

## ABSTRACT

*Tasikmalaya is an area part of West Java with the movement of traffic, goods and people which is quite slow compared to other areas. The cause is access between cities that are not well connected, so that economic activities are less than optimal. Therefore, the planning of the Gedebage-Tasikmalaya-Cilacap Toll Road is used, including geometric road planning, rigid pavement planning, and good drainage for safety and driving comfort. Geometric Roads and Interchange of Gedebage-Tasikmalaya Toll Roads are guided by PU Bina Marga 007/BM/2009 and AASHTO 1993, for the selection of the best interchange design based on PU Bina Marga 03/BM/2005. Perkerasan Thickness Based on Pd-T-14-2003 Method, and drainage channels are planned based on Hydrological Analysis and PU Highways Pd-T-02-2006-B.*

*From the planning results, the number of horizontal curves is 2 and 19 vertical curves, at the interchange there are 4 horizontal arch ramps. The thickness of the rigid pavement is 250 mm, the drainage channel is divided into 7 segments, the excavation volume is 259636.41 m<sup>3</sup> and the pile volume is 903718.54 m<sup>3</sup> on the Free way, as well as the interchange of the excavation volume is 209770.80 m<sup>3</sup> and the pile volume*

***Keywords:*** <sup>1</sup> *Gedebage-Tasikmalaya Toll Road*, <sup>2</sup> *Interchange*, <sup>3</sup> *Geometric Road Rigid Pavement*

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<sup>1</sup> Undergraduate Student in Civil Engineering, Faculty of Engineering, Siliwangi University

<sup>2</sup> Lecturer in Civil Engineering Study Program, Faculty of Engineering, Siliwangi University