



## Slope Stabilization

### Reference Details:

**Owner** US Army Corps of Engineers +++

**Structural Design** US Army Corps of Engineers +++

**Execution** Odebrecht Contractors of California Inc. (dam and intake structure), Tutor Saliba-Perini (dicerion tunnel)

+++ **Drilling and anchor works** Malcom Drilling Co., Inc.

**DSI Services** Supply of 128 double corrosion protected DYWIDAG Strand Anchors 17 to 23-0.6" up to 41m and 40tons of DYWIDAG Resin Anchored Rock Bolts dia. 25mm and dia. 28mm, using GEWI® threadbars; Rental of equipment for anchor installation; Technical assistance.



## Seven Oaks Dam and Appurtenances, San Bernardino, CA, USA

### Project:

Large embankment project (167 m high by 854 m long) consisting of approximately 29 million m<sup>3</sup> of rock and earth, part of a multi-faceted mainstream flood control project along the Santa Ana River

### System:

Double corrosion protected 17 to 23 x 0.6" DYWIDAG strand anchors up to 41 m, 25 mm and 28 mm Ø DYWIDAG resin anchored rock bolts, using GEWI® threadbars

### Application:

Seismic resistance provided to dam's left abutment by 61 m tall reinforced concrete intake structure tied back with large capacity strand anchors, diversion tunnel roof support, stabilization of rock faces during construction of access roadways

### Special Features:

Drilling and anchor installation from a mobile working platform moved from the top down at every two tie back rows. Small-bore hole inclination (10°) and heavy, long anchors, required attachment to the anchor end of a pulley expansion device that facilitates tendon installation.