

Seminar Geosains Kebangsaan 2007 (NGC 07)
Universiti Malaysia Sabah, Kota Kinabalu, Sabah
7 – 9 June 2007

P1A-2

LANDSLIDE HAZARDS ASSESSMENT IN A MOUNTAINOUS SEDIMENTARY ROCKS TERRAIN – PRELIMINARY STUDIES ALONG THE RAILWAY LINE BETWEEN MEMBAKUT, BEAUFORT AND TENOM, SABAH

Tajul Anuar Jamaluddin¹, Raftah Mahfar² & Rusman Rais²

¹. Geology Programme, Faculty of Sciences & Technology, UKM Bangi, Selangor

². SCG Consultants Sdn. Bhd., 16-C, Wisma Keringat 2, Lorong Batu Caves 2, 68100
 Batu Caves, Selangor Darul-Ehsan.

ABSTRACT

Geological studies form the vital component in landslide hazards assessments. In practices however, the landslide hazards assessment have long been monopolised by engineers due to lack of geologists involvement in this field. Hence, possibility for the lack of appreciation and underestimation on the vital geological parameters during the

course of assessments could have not been precluded. This paper describes an example of landslide hazards assessment which was carried out on a project of widening and modernisation of the railway track transversing mountainous sedimentary rocks terrain in Sabah. The main objectives of this study are identification of the existing and the potential modes of landslide hazards along the proposed alignment, and to recommend suitable mitigation measures. To achieve these goals, the geological studies were designed in such a way by focussing on the understanding of the characteristics and behaviours of the highly inhomogeneous associated sedimentary rock masses, geomorphology and predominant geomorphic processes, followed by the identification of the forms, types and the potential mode of slope failures. Once these vital information were compiled and analysed, then only the suitable mitigation measures can be proposed to the engineers and project proponent for further actions.