



HOMESTAKE DAM AND RESERVOIR REPAIR PROJECT

EAGLE AND PITKIN COUNTIES / COLORADO, USA

Client

Homestake Water Project Aurora
Water and Colorado Springs Utilities,
Colorado Springs

Contractor

Joint Venture Moltz Construction Co.
and STRABAG International GmbH

Construction period

04/2012 – 10/2012
04/2013 – 10/2013

Key facts and figures

Reservoir capacity: 53 million m³

Partial renovation of the asphalt
drainage layer

Complete renovation of the asphalt
sealing layer as well as surface
sealing (approx. 50,000 m²)

PROJECT DESCRIPTION:

The dam is located in the Rocky Mountains at an elevation of 3,100 m. It was completed in 1968 to supply the cities of Aurora and Colorado Springs with drinking water.

PROCEDURE:

Given the dam's 600 m long crest and 150 m long embankment, a first phase of construction involved milling the entire embrittled sealing layer and placing a new 8 cm thick sealing layer with high polymer modified binding agent. The second construction phase saw the replacement of the existing asphalt drainage layer in the upper part of the embankment.

SERVICES PROVIDED BY TPA:

- Engineering consulting during the bid phase
- Suitability documentation for various asphalt mixtures
- Implementation of special trials for the placement of hydraulic engineering asphalt on the embankment (stability, deformation)
- Fine-tuning of asphalt mixing facilities using test areas
- Monitoring of mixture production, raw materials, bitumen and aggregates as well as implementation of field trials in accordance with ASTM in own asphalt laboratory container
- Documentation