traffic growth data of Batam City and the reports on CBR test results.

The result of the author’s research shows that the calculation for the thickness of the pavement using component analysis method No. SNI 1732-1989-F obtained a surface layer with a thickness of 10 cm, an upper foundation layer with a thickness of 20 cm and a lower foundation layer with a thickness of 37 cm.

Keywords: flexible pavement, component analysis method, pavement thickness.