

PROJECT :-

**REMEDIAL WORK FOR THE COLLAPSE OF MONSOON DRAIN ALONG
LEBUHRAYA DAMANSARA-PUCHONG, 2000**

The monsoon drain was originally constructed using two rows of cantilever sheet piles to retain the soil on both sides. More than 30m long stretch locating downstream of a triple cell box culvert collapsed after a series of heavy rains. Temporary remedial measure was carried out immediately by installation of two rows of sheet piles with one level of internal strut.

Investigation was carried out. The subsoil mainly consisted of very loose to medium dense sandy materials. Very dense sandy soil was at about 5 to 6m below ground surface. Granite bedrock could be found at depth of about 8m. The collapse was likely due to bed scouring taken place at because the bed was not protected by concrete slab. The scouring caused the loss of resistant forces in front of the sheet piles. In addition, groundwater level trapped behind the sheet pile wall took longer time to lower could have contributed additional force to the sheet pile wall.

Few remedial options had been evaluated. Concrete U-shape drain was selected. It was economical and long-term performance could be ensured. The remedial work commenced in December 2000 and took 6 months to complete.

