عنوان مقاله:

Assessment of the Stability in the Foundation of Canal Structures in Permeable Soils

محل انتشار:

کنفرانس بین المللی پژوهش های نوین در علوم کشاورزی و محیط زیست (سال: 1394)

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نویسندگان:

Sina Keshtkar - *MSC Student of Civil Engineering, Islamic Azad University of Lahijan*

Mir Ahmad Lashteh Neshaei - *Associate Professor of Civil Engineering Department, Guilan University*

Ebrahim Amiri - *Associate Professor of Water Engineering Department, IAU of Lahijan*

خلاصه مقاله:

Problem of seepage in the foundation of canal structures is one of the most important issues in groundwater engineering. There exist several failure in different canal sections constructed in Guilan drainage system due to penetration of ground flow through permeable media of the soil. In this study, following series of chemical, physical and strength tests, the effect of leaching has been appointed and investigated on the north Iran's clay soils. This study indicates that as a result of leaching the soil structure have become porous and removal the soluble salts and part of the fine particle change the dry unit weight, void ratio, specific gravity and hydraulic conductivity. Also, leaching cause the reduction of mechanical properties and unconfined compressive strength, Elasticity of modulus, Cohesion and friction angle in two condition as drained and un-drained conditions. Finally, using the result of laboratory tests and comparison with the results of a case study using a numerical approach, the effect of leaching in sliding has been .investigated

کلمات کلیدی:

Soil, Structure, Stability, Foundation, Canal