

GEOLOGI DAN ZONASI TINGKAT KERENTANAN LONGSOR DESA GUNUNGTEGES DAN SEKITARNYA, KECAMATAN KEMIRI, KABUPATEN PURWOREJO, PROVINSI JAWA TENGAH

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Abstract

The research was administratively carried out in Gunungteges Village and its surroundings, Kemiri District, Purworejo Regency, Central Java. There were four landform units found in the study area consist of homoclinal hill landform unit, homoclinal valley landform unit, point bar landform unit and river body landform unit. The study area is composed of Waturanda volcanic-breccia unit formed in Early Miocene, Waturanda lapilli-tuff unit formed in Early Miocene, and an alluvial deposit unit formed in holocene. The geological structure in the study area consist of shear joint with the NNW-SSE stress orientation, right-slip fault with NW-SE orientation, and left-slip fault with N-S orientation. The slope stability analysis of the study area was carried out on six soil slopes. Slopes that are categorized as hazardous are slope-1, slope that categorized as unstable is slope-3, and slopes that categorized as safe are slope-2, slope-4, slope-5, and slope-6. Parameters that used in the making of potential landslide disaster zone consist of rainfall value, soil thickness, soil type, slope value, safety factor, rock type and fault buffer zone, land use, landslide event point. The division of vulnerability level devided into three level that are consist of high vulnerability zone, moderate vulnerability zone, and low level vulnerability zone with the dominance of research area is moderate vulnerability zone

Keywords: *Landslide, slope, vulnerability zone*]