Abstract

Sugihan II bridge is the bridge located on the lane road between Nganjuk and Bojonegoro. Sugihan II bridge has long spans 24.10 m and 3.70 m the total width of the bridge. The bridge was built over a river located in the village area Kedung Sumber, sub-district of Temayang, Bojonegoro district.

Sugihan II bridge is used as the object of final project, planned by the width of the bridge 11 m and length 34 m. The addition of the long bridge aims to abutment bridge to avoid the flow of rivers that can add horizontal load to the abutment in the form float load and can cause scours at the abutment and the soil. Kinds of data needed include: Soil data to determine the condition of the soil layer below the surface (sub surface), Topographic data to know the situation of the area around the bridge and the front elevation of land or road. Besides that, Hydrological data to know high-flood plan required in determining the elevation of the vehicle floor.

The type of upper building bridge is used T beam reinforced concrete s. For the lower building bridge type is used welling foundation, it is caused by soil structure that fairly hard less than 8 meters of the depth the welling foundation planned length is 3 meters. All calculations are based on the rule book of
bridge engineering planning guide “BRIDGE DESIGN MANUAL”

Keyword: Reinforced Concrete Bridge, Welling Fondation, Abutment, Pillar.