

Flood Protection Weißbach bei Lofer

Client:

Office of the Salzburg provincial government –
Protective Water Management Unit

Country:

Austria

Duration:

From 2015 to 2017

Services:

Investigation of the excavated material and dam base, sampling of dam material and coordination of laboratory experiments, soil investigation analysis, assessment of soil mechanics experiments, definition of input parameters for dam material, design of the computational model from characteristic cross-section, dam stability and perfusion calculations using characteristic cross-sections

Project objectives

Construction of flood alleviation structures in Weißbach bei Lofer.

Project description

The summer floodings of 2013 severely affected the community of Weißbach bei Lofer. In 2015 and 2016 an extensive flood alleviation project was implemented. Based on the on-site geological investigations (trial pits) and geotechnical parameters derived from soil samples, the necessary stability and maximal perfusion of the dams during flood periods was confirmed by the models, and the requirements for the dam materials parameters were defined accordingly.

Project data

Widening and flood protection dams along the river Saalach with an overall length of 15 km, flood protection dam for a 100-year-flood-level with support core with a length of 755 m, pump station for drainage of settlement areas.

Project specifics

Flood protection dam with support core, protecting traffic routes and rural areas, 2D finite element Model for dam stability and perfusion calculation.

Services

Investigation of the excavated material regarding the use for dam construction and under the dams, including the dam base, sampling of dam material and coordination of laboratory experiments, soil investigation analysis, assessment of soil mechanics experiments, definition of input parameters for dam material, design of the computational model from characteristic cross-section, dam stability and perfusion calculations using characteristic cross-sections.



Image Source: iC consulenten ZT GmbH

