



PROJECT DESCRIPTION SHEET



**GEOTECHNICAL AND WATER
RESOURCES ENGINEERING**



RJH Consultants, Inc.
9800 Mt. Pyramid Court, Suite 330
Englewood, CO 80112
Phone: 303-225-4611
Fax: 303-225-4615
Toll Free: 866-900-1930
www.rjh-consultants.com

MARGARET CARPENTER RECREATION CENTER DAM, ADAMS COUNTY, CO CITY OF THORNTON

RJH Consultants, Inc. (RJH) was retained by the City of Thornton to perform engineering design and construction management services for construction of an earthen embankment dam to impound non-potable irrigation water and provide a recreation lake at the Margaret Carpenter Recreation Center.

The reservoir was constructed by excavating to depths of about 30 feet below the existing ground surface and building a homogeneous earthen embankment with a maximum embankment height of 20 feet, across the northern tributary to Grange Hall Creek. A 10-foot-wide, multi-use path was constructed along the crest of the embankment. The dam included a gated low-level outlet and a concrete-lined chute spillway, both of which discharge into Grange Hall Creek. A 102-foot-long pedestrian bridge was designed to span the spillway channel.

RJH provided the following services:

- Hydrologic and hydraulic analyses
- Geotechnical analyses
- Design of the dam embankment, outlet works, and spillway
- Construction management services