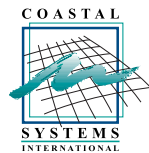


Harbour Isle Development, Florida



regulatory permitting

Coastal Systems International Inc. designed and developed a plan for a marina as part of the Harbour Isle residential development on Causeway Island. A 63-slip marina is to be located in a dredged harbor basin with a flushing culvert. Coastal Systems has conducted hydrographic and marine resource surveys of project shoreline for use in analyzing potential environmental impacts and development of project alternatives with minimization and mitigation of impacts. The hydrographic work extended into Indian River and Fort Pierce to provide sufficient data required for the design of the proposed basin entrance and flushing culverts.

Coastal Systems secured environmental permits from the U.S Army Corps of Engineers (USACE) and the South Florida Water Management District (SFWMD) for the marina and associated seagrass and wetland mitigation projects.

Coastal Systems, in coordination with sub-consultants, designed the seagrass and wetland mitigation projects, which include:

- Filling of a 1.6 acre dredge hole to mitigate for approximately 0.4 acre of seagrass impact caused by channel dredge activity. Restoration includes transplanting seagrass from the proposed impact areas and additional donor sites to the filled dredge hole.
- Onsite creation of 3.4 acres of saltwater marsh habitat to mitigate the removal of 4.6 acres of freshwater wetlands. Additional compensation will be provided by onsite exotic vegetation removal and establishment of protective buffers between the upland development and wetlands.
- Construction of the marina, upland development and mitigation areas were designed specifically to minimize impacts to natural resources.



Pre-construction Harbour Isle



Conceptual Design

Client:	Beach Co, LLC
Location:	Ft. Pierce, Florida
Date of Completion:	2005
Construction Cost:	N/A

