



National Park Service
U.S. Department of Interior

NPS Cosco Busan Recreational Use Program

Bay Trail – Replace Decking on Crissy Field Promenade Bridge

Final Programmatic Report

January, 2019

Recipient Park Unit: Golden Gate National Recreation Area
Project Location: Crissy Field, Presidio of San Francisco
Date Approved: January 8, 2013
Project Period: June 2013 – February 2015
Award Amount: \$37,000
Total Expended: \$37,000
Project Number: PXP0202308

1. Summary of Accomplishments

The Crissy Field Promenade Bridge is part of the Golden Gate Promenade, a component of the San Francisco Bay Trail. It spans the tidal marsh at Crissy Field and provides a walking and biking connection used by thousands of visitors and local residents every day to enjoy the park, the Golden Gate Bridge views, and shop at park cafes and stores.

The 25-foot wide, 86-foot long bridge was constructed in 1999. Inspections in 2008 and 2012 identified tripping and walking safety hazards in need of repair. This project mitigated those safety hazards by rolling the existing bridge deck boards over, and replacing the original bolts.

2. Project Activities & Outcomes

The proposal to replace the bridge decking proved to be cost prohibitive, so a revised project was approved to repair, rather than replace, the decking. The original pedestrian and bicycling bridge decking was constructed in 4 spans with 6"x12" pressure-treated lumber deck boards, with 3"x12" pressure-treated stringer boards providing the underlayment for the decking. The deck boards were attached with steel lag screws covered with tar caps. The NPS contracted with AMA Diversified Construction Group to conduct the bridge decking repairs. In December 2015, AMA

removed and disposed of the original tar caps and lag screws, and inspected the underlying stringer boards. The existing deck boards were then rolled over, with a limited number requiring complete replacement. The boards were then bolted down with new ½"x7" stainless steel lag bolts into a countersunk hole. Once installed and fastened, each of the holes was tarred to create an even finished surface. The project necessitated closing the bridge for 2 weeks and rerouting pedestrians and cyclists to the multi-use trail along Mason Street.

3. Benefits

This project resulted in immediately improved safety for the 210,000-325,000 local and out-of-town visitors of all ages who walk, dog-walk, run and cycle at Crissy Field on a monthly basis. Others use the promenade while visiting Crissy Field to enjoy the beach, picnic, or participate in special events. The benefits of the repairs were more short-lived than the 10-12 year lifespan expected of full-scale replacement of the bridge decking. The repairs were in place for about 3 years until the decking was completely replaced in 2018. By the time the decking was replaced, it no longer met accessibility requirements.

4. Lessons Learned

The proposal to replace the decking on the Crissy Field Promenade Bridge with entirely new decking proved to be double the original government cost estimate and therefore infeasible. Full replacement also would have required this section of the Bay Trail to be closed for four weeks, whereas the decking repairs resulted in a more cost-effective and environmentally sustainable project, and reduced the closure of the trail to two weeks.

5. Funding acknowledgement

Funding for this recreational use restoration project was provided by the Cosco Busan Trustee Council comprised of the California Department of Fish and Wildlife, the California State Lands Commission, the National Oceanic and Atmospheric Administration, and the Department of the Interior through the U.S. Fish and Wildlife Service and the National Park Service.

6. Photos



Figure 1. Google Earth image of the location of the Crissy Field Promenade Bridge



Figure 2. Crissy Field Promenade pedestrian and bicycling bridge in 2017, after the decking boards were rolled over in 2015 as part of this project, and before complete replacement of the decking in 2017.