DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
69A HAGOOD AVENUE
CHARLESTON, SOUTH CAROLINA 29403-5107

FINDING OF NO SIGNIFICANT IMPACT

FOLLY BEACH SHORE PROTECTION PROJECT AND USE OF OUTER CONTINENTAL SHELF SAND

CHARLESTON COUNTY, SOUTH CAROLINA

August 2013

The National Environmental Policy Act (NEPA) requires the U.S. Army Corps of Engineers, Charleston District (USACE) and the Bureau of Ocean Energy Management (BOEM) to evaluate the effect of proposed projects on both the environment and human health and welfare. This Finding of No Significant Impact (FONSI) summarizes the results of the USACE/BOEM evaluation and documents the USACE/BOEM's conclusions.

USACE/BOEM is proposing to perform a beach renourishment project at Folly Beach, South Carolina using sand from offshore State waters and sand from the outer-continental shelf (OCS). This renourishment project is part of a previously approved USACE Hurricane and Storm Damage Reduction Project. Use of OCS sand requires a non-competitive negotiated agreement between the City of Folly Beach (i.e., the projects non-federal cost share sponsor) and BOEM. This NEPA evaluation supports BOEM's action in executing the agreement. The initial nourishment of the Folly Beach Hurricane and Storm Damage Reduction Project was performed by USACE in 1993 using sand from the Folly River. Renourishment efforts were performed by USACE in 2005 and 2007 (a partial renourishment) using sand from offshore State waters. While the conclusions in this FONSI represent the conclusions of both USACE and BOEM, this FONSI is being issued as a Corps of Engineers document. BOEM will issue a FONSI as a separate document.

The proposed project is a periodic renourishment of an existing project. The project provides for re-nourishment of approximately 26,000 linear feet (~4.9 linear miles) of shoreline. A berm will be constructed with a top width of 15 feet and an elevation of 8.0 feet national geodetic vertical datum (NGVD). The project extends from just below the U.S. Coast Guard Base on the east end of Folly Island to just above the Charleston County Park on the west end of Folly Island (See Figure 1). The exact quantity of sand that will be placed on the beach during re-nourishment will be dependent on the beach profile at the time of construction; however, based on present conditions, it is estimated that approximately 1.4 million cubic yards of beach quality sand will be placed on the beach seaward of existing dunes, sea walls, and revetments.

Construction will be by means of a hydraulic cutter head dredge that will transport the sand through a pipeline. The pipeline will run from the offshore borrow areas onto the beach and then run down the beach. Beach compatible sand from the offshore source will be discharged as slurry. During construction, temporary training dikes of sand will be used to contain the discharge and control the fill placement. Fill sections will be graded by land-based equipment, such as bulldozers, articulated front-end loaders, and other equipment as necessary to achieve the desired beach profile. Equipment will be selected based on whatever proves to be the most advantageous economically, as well as what generates only minimal and acceptable temporary environmental impacts. It is anticipated construction will begin in mid-October 2013 and will require approximately 6 months for completion. This schedule could change due to contractual issues, inclement weather, equipment failure, or other unforeseen difficulties.

The borrow areas being used for beach compatible sand are shown in Figure 1. These areas total approximately 550 acres; however, over half of Borrow Area A and approximately a third of Borrow Area B have been used during previous re-nourishment projects. The borrow areas are located approximately three miles offshore of the northern end of the island. The volume of beach compatible sand, the area, and the water depths in each borrow area are shown in Table 1. The volumes listed are based on removing all the available beach quality sand to the down to a maximum depth of 10 feet. Most of Borrow Areas A and B contain a sand thickness of 3 to 7 with two small areas in B with a sand thickness of 10 feet. Borrow Area C contains a sand thickness of 5 to 7 feet. Borrow Area D contains a sand thickness of approximately 4 feet.

TABLE 1: BORROW AREA CHARACTERISTICS

Borrow Area	Total Borrow Area Size (acres)	Area Available for this Renourishment (acres)	Sand Volume Available for this Renourishment (yd^3)	Water Depth (feet)
A	310	80	490,000	30 to 36
B	210	120	780,000	29 to 39
C	30	30	310,000	30 to 35
D	70	70	370,000	40 to 44

Since the proposed project is a periodic renourishment of an existing Federal Hurricane and Storm Damage Reduction Project, the only true alternative that was given consideration other than the proposed action was the No Action alternative. However, because of the severe

erosion that has occurred at Folly Beach and because of the Federal Government's commitment to renourish the beach when necessary over the life of the project, the No Action alternative was rejected.

Concerning the use of other sources of sand instead of OCS sand, no other viable sand sources are currently known in the vicinity of Folly Beach. Borrow Areas A, B, C, and D were identified prior to the 2005 renourishment project after an extensive investigation of the area offshore of Folly Beach. Borrow Areas A and B were used during the 2005 and 2007 renourishment efforts and there is insufficient sand in these areas to fully perform this renourishment project. Therefore, the only viable alternative is to use the OCS sand from Borrow Areas C and D.

USACE and BOEM have determined that the proposed project does not constitute an action significantly affecting the human environment. Accordingly, preparation of an Environmental Impact Statement is not warranted. The full Environmental Assessment can be downloaded from the internet (in PDF format) at *http://www.sac.usace.army.mil/Missions/CivilWorks/NEPADocuments.aspx* or a copy may be obtained by contacting Mr. Alan Shirey (*alan.d.shirey@usace.army.mil*; (843) 329-8166).

Date_____

JOHN T. LITZ, PMP
Lieutenant Colonel, EN
Commander, U.S. Army Engineer District,
Charleston

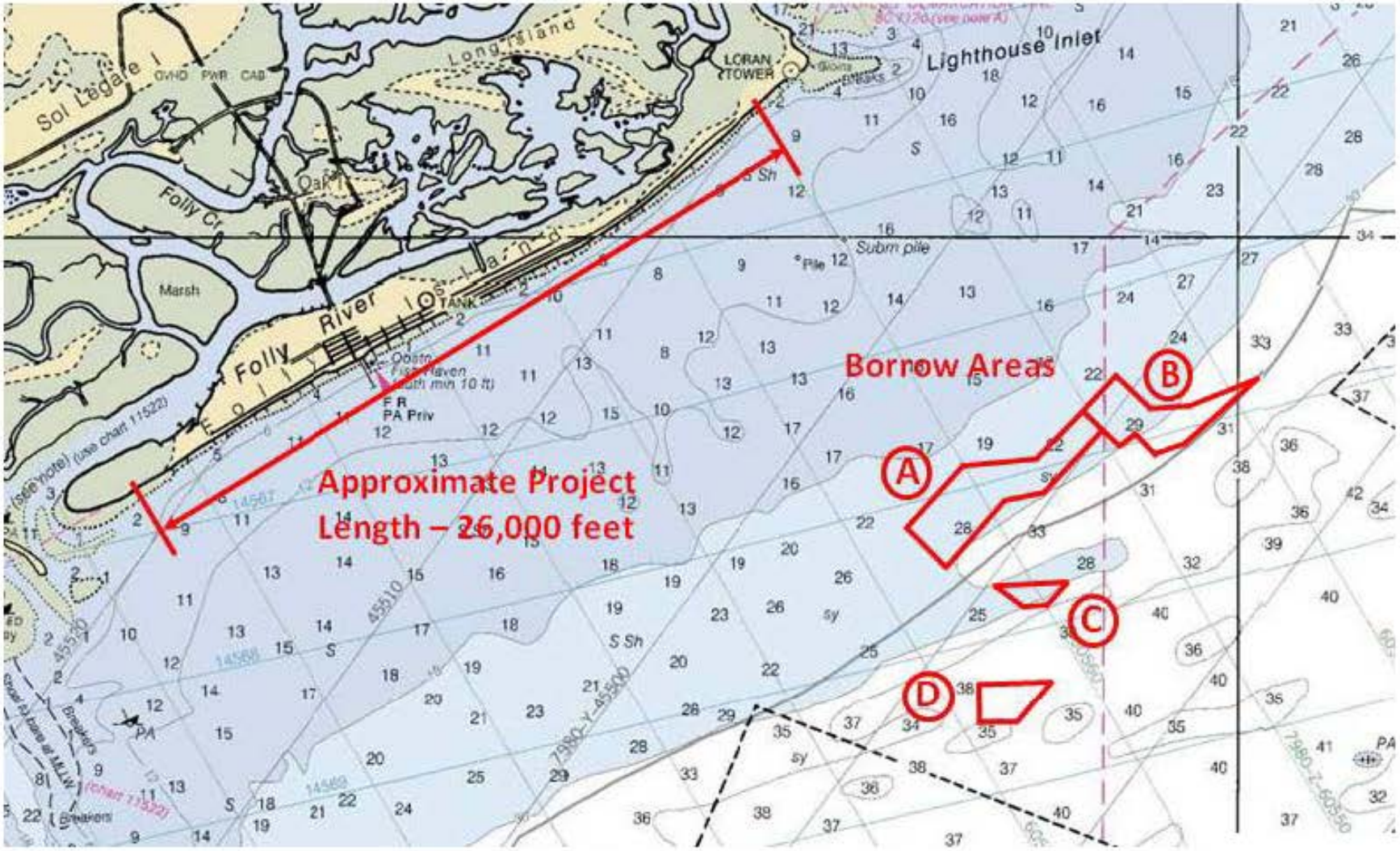

FIGURE 1: LOCATION OF NOURISHMENT AND BORROW AREAS