

Oakland Bay Bridge Lowering San Francisco, CA





Description of the Work

After the completion of the new eastern span of the San Francisco-Oakland Bay Bridge in 2013, the old non-seismically resilient bridge, was to be demolished. The truss deck, approximately 2 miles long, included five 504-foot spans. The contractor proposed to dismantle these spans by cutting and lowering each on a barge. The spans would then be transported to a yard for complete dismantling. This strategy had several advantages: easy lead paint mitigation, no need of temporary supports and safer/faster dismantling on land.

Freyssinet/Hebetec Scope

Freyssinet provided the heavy lifting equipment required for the lowering operations with onsite technical assistance. Strands were bundled in coilers so that after each lowering operation they can be easily recovered and moved safely to the next span. During lowering operations, the 8 lifting units were controlled simultaneously by a computer allowing for full monitoring of load, displacement, and other information during the operations. Each movement was completed in less than 6 hours, including the time for cutting the truss, lowering and transferring the load to the barges. The 5 spans were dismantled safely in less than 6 months.

General Contractor :	CEC/Silverado Contractors JV
Owner:	Caltrans
Beginning of works : End of works :	February 2016 August 2016



Weight per steel truss 1,700 Tons Lowering distance 45m

Equipment used

Strand Jack H-600 4 units Strand Jack HA-600 4 units Hydraulic PA-4-30 4 units EV-55 Fork 1 unit



Photos courtesy of Caltrans