DJC 2012 TopProjects

FIRST PLACE

PUBLIC WORKS/ INFRASTRUCTURE/ TRANSPORTATION \$15.1M - \$50M

PROJECT TEAM + STATS:

Location: Columbia River **Cost:** \$18 million

Start date: October 2009 **Completion date:** March 2011

Owner/Developer:

U.S. Army Corp of Engineers

Architect: U.S. Army Corps of Engineers Engineer: U.S. Army Corps of Engineers

General contractor: Advanced American Construction Inc.





John Day Lock and Dam Gate and Sheave Replacement

SUBMITTED BY: ADVANCED AMERICAN CONSTRUCTION INC.

orking in some of the wettest and most turbulent conditions the Columbia River Gorge has seen in many years, the project team for the John Day Lock and Dam Gate and Sheave Replacement delivered a difficult gate removal with associated improvements on a demanding schedule.

The U.S. Army Corps of Engineers needed the existing gate removed and a new, 2-million-pound gate transported and installed. To maintain the 7-day-a-week, 14-hours-a-day work schedule, crews built temporary enclosures for workers that were heated and ventilated to provide respite from the howling winds and pounding rains that dogged the project from the beginning, according to Kainan Bodenlos, project manager with Advanced American Construction. Steel structures were also heated to keep welding moving. A dozen large cranes necessary to move giant pieces of concrete and steel were

often held up for days because of wind, requiring crews to work on smaller jobs until the weather subsided.

"When they are working so many hours, you try to keep your guys as comfortable as possible so they don't burn out," Bodenlos said. "We went the extra mile on that because we knew guys would be pushing it and fatigue would set in. Where there's minimal risk for a mishap if you're working 40 hours a week, 60 hours a week multiplies that."

While the gate was being installed, commerce on the river slowed to a standstill as barges were unable to pass. The project team met often with representatives from industries bringing in goods along the Columbia to update everyone on project progress. The complex work of removing the gate and fabricating and installing the new gate was executed in only 14 weeks – allowing river commerce to continue.