



Project News

Northern Dare Beaches
Shore Protection
and Erosion Abatement Project
October 2003



Renourishment Project Moves Forward

Project Background

The U.S. Army Corps of Engineers began a feasibility study in 1994 to investigate hurricane protection and beach erosion control needs in order to develop the optimum plan of protection for Dare County Beaches. The primary study area, a twenty mile stretch in northern Dare County, included the communities of Nags Head, Kill Devil Hills and Kitty Hawk. The study concluded that the most practicable plan of protection for the study area is a berm and dune project with terminal transitions. The county chose the recommended plan in order to maximize protection of properties and benefits for dollars invested.

Project Location

The initial project construction will involve the nourishment of approximately 10.1 miles of the oceanfront in Nags Head and 4.1 miles in Kill Devil Hills and Kitty Hawk. The project will be constructed in three phases or reaches. See the back of this sheet for location and construction schedule.

Project Design and Construction

The project design profile, which will be maintained over the 50-year life of the project, calls for the addition of a dune and berm which combined will add 50 to 75 feet of width to the beach in areas that have a full construction profile.

Advanced maintenance fill will also be placed at the time of construction, which will add an additional 100 to 200 feet of width to the beach. This will allow for shifting of fill material into the near shore area, as well as erosion, until the next maintenance renourishment. The

construction profile on both ends of the project will be tapered back to the existing profile in the transition areas.

Sand will be dredged from about 7 square miles of sandy ocean bottom within the 3 mile nautical limit offshore of the project area. A good quality beach sand has been found that is compatible with the native beach sands making the new fill material stable and less prone to rapid erosion. The initial nourishment will require 12.3 million cubic yards of sand. Sand will be pumped to the beach by pipeline dredge where it will then be shaped by earth moving equipment.

Periodic Renourishment

After the initial construction, a periodic nourishment operation will occur every year along some segment of the project area with each segment being nourished on a 3 year cycle for the 50-year life of the project.

Funding

The initial construction for the entire project is estimated to cost \$71.6 million. Project costs are shared between federal, state and local sources. The federal share is 65% and the non-federal share is 35%. Non-federal funding is cost shared between the state and local sponsors. Construction of the project is subject to the availability of federal, state and local funding.

Current Project Status

The easement phase is now in progress for the Reach 1 area. Dare County has begun the process of getting easements for the project, which will allow for **construction of a renourished beach strand beginning in January 2005.** To

keep the project on schedule, the project easements must be obtained from the oceanfront property owners whose property extends onto the beach within the nourishment area before construction can begin. The sponsors anticipate little, if any, difficulty in obtaining the easements since the project will enhance the appearance of the beach and protect properties from high tide and storm events.

Dare County has contracted with Lee Wrenn & Associates, Inc. to obtain the required easements.

Questions concerning the easements should be directed to Lee Wrenn & Associates, Inc.

Surveys maps are nearing completion and title searches are now being completed to determine the owners of the affected lots.

When the maps and title searches are completed, owners of affected parcels will be contacted and asked to provide permission for the placement of sand on that portion of their property that lies out on the beach strand.

Information Contacts

For project sponsor related questions, please call **Ray Sturza, Planning Director, Dare County (252) 473 - 1101**

For project design, policy and funding questions, please call **Sharon Hagggett, Senior Project Manager, US Army Corps of Engineers, Wilmington District (910) 251 - 4441**

For easement questions, please call **Lee Wrenn, Project Manager for Easement Acquisition Lee Wrenn & Associates, Inc. P.O. Box 3959 Kill Devil Hills, NC 27948 (252) 480 - 9535**

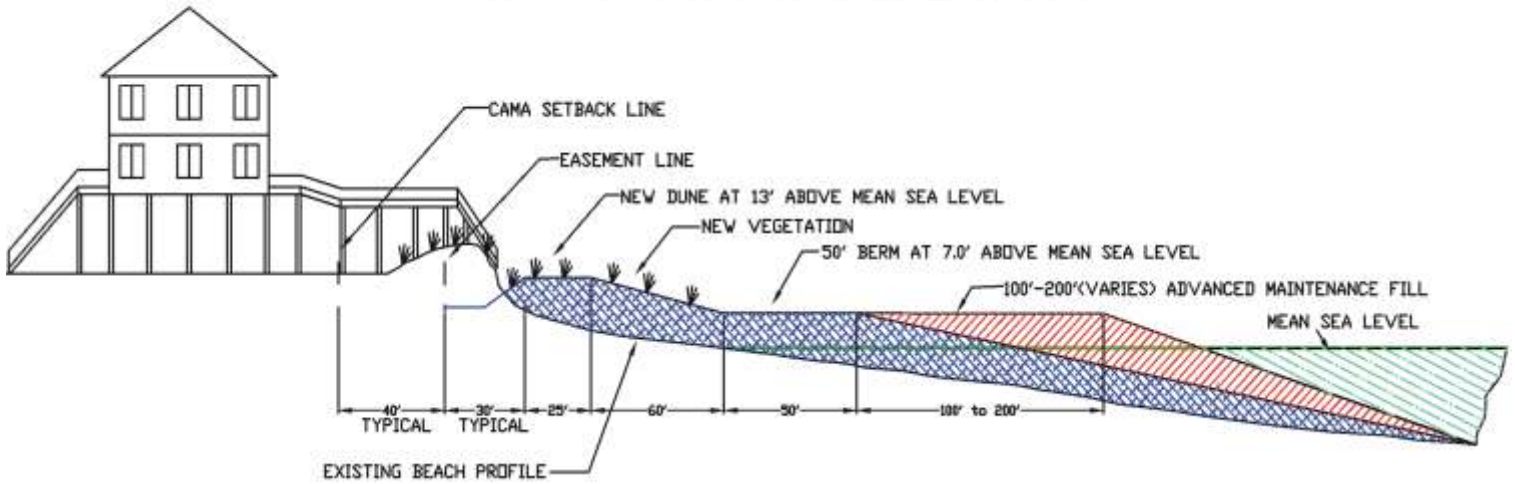
Project Sponsor and Municipal Co-Sponsors



Construction	Location
Reach 1 Northern Portion	*** Between Prospect Street in Kill Devil Hills and Sanderlin Street in Kitty Hawk.
Reach 1 Southern Portion	*** Between Isabella Street. and Hawks Nest in Nags Head
Reach 2	*** Between the intersection of Old Oregon Inlet Rd. & Hwy 12 and Isabella Street in Nags Head.
Reach 3	*** Between Hawks Nest and Blackman Street in Nags Head.

** Construction dates are subject to the availability of funding.

Typical Full Construction Profile



DESIGN FILL (STORM BERM)

ADVANCED MAINTENANCE OVERFILL (CONSTRUCTION BERM)

*** BEACH WIDTH TYPICALLY IS INCREASED 150' TO 250' INITIALLY IN SECTIONS WITH A FULL CONSTRUCTION PROFILE. CONSTRUCTION PROFILES ARE TAPERED BACK TO EXISTING PROFILES ON EACH END OF THE PROJECT. A CROSS SECTION IN FRONT OF A PARTICULAR PARCEL WILL RANGE BETWEEN FULL CONSTRUCTION PROFILE AND EXISTING PROFILE DEPENDENT UPON ITS LOCATION IN THE PROJECT. EXISTING DUNES WILL NOT BE DISTURBED OR ALTERED. SOURCE DOCUMENT - CORPS OF ENGINEERS FEASIBILITY STUDY PAGE 60 FIGURE 7.

Prepared by:

Lee Wrenn & Associates, Inc.

Easement Acquisition and Project Management Specialists

Photos Myrtle Beach Reach 3 Project

Before



After



Please visit WWW.SEASHELL.COM for additional project information.