Client:
Amt der Salzburger Landesregierung – Referat Schutzwasserwirtschaft

Country:
Austria

Duration:
November 2015 - July 2016

FLOOD PROTECTION WEISSBACH BEI LOFER

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. Between 2015 and 2017, a flood protection dam with a support core was constructed to protect traffic routes and residential areas. Based on on-site geological investigations (trial pits) and geotechnical parameters derived from soil samples, the stability and maximum perfusion of the dams during flood events were verified using a 2D finite element model, and the requirements for the dam material parameters were defined accordingly.

Project data

- Saalach widening & flood protection dams: 15 km length
- 100-year-flood-level protection dam with support core: 755 m length
- Pump station for drainage of settlement areas

Services

Investigation of the excavated material regarding its suitability for embankment fill material and foundation conditions beneath the dams, including the dam base; sampling and coordination of laboratory experiments; analysis of soil investigations; assessment of soil mechanics experiments; definition of input parameters; design of a 2D-FE-model from the characteristic cross-section; dam stability and perfusion calculations using representative cross-sections.