MALAM JURUTERA 2010

Propagation of seismic shock wave in rocks and soils

LOW KAW SAI (UTAR)

Design of embankment in soft ground to Eurocode 7 – development of Malaysian Annex

TAN YEAN CHIN (G&P)

Road construction on peat

TOH CHENG TEIK (Consultant)

22nd October 2010, Department of Geology, University of Malaya, Kuala Lumpur

"Malam Jurutera 2010" featured 3 speakers, namely Sdr. Dr. Low Kaw Sai from UTAR, Sdr. Tan Yean Chin (G&P) and Sdr. Dr. Toh Cheng Teik (Consultant)

Sdr. Low spoke on the propagation of seismic shock wave in rocks and soils, and the application to seismic design of structures such as high-rise buildings, bridges, etc. He also discussed the seismo-tectonic setting of Malaysia and surrounding regions, and showed some examples of earthquake events from around the world.

Sdr. Tan discussed the design of embankment in soft ground to Eurocode 7 and the development of the Malaysian Annex. Modes of failure, partial factors of safety for the embankment were included in the presentation. The famous Muar Trial Embankment was used as an example for illustration.

Sdr Toh gave a very comprehensive and lengthy (60 mins. instead of the 30 mins. allocated) presentation on road construction on peat. The topics covered include properties and classification of peat, engineering parameters that can be derived from correlation with simple properties like water content, organic content, and computation of ground settlement due to primary and secondary consolidation of the peat. An interesting feature of peat is the high friction angles (φ = 40-50°) due to the fibers in contrast to granular soils. Numerous local case histories (notably in Sibu, Sarawak) on road construction on peat were presented.

As usual, the talks were followed by various questions and discussions from the floo , ending at about 8 pm, with most participants staying back till the end.

Tan Boon Kong,
Chairman,
Working Group on Engineering Geology,
Hydrogeology and Environmental Geology

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