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Abstracts of Posters

Hazard assessment and slope stabilization of a granite cut slope in a hillside development off Jalan Kuari Cheras, Selangor

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One example of a hillside residential development that is of concern to the authorities is a rock slope off Jalan Kuari in Cheras. The rock slope was identified as being potentially unstable. The stability of this particular slope was critical because it was located immediately across the backlane behind a row of newly completed terrace houses. A study was undertaken to analyze the stability of the rock slope and to recommend suitable protection and/or stabilization measures, to ensure long term stability of the rock slopes and safety of existing properties and human activities in the newly developed residential area. From this study, it is concluded that the rock slope behind the newly completed terrace houses is generally stable. Although all the joint planes are potential slip surfaces, no signs of major instability were found except for some localized small-scale unstable elements. Suitable protection measures and monitoring and maintenance programme are suggested to ensure long term stability of the cut-slope. In any hillside development, the stability of the cut slope should be maintained to prevent undesirable landslides hazards. This study illustrates the concern of the authorities on the stability of cut slopes on hillside development for roads and housings. With adequate cut slope design and implementation of stabilization and protective measures, including regular maintenance and monitoring, the need for costly rehabilitation and remediation measures can be avoided, which would become necessary should the slope failures occur.