

Nomogram for the Execution Specification of Drain Pipes for Earthfills

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The groundwater levels of earthfills often rise due to heavy rainfall, which would occasionally cause embankment collapse. In order to lower the ground water level, it is important to take countermeasures for the water drain of earthfills which would become weak spots during heavy rainfall. The drain pipe method for earthfills has been adopted widely in Japanese railways as a water drain method. However, the execution specification of drain pipes has not been established yet, and the details of construction works depend on past experience at present. Therefore, in this study, we evaluated the effect of drain pipes quantitatively, and we suggest the execution specification of drain pipes for earthfills based on the evaluation considering the height of the earthfill, external permeance, and so on.