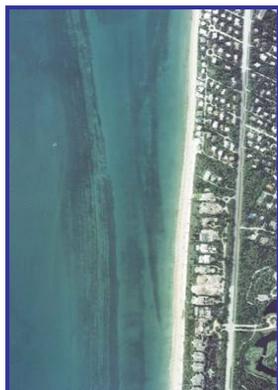


SECTOR 3 BEACH RESTORATION

Client: Indian River County, FL



The “*Indian River County Beach Preservation Plan Update*” recommends nourishment of the County’s critically eroded beaches including Sector 3 on the barrier island. Coastal Tech advanced and completed the project design - for *both* offshore and upland sand sources - and obtained permits from the Florida Department of Environmental Protection (FDEP) and the U.S. Army Corps of Engineers (USACE). Coastal Tech worked in close collaboration with County staff and provided periodic updates to the County’s Beach and Shore

Preservation Advisory Committee.

Coastal Tech also provided essential environmental and geological services to fulfill requirements posed by the FDEP during their review of the Joint Coastal Permit (JCP). The environmental services entailed field investigations and associated professional services to map and characterize hardbottom communities and identify turtle nesting and abundance within and surrounding the project. The project was specifically designed to have “no impact” upon hardbottom. To develop the design, Coastal Tech assessed numerous numerical and empirical models to identify the best model for prediction of hadbottom impacts – based on measured data from the Sectors 1 & 2 project; Coastal Tech then employed this method in the design, which was accepted by FDEP and the USACE. Geological services demonstrated that the proposed upland sand fill is beach-compatible and suitable as beach fill without hardbottom impacts.

Construction began in February 2010 and was completed in three phases (1, 2, & 2b) in May 2012. Roughly 560,592 cubic yards of sand (37,500± truck-loads) were placed. The project was phased to (a) address concerns of the



regulatory agencies relative to the upland sand sources, and (b) as required by the Contractor’s capacity to produce fill. Subsequent to Phase 1, per the permits, Coastal Tech assessed impacts to nesting turtles (which indicated no significant impacts) and allowed subsequent phases of construction to occur. During each phase of construction, Coastal Tech monitored the progress of construction and checked the construction for compliance with the Contract Documents and permits. Coastal Tech has also provided services to document permit compliance. Coastal Tech has prepared post-construction monitoring reports, which indicate “no impact” to hardbottom – consistent with the project design.

Key Elements

- Beach Committee Meetings
- Preliminary Design
- Numerical Mike21 Modeling
- Final Design Plans & Specs
- FDEP Permit/ ECL Establishment
- USACE Permit/NEPA Compliance
- Construction Administration
- Post-Construction Monitoring

Date: 2006 - 2012

Cost: \$14.7M

Fees: \$3,927,693.

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