

A Soil Stabilization Technique on Apa-Hotamış Conveyance Channel

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Abstract : Apa-Hotamış conveyance channel is located within in the boundaries of Konya Regional Directorate of Water Works. This channel transfers the water to the fount of Apa Dam with 17 km length of Blue Channel. Then the water is transmitted with Apa- Hotamış conveyance channel to Hotamış Water Storage. In some places along the Apa-Hotamış conveyance canal which will be constructed by Directorate of Water Works of Konya, some swelling soils have been seen. The samples taken from these places have 35-95 kPa swelling pressure. To prevent the swelling pressure arising from the penetration of water to the concrete channel, it was proposed to make 10 cm concrete coating by spreading the geomembrane and geotextile between the soil and concrete. In this way, the pressure (35-95 kPa) caused by the swelling and cracking of concrete failure will be blocked.

Keywords : conveyance channel, swelling pressure, geomembrane, geotextile, concrete

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