Primary geological features in relation to cut slope instability — a case study in Pengkalan Hulu (Keroh), Hulu Perak

QALAM AZAD ROSLE & G.H. TEH

Department of Geology
University of Malaya
50603 Kuala Lumpur

The case study of primary geological features in relation to cut slope instability was carried out in an area which is located about 35 km north of Grik along the Kg. Lalang-Kg. Air Panas highway, between kilometer 9.5–9.0 from Keroh near the Felda Nenering village.

Geologically the study area is underlain by two formations, namely, Kroh Formation and the continental deposits of the Nenering Tertiary Beds, the former acting as the basement unit for the latter, separated by a plane of angular unconformity. The Kroh Formation consists of four main facies, that is the Argillaceous Facies, Arenaceous Facies, Siliceous Facies and Calcareous Facies whereas the Nenering Tertiary Beds consist of a braided river pattern of channel fill alluvial-fluviatile deposits.

A massive landslide occurred in June 1996 involving weathered to completely weathered material of the

Warta Geologi (Newsletter of the Geological Society of Malaysia), Vol. 25, No. 3, May-June 1999

overlying Nenering Tertiary Beds where a combination of slump and flow movements brought down a huge volume of earth from one side of the road, on to the tarmac and on to the other side, totally blocking the road. The slump occurred on a pre-existing failure plane that is the plane of unconformity above the fresh grade I–II limestones of the calcareous facies of the Kroh Formation. The slump has exposed the higher level of the limestone bedrock underlying the area besides the already exposed outcrop along the road stretch.
