

# U. S. Coast Guard Sector San Francisco, California

## Yerba Buena Island Wave Panel Repairs

---

### Project Overview

Sustainable Group key personnel performed on-site construction services to repair the Patrol Boat Pier Wave Panels.

### Reference

Jack Dougherty  
Contracting Officer's Technical  
Representative  
[John.V.Dougherty@uscg.mil](mailto:John.V.Dougherty@uscg.mil)  
510-637-5555

---

### Project Description

The U.S. Coast Guard Patrol Boat Pier located at the Sector San Francisco Yerba Buena Island Facility utilizes concrete wave panels to protect the boats from wave action in the San Francisco Bay. These panels have failed over the years and most recently three of the 14-ton concrete panels have fallen off the face of the pier and are now embedded in the bottom of the San Francisco Bay.

This project attempted to raise the three panels; repair, then reinstall them; and reinforce the pier-to-pile connections for the panel system. Two 40-ton cranes with vibratory equipment attached attempted to raise the panels, however the depth of embedment in the bottom of the bay coupled with the neoprene rubber used to wedge the panels in place did not allow the panels to be recovered. A dive team was deployed to cut one of the panels at the mudline to aid vessel navigation in the area. In addition, two composite timber and concrete panels were constructed and used to replace the two missing panels (a similar panel was placed in 2016 to replace the third panel). Other elements of work included the replacement of broken connection hardware and the repair of cracked concrete with epoxy cement on two of the floating docks which were heavily damaged during the winter storms of



Sunken panel recovery attempt



Installation of new panels

---

### Key Personnel Certifications

PE, LEED AP, PMP, CFM, QSD/QSP

Sustainable Group is a Service Disabled Veteran Owned Small Business Corporation.

---



Floating dock repairs

2017. Despite several challenges related to the non-recovery of the sunken panels, Sustainable Group successfully installed the new composite panels and repaired the floating docks. This successful accomplishment in turn protected Coast Guard Patrol Boat assets in advance of the approaching 2018 winter storm season.

Sustainable Group key personnel self-performed many of the construction activities for this project including the installation of 38 heavy duty plates to reinforce the pier-to-pile connections, the on-site construction and installation of the new wave panels and the repairs to the floating docks. On-site construction management, safety oversight, and Quality Control/Quality Assurance (QA/QC) services were also self-performed.

### About Sustainable Group

Headquartered in Moraga, California, Sustainable Group Inc. is a premier licensed General Contractor (CA #966993, HAZ) providing general construction environmental remediation, demolition, civil site development, and marine construction services. Sustainable Group also offers Leadership in Energy and Environmental Design (LEED) expertise pertaining to renewable energy and sustainable sites, as well as overall facilities management consulting services. Sustainable Group key personnel have over 26 years of experience in successfully executing projects and performing expert facilities management for multiple Federal entities including the Department of Homeland Security, Department of Energy, Department of Defense, Department of Transportation, and the Army Corps of Engineers.

### Let's Discuss Your Needs

Sustainable Group will become a highly valued and trusted resource that you'll rely upon to consistently provide expert, efficient and professional construction, remediation, demolition, LEED, and facility management consulting services. Contact us at your convenience; we look forward to discussing your needs.

For more information, call us at **925-899-9721**, or email [info@sustainable-group.com](mailto:info@sustainable-group.com).

---

### Sustainable Group, Inc.

1480 Moraga Road, Suite C #347  
Moraga, CA 94556 USA

**Phone:** 1-925-899-9721

**Email:** [info@sustainable-group.com](mailto:info@sustainable-group.com)

© 2018 Sustainable Group, Inc. All rights reserved. Sustainable Group, and the Sustainable Group logo are trademarks and/or registered trademarks of Sustainable Group, Inc., and/or its subsidiaries in the United States and/or other countries. All other trademarks are properties of their respective owners.