

# Diplomat Resort Marina, Florida



regulatory permitting

Coastal Systems International, Inc. provided environmental permitting, engineering design and construction administration services for the bulkhead and docking facility improvements on the Intracoastal Waterway, seawall improvements and erosion hot spot beach renourishment on the beach side of the project, environmental resource permitting for the entire site and coastal construction permitting for the oceanfront resort. Coastal Systems was the lead environmental permitting consultant working with a team of legal and environmental professionals to ensure that regulatory standards were met on many fronts, including Florida Department of Environmental Protection (DEP) stormwater management and coastal construction standards, as well as marine turtle protection. Coastal Systems also designed and secured environmental permits for rehabilitation of the existing oceanfront seawall and a 65,000 c.y. beach nourishment project to temporarily stabilize the beach adjacent to the resort prior to Broward County's Segment III nourishment project implementation.



Diplomat Marina

Coastal Systems also was the developer's agent for the stormwater permitting, which was completed in phases to match the complex resort construction sequence and utilities issues. For marine facilities proposed on the Intracoastal Waterway, field investigations were conducted to assess the structural condition of existing structures, bathymetry and marine resources. Conceptual designs for the proposed docking facility were developed and the alternatives were presented in a comprehensive engineering report with construction cost estimates.

After coordination with the developer regarding desired slip mix and negotiation with the environmental permitting agencies to avoid impacts to protected marine seagrass resources and meet navigational setback criteria, Coastal Systems completed the final engineering design of the improvements consisting of bulkhead rehabilitation and flexible mooring options. Fourteen slips were constructed for boats up to 45 feet and three slips were constructed for boats in excess of 70 feet. The entire length of the bulkhead was designed with concrete batter piles driven seaward of the wall to avoid conflict with proximal upland construction. Utilities including pedestals with water, electrical, telephone and cable TV were designed including 200 amp service for mega-yachts. A fire protection system using foam was also provided.



**Client:** Diplomat Properties, LLP

**Location:** Hollywood, Florida

**Date of Completion:** 2001

**Construction Cost:** \$2,000,000

