

The occurrence of Tertiary boulder beds between km 22.6 and km 24.5 of the Malaysia-Singapore Second Crossing Expressway, Kangkar Pulai, Johor, Malaysia

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The stretch between km 24.5 and km 22.6 of the Malaysia-Singapore Second Crossing Expressway is cut across a probable Tertiary rocks consisting predominantly of semi-consolidated boulder beds and sandstone with minor intercalation of mudstone.

The Boulder Beds comprise essentially of pebble to boulder, matrix-supported, polymictic conglomerate with poorly defined bedding. The clasts of various lithology, predominantly metasandstone, granite biotite, granodiorite, adamellite, quartz veins, volcanic and volcanoclastics, are generally subangular to well rounded, very crudely sorted and poorly graded. The sandstone, often with better defined bedding, are generally coarse-grained and poorly-sorted, and occasionally contain pebbles of granite, metasandstone, volcanic and volcanoclastics. The fining upward pattern, poorly graded and erosive base conglomerate, matrix supported, and the sandstone with trough cross-bedding, parallel lamination and common with channelised beds, probably indicates that depositional take place mainly in a fluvial environment with the sediment supply mainly come from the surrounding country rocks.

The Boulder Beds are gently dipping c. 12-25° variably to the N, NE and SE, suggesting either due gentle, broad folding or deposition upon irregular basinal topography. However, with the common occurrences of joints, a dextral fault associated with narrow shear zone, and a reverse fault clearly indicated that these are tectonic. These mild tectonic features are characteristically common in other Tertiary Boulder Beds encountered in Batu Arang Selangor, Felda Lawin Perak and the Nenering, Keroh, Perak.
