

American Bridge and Fluor Come to the Rescue

September 2009

The joint venture of American Bridge Company and Fluor (ABFJV) was awarded the contract in 2006 to construct the self-anchored suspension (SAS) span of the new San Francisco – Oakland Bay Bridge (SFOBB). At a bid value of \$1.434 billion, this award is for the largest public infrastructure project in California's history. The 2,050-foot-long SAS segment will consist of a single 525-foot-high cable tower, constructed on piers and footings from 0.4 to 0.8 miles east of the Yerba Buena Tunnel east portal.

The SAS bridge will be the first of its type built in the United States and will feature two parallel steel bridge decks, each carrying five lanes of traffic. To execute the project, a 400-foot-long, 1,700-metric-ton-capacity, shear-leg crane barge was constructed to lift the massive segments of the deck and tower.

Over the last few months, the ABFJV team has successfully aided the San Francisco community and has been recognized by the media for our efforts during the planned closing of the existing Bay Bridge over the 2009 Labor Day weekend and the U.S. Coast Guard's recovery of the USS Wenonah.

ABFJV Team Answers the Call, Helps Caltrans Reopen Bay Bridge

Over the 2009 Labor Day weekend, members of the ABFJV team came to the rescue to help ensure the planned Labor Day weekend closing of the San Francisco Bay Bridge was not extended another day, thereby creating commuter chaos as roughly 300,000 people sought last-minute transit alternatives.

The four-day closure was scheduled from 8 p.m. on Thursday, September 3 to 5 a.m. on Tuesday, September 8 by the California Department of Transportation (Caltrans) so that a football-field-sized section of double-deck steel truss could be removed, and a new 3,600-ton detour span could be slid into place. During this process, Caltrans performed a routine inspection of the 73-year-old bridge and discovered a large crack in one of the critical eye-bar members. Fearing that repairs would not be completed in time, Caltrans officials announced on Monday that the reopening would be postponed by 24 hours to 5 a.m. Wednesday. The announcement sent hundreds of thousands of Bay Area commuters scrambling for alternative methods to get to work on Tuesday.

Responding to the Call

ABFJV, which is building the completely separate SAS bridge component of the project, received a request from Caltrans for assistance on Labor Day morning. ABFJV immediately assembled two ironworker crews and key management staff to complete the steel barrier transition for the new south detour span's top and bottom deck. The two crews worked throughout the day Monday and completed their tasks successfully at about 11 p.m. Without the efforts of these crews, the work on the detour would not have been completed prior to the planned reopening of the bridge.

ABFJV's work was not yet complete. The fabricated steel piece for the eye-bar repair that had been flown in from Arizona did not fit properly. Caltrans released a revised design at about 5 p.m. on Monday and asked ABFJV to fabricate a new 1,600-pound, suitcase-shaped, metal-spacer piece needed to complete the repair. In a true display of teamwork between Caltrans' lead engineer and ABFJV engineers, the piece was delivered 4 hours later and hoisted into place at about 10 p.m. The fit was perfect, and enabled Caltrans to complete the eye-bar repairs overnight.

As a result, the Bay Bridge reopened at about 6:40 a.m. on Tuesday, September 8, a bit later than the original goal of 5 a.m., but well ahead of the announced delayed opening time of Wednesday morning. Local media reported extensively on the successful emergency repair and timely reopening.



Shown above:
A 1,600-pound steel spacer, fabricated
by ABFJV to repair the crack in the existing eye-bar,
is lifted into place.