

# Repair FISC Fueling Pier

United States Navy



## Project Description

This project involved structural waterfront repairs to a major DESC fueling pier within the Pacific capable of berthing aircraft carriers.

Repairs were designed to extend the useful service life of the aging 1942 vintage structure and included cathodically jacketing the piles, above and below deck concrete repairs, an epoxy deck overlay, fender system repairs, and mooring hardware replacement and upgrades. Materials were sourced locally when available and recycled plastic fender elements were used. The design allowed operations to continue throughout construction and controlled costs. Post construction award services and Title II services provided technical oversight and quality assurance throughout construction of the repairs. Along with technical oversight these services involved communication and meetings with multiple Navy commands to ensure design met the owner and operator's intent and construction did not impact operations.

The project included design level above and underwater inspections utilizing a team of in-house engineer divers, concrete material testing, mooring analysis, static and dynamic structural analyses using finite element computer modeling, design of repairs, development of Design Bid Build plans and specifications, creation of a three-dimensional structural model and renderings, post construction award services (PCAS), and full time onsite Title II services staffed by Appledore Marine's Honolulu, Hawaii Office.

**This project received the Navy's highest performance rating of Excellent!**

## Project Type

Facility Repairs/Rehabilitation

## Location

Pearl Harbor, Hawaii

## Estimated Construction Cost

\$5,500,000 USD

## Date of Service

2009-2011



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## Services Provided

- Design
- Inspection & Assessment
- Structural Analysis
- Bid Document Preparation
- Construction Administration