GEOLOGY AND GEOLOGY OF THE POTENTIAL EFFECT OF MASS MOVEMENT IN THE REGION VILLAGE SONOWANGI, SUBDISTRICT AMPELGADING, DISTRICT MALANG, PROVINCS EAST JAVA

ABSTRACT

I Ketut Aras Agastya
111.110.124

The purpose of this study is to determine the order of the Regional geology Sonowangi village and its surroundings, as well as to determine the characteristics and potential of the mass movement of the mass movement in the region, the administration area of research is in the Village area Sonowangi, Ampelgading, Malang, East Java Province. Geographically the study area is located at a latitude 112˚52'45,436 "E - 112º55'29,04" E and longitude 8º15'51,428 'S - 8º19'21,34' S. The northern part of the study area bounded by Sidorenggo village, east limited by Tamansari village, the southern part of the village bounded by Slick, while the western part is limited by Sumberbuncis village with an area of 37.5 km2 area of research with the scale of 1: 25000.Metodelogi study is a pre-field methods, methods of field and post-field method. Methods include pre-court preparation tool - a tool such as a hammer, regional geological maps, etc., As well as licensing. A field method is to collect data - primary data in the form of data collection distribution of lithology to make the connection between lithological difference with the mass movement for map-making potential of the mass movement. Post-field methods such as laboratory analysis consists of a thin section petrographic analysis and analysis stereografis geological structure, presentation of data and reports. Results from these studies obtained Geomorphology The study area was divided into two primary forms, which form the structural origin and form fluvial origin. Forms of structural origin, are divided into two geomorphic units, namely sub hills homoklin geomorphic unit (S1) and a sub-unit of geomorphic valley homoklin (S2). Forms of fluvial origin, are divided into three geomorphic units, namely sub-units of the alluvial plain (F1), sub unit body geomorphic stream (F2) and sub unit footed geomorphic stream (F3). drainage pattern that developed was anasomatik and joint trellis. Based on the stratigraphy of the research area is divided into three lithologies unofficial. namely andesite lava Mandalika Unit (Late Oligocene - Early Miocene), andesite breccia Unit Mandalika (Late Oligocene - Early Miocene) and Alluvial Deposition (Holocene). The geological structure in the area of research is a robust and fault. Faulting encountered in the study area is Normal Right Fault Slip, Slip Fault and Normal Normal Fault Slip according to Rickard, 1972. The characteristics of the type of mass movement in the research area is divided into five, namely earth slides, debris slides, debris fall, rock slides and rock fall , Referring to the aspects - geological aspects contained in the area associated with the incidence dang carefully situations masses, the potential of mass movement in this area is divided into three, namely the potential for high, medium and low.