



Stability of a low embankment in the proximity of a waterway

Graduation assignment

CRUX is a leading independent consulting firm in the field of geotechnical engineering, geohydrology and environmental remediation.

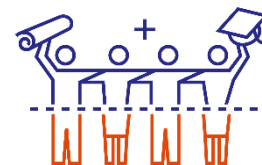
Through our intensive cooperation with our sister companies BouwRisk (monitoring) and CEMS (engineering microservices), we are able to provide innovative, (geo)technical design solutions for all subsurface issues. One of these issues concerns bearing capacity for low embankments on weak soils.

It is commonly considered that the first stage of building the embankment, for example the first 1.5 meter of sand for the work floor of a drainage machine, can be applied to the subsurface without problems. In recent projects, CRUX has

experienced that these low embankments on very weak soil and in the presence of a waterway can still fail, contrary to expectations. This collapse does not follow from the usual design calculations with DGeo-Stability and the failure mechanism looks more like squeezing.

The assignment consists of using Plaxis to analyze the failure that can occur and come to a design approach such that, based on the strength of the subsoil and the distance between the waterway and the embankment, a good design can be made for the installation of the first stage.

Looking for another assignment or internship? Contact us and ask about the opportunities.



Interested in taking on this subject in a dynamic and professional working environment? Get in touch:

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Good coffee, challenging projects and being part of Jong CRUX are the basics of your career at CRUX. We are happy to tell you about the opportunities.