

 **Appledore Marine Engineering Inc.**

Specializing in
Waterfront Engineering.



[Department of the Navy – Naval Facilities Engineering Services Center]

“...You have clearly demonstrated the highest level of professional performance on numerous underwater structural evaluation and design projects. Your cooperation with the Government, and eagerness to provide a quality product, has been unsurpassed. I have appreciated your support and thank you for a job well done.”

J.F. Alling, Lieutenant Commander,
Civilian Engineer Corps., United States Navy,
Office in Charge



Appledore Marine Engineering, Inc.'s senior management team has been together for over 14 years and has the expertise to work on the most complex projects.



M/V Ambassador at Sprague Energy Portsmouth Terminal

Naval Defense Energy Support Center in Japan



Evaluation of Naval facilities by our in-house engineer divers at locations in Yokosuka, Sasebo and Atsugi Japan, provided valuable information to the government for these Far East facilities.

Naval Station Pearl Harbor, Oahu Hawaii



Underwater and above water inspections and assessments of waterfront facilities at the Pearl Harbor Naval Station including over 10,000 pilings. Inspections were conducted during a four-month deployment and included the development of design-build packages and the use of waterfront metrics to provide objective evaluation of structures, considering material type, age and condition.

Port of Portsmouth



Waterfront planning and design services for the Port of Portsmouth included inspection, assessment, and development of expansion concepts to optimize port services.

Port of Thule Greenland



Rehabilitation of the Port Facilities at the United States Air Force's Thule Airbase in northern Greenland, known as the northern-most deep water port in the world. Project involved on-site studies 600 miles north of the Arctic Circle and design of repairs understanding the complexities of Arctic construction. Appledore personnel acted as the contracting officer's technical representative assuring the quality of the delivered project.

Naval Shipyard Waterfront Improvement Program



Design of over \$33,000,000 in waterfront improvements to the infrastructure at the Portsmouth Naval Shipyard. Appledore's in-house engineer dive staff collected detailed attributes to develop bid documents. The majority of these projects received the Navy's highest rating of excellence.

United States Coast Guard Planning Services



Planning studies to support the government in their effort to ensure best value shore capability for their waterfront capital assets. Studies include business case analyses and rigorous engineering and financial studies of waterfront assets that balance diverse factors from safety and health to aesthetics, functionality and affordability.

United States Coast Guard Sector San Francisco Wave Abatement



Wave analysis, design and economic feasibility study of an abatement system to provide long-term protection for the San Francisco Bay area's Homeland Security and Search and Rescue vessels. The system developed by the Appledore Team includes a fixed structure designed to survive a 100-year storm while maintaining circulation patterns. The construction cost of the full build out is approximately \$7,000,000.

University and National Oceanic Atmospheric Administration



Design, and construction services of the University of New Hampshire and National Oceanic Atmospheric Administration Joint Research Pier. Future home to the UNH research vessel fleet and the NOAA state of the art coastal mapping vessel, "SWATH". Shallow bedrock and strong tidal currents led to innovative design and construction techniques.

Woods Hole Oceanographic Institute



Design of an oceanographic monitoring tower off the coast of New England. Tuned to minimize flow disturbances and vortex-induced vibrations due to strong tidal currents, the tower supports atmospheric and oceanographic instrumentation for the Woods Holes Institute. The project is instrumental in improving the understanding of ocean-atmospheric interactions in low to moderate winds and improving marine weather forecasts and ocean circulation models.



[research and publishing]

Appledore Marine Engineering, Inc.'s senior management team actively publish and present to educate engineers and owners.

Visit Noah Elwood and John Gaythwaite at the ASCE Ports 2007 Conference.

Noah will be presenting a paper and John will be teaching a workshop. Cheryl Coviello has published a paper in the upcoming issue, *Civil Engineering Practice Journal*.

worldwide marine engineering experience



Canadian Coast Guard Icebreaker Henry Larsen, Thule, Greenland

For over 20 years, Appledore Marine Engineering, Inc. has consistently focused on excellence for our clients and our staff. Our professional staff are uniquely qualified in underwater inspection, structural engineering, planning, and design services for waterfront facilities worldwide.

Specializing in: Port Authorities, Industrial Marine Terminals, Government Marine Terminals, Ports and Harbor Development, and Shipyards. Our staff of professional engineer divers has direct experience and are qualified to complete the following services:

- Port Studies
- Planning Studies
- Feasibility Studies
- Mooring/Berthing Analysis
- Forensic/Post-Event Analyses
- Waterfront Facilities Data Management System
- Dredge Services
- Cost Estimating
- Design-Build Partnership
- Waterfront Metrics
- Facility Inspection and Evaluation
- Bridge Inspections
- Corrosion Survey
- Environmental Permitting
- Construction Support Services



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