PUBLIC NOTICE

Permit Application Number SAJ-1994-05200(SP-ACM)

TO WHOM IT MAY CONCERN: The Jacksonville District of the U.S. Army Corps of Engineers (Corps) has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. §1344) and Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. §403) as described below:

APPLICANT: Charlotte County Board of County Commissioners
18500 Murdock Circle
Port Charlotte, Florida, 33948

WATERWAY AND LOCATION: The project would affect waters of the United States associated with the Gulf of Mexico along Manasota Key Beach and offshore borrow areas located 3 to 7 miles offshore of the beach area. The beach area’s northern project boundary is R-175 in Sarasota County and the project extends across the Charlotte County / Sarasota County line extending to 400 feet south of R-15 in Charlotte County. The project site is located in Sections 26 and 27, Township 40S, Range 19E in Sarasota County and Sections 1, 2, 11, 12, and 13, Township 41S, Range 19E, Charlotte County, Florida.

Directions to the site are as follows: From I-75 take Exit 170 (C.R.769). Turn onto Kings Highway. Proceed 0.4 miles. Turn right onto Veterans Boulevard and proceed 7.0 miles. Veterans Boulevard becomes SR-776W. Proceed 16.1 miles. Turn left onto Beach Road. Proceed 1.4 miles. Enter round-a-bout and take 1st exit onto North Beach Road. Turn left to enter Chadwick Park at Englewood Beach.

APPROXIMATE CENTRAL COORDINATES: Latitude 26.924339
Longitude -82.36092

PROJECT PURPOSE:

Basic: Beach restoration and renourishment

Overall: The project provides erosion control and shoreline stabilization measures including beach nourishment for approximately 4.4 miles of eroding gulf-front shoreline within the Manasota Barriers utilizing offshore borrow areas over a 15-year timeframe.
EXISTING CONDITIONS: The beaches within the project area begin at Florida Department of Environmental Protection (FDEP) Reference Monument R-175 in Sarasota County and the project extends for over 4.4 miles across the Sarasota County / Charlotte County line south to the Stump Pass Beach State Park, approximately 400 feet south of R15.

In Sarasota County from R175 to the County line, the beach width varies and there are small structures, one seawall and one rock revetment, along two of the single-family homes. There are established dunes along several segments of the beach segment in Sarasota County. Between R1 and R5 in Charlotte County, an existing rock revetment armors the shoreline and there is little to no existing dry beach present. From R5 to south of R7 the majority of property owners have installed sheet pile seawalls to address the severe erosion since 2015. South of R7, a well-developed, Gulf-coast dune system is present along the beach including along the County Park between R9 and R11. South of R11 the shoreline type varies from natural, to natural with established dunes, to armored with seawalls or rock revetments.

Sides can sonar surveys and diver investigations mapped 2.1 acres of persistent and 2.2 acres of ephemeral near shore hard bottom exposed in 2017 and an additional 0.3 acres that were exposed in 2016, for a total of 4.6 acres between R1 and R5. Hard bottom areas were also mapped offshore of the beach between R5 and R11 between the equilibrium toe of fill and the offshore borrow areas. No hard bottom was found within 1,000 feet of the borrow area excavation limits. No hard bottom was found along the Sarasota County segment in the near shore zone from R-175 south to the County line.

There are no seagrass beds within close proximity to the Project area.

The sediments within the eight offshore borrow areas are characterized by medium to fine-grained gray sand with low silt concentrations below 5%. A compatibility analysis was completed comparing the native beach data and borrow area data which indicates that the sand from all eight borrow areas is compatible with the native beach sand.

PROPOSED WORK: The applicant seeks authorization for initial restoration and periodic renourishment for a 15-year period. The initial project proposes to discharge 1,009,000 cubic yards of beach compatible sand inclusive of the design beach, advance nourishment, equilibrium template, construction tolerance and tapers to restore the critically eroding shoreline of Manasota Key between R175 (Sarasota County) to R15.4 (Charlotte County). The applicant permitted five offshore borrow areas for their existing Erosion Control Project (USACE Permit SAJ-1997-05200 SP-MMB dated February 17, 2016) and have identified three new offshore borrow areas, for a total of eight offshore borrow areas to provide the sand for initial construction and subsequent renourishment. The beach fill will impact 2.1 acres of persistent and 2.5 acres of ephemeral near shore hard bottom. Three mitigation reef placement areas totaling approximately 4.8 acres are proposed to be constructed concurrently with the initial project as compensatory mitigation. The renourishment volumes are predicted to be on the order of 600,000
cubic yards per event on an eight year renourishment cycle (average). The proposed
dredge methods for the offshore borrow areas is via hydraulic cutter head with direct
submerged pipeline, or hopper dredge means with pump-out via submerged pipeline, or
hydraulic cutter head with scow barges and pump-out vis submerged pipeline. The in-
water work would be conducted using barge/vessel-based heavy equipment (vessel
drafts ranging from 6’ to 20’ offshore) with no blasting. The land-based work for beach-
fill grading would be conducted by bull dozers, excavators, front-end loaders, and off-
road vehicles.

AVOIDANCE AND MINIMIZATION INFORMATION – The applicant has provided the
following information in support of efforts to avoid and/or minimize impacts to the
aquatic environment:

The applicant’s beach management goals for Manasota Key include the following:
Restore and maintain the critically eroding beaches within the Project Area utilizing high
quality beach compatible sand; Provide an appropriate level of storm damage reduction
along the developed shoreline segments within the Project Area through an engineered
beach fill design plan; Provide protection to the failing armoring structures along the
shoreline within the Project Area through placement of fill in front of the structures;
Provide environmental protection and enhancement for threatened and endangered
species such as shorebirds and sea turtles through creation and maintenance of
habitats, monitoring, and implementation of best management practices and safeguards
during construction; Avoid, minimize, or mitigate unavoidable impacts to near shore
hard bottom from beach restoration; Provide and sustain the design beach fill template
between renourishment cycles; and Align the restoration and nourishment cycles with
the County’s existing beach and inlet management program to provide synergy among
construction and monitoring efforts as well as to optimize cost effectiveness.

A detailed alternatives analysis was conducted to examine beach fill designs that would
avoid and minimize near shore hard bottom impacts to the greatest extent practicable
while still meeting the Project objectives. The beach fill design included the following:
Design Template – recommended design to provide storm damage reduction benefits
from a 25-year storm event; Advanced Nourishment – additional fill placed to account
for background erosion between renourishment events; Equilibrium Profile Adjustment –
adjustment of the beach fill (cross-shore) as the profile undergoes initial change;
Planform Adjustment – adjustment of the beach fill (alongshore) as the beach fill
undergoes diffusion; and Hard bottom Impact Assessment – analysis of the impact on
near shore hard bottom from direct beach fill placement, fill equilibration, and
subsequent beach fill adjustments. Based on the detailed modeling and alternatives
analysis, it was determined that all of the beach fill designs (including a minimalistic 15-
foot wide beach berm design) and predicted profile adjustments from the design storm
resulted in complete coverage of the existing near shore hard bottom.

Attempts to avoid and minimize impacts to the near shore hard bottom resources from
the beach fill were undertaken. However, in order to restore the beach, provide the
design level of storm damage reduction benefits, and sustain those benefits, all
exposed and potential near shore hard bottom will be completely buried, resulting in the permanent loss of hard bottom habitat. A compensatory mitigation plan is proposed to offset the permanent impacts to near shore hard bottom.

Beach fill placement shall not occur during the sea turtle nesting season, May 1st through October 31st.

A biological monitoring plan shall be implemented to verify the prediction of no expected impact to offshore hard bottom from cross-shore movement of beach fill seaward of the equilibrium toe of fill.

A turbidity mixing zone equal to or less than 150 m shall be enforced during project construction at the beach fill and offshore borrow areas.

COMPENSATORY MITIGATION – The applicant has offered the following compensatory mitigation plan to offset unavoidable functional loss to the aquatic environment:

Three mitigation reef placement areas totaling approximately 4.8 acres to be constructed concurrently with the initial restoration are proposed as compensatory mitigation. The acreage was determined through a UMAM analysis. All three reef placement areas are at least 500 feet offshore of the equilibrium toe of fill and range in size from 2.0 to 2.5 acres. The artificial reefs will be placed at least 25 feet from adjacent hard bottom to provide protection during construction. The artificial reefs will be constructed as a single layer of 18” to 30” diameter limestone boulders to create low relief substrate similar to the impacted near shore hard bottom. Water depths at the artificial reefs are approximately 18 to 24 feet and are deeper than the impacted near shore hard bottom (up to depths of 12 feet). Similar water depths with suitable sediment depths over underlying hard bottom are not available in the Project area. Proximity of the mitigation artificial reefs to adjacent offshore hard bottom will promote recruitment of benthic species, and recruitment of stony corals and octocorals is expected since these organisms are present on adjacent offshore hard bottom. The topography of the limestone boulders will provide microhabitats for numerous fish species, and the substrate is suitable for boring organisms. Macro algae is expected to be the dominant benthic cover on the reef placement areas similar to the near shore hard bottom.

CULTURAL RESOURCES:

The Corps is not aware of any known historic properties within the permit area. By copy of this public notice, the Corps is providing information for review. Our final determination relative to historic resource impacts is subject to review by and coordination with the State Historic Preservation Officer and those federally recognized tribes with concerns in Florida and the Permit Area.

ENDANGERED SPECIES:
The Corps determined the proposal may affect, but is not likely to adversely affect the endangered West Indian manatee (Trichechus manatus), endangered red knot (Calidris canutus), and the endangered piping plover (Charadrius melodus). The Corps has also determined that the proposed project may affect the threatened/endangered nesting sea turtles (Chelonia mydas, Eretmochelys imbricata, Lepidochelys kempii, Dermochelys coriacea, Caretta caretta). The Corps will initiate ESA consultation as required with the U.S. Fish and Wildlife Service for the above listed species.

The Corps has determined the proposed project may affect the threatened/endangered swimming sea turtles (Chelonia mydas, Eretmochelys imbricata, Lepidochelys kempii, Dermochelys coriacea, Caretta caretta). The Corps has also determined that the project may affect but is not likely to adversely affect the endangered smalltooth sawfish (Pristis pectinata). The Corps will initiate ESA consultation as required with the National Marine Fisheries Service for the above listed species.

ESSENTIAL FISH HABITAT (EFH): This notice initiates consultation with the National Marine Fisheries Service on EFH as required by the Magnuson-Stevens Fishery Conservation and Management Act 1996. The proposal would impact approximately 2.1 acres of persistent and 2.3 acres of ephemeral near shore hard bottom benthic communities dominated by fleshy macroalgae and turf algae. Hard bottom impacts would be offset with in-kind mitigation in accordance with 33 CFR 332 based on the results of the Uniform Mitigation Assessment Method analysis of the impacts and mitigation proposed. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or Federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

NOTE: This public notice is being issued based on information furnished by the applicant. This information has not been verified or evaluated to ensure compliance with laws and regulation governing the regulatory program. The jurisdictional line has been verified by Corps personnel.

AUTHORIZATION FROM OTHER AGENCIES: Water Quality Certification will be required from the Florida Department of Environmental Protection.

COMMENTS regarding the potential authorization of the work proposed should be submitted in writing to the attention of District Engineer through the 1520 Royal Palm Square, Suite 310, Ft. Myers, Florida 33919 within 21 days from the date of this notice.

The decision whether to issue or deny this permit application will be based on the information received from this public notice and the evaluation of the probable impact to the associated wetlands. This is based on an analysis of the applicant's avoidance and minimization efforts for the project, as well as the compensatory mitigation proposed.
QUESTIONS concerning this application should be directed to the project manager, Allison C. Murphy, in writing at the Ft. Myers Permits Section, 1520 Royal Palm Square Blvd., Ft. Myers, Florida, 33919; by electronic mail at Allison.C.Murphy@usace.army.mil; by facsimile transmission at (239)334-0797; or, by telephone at (239)334-1975 ext. 0008.

IMPACT ON NATURAL RESOURCES: Coordination with U.S. Fish and Wildlife Service, Environmental Protection Agency (EPA), the National Marine Fisheries Services, and other Federal, State, and local agencies, environmental groups, and concerned citizens generally yields pertinent environmental information that is instrumental in determining the impact the proposed action will have on the natural resources of the area.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including cumulative impacts thereof; among these are conservation, economics, esthetics, general environmental concerns, wetlands, historical properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food, and fiber production, mineral needs, considerations of property ownership, and in general, the needs and welfare of the people. Evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, EPA, under authority of Section 404(b) of the Clean Water Act or the criteria established under authority of Section 102(a) of the Marine Protection Research and Sanctuaries Act of 1972. A permit will be granted unless its issuance is found to be contrary to the public interest.

The US Army Corps of Engineers (Corps) is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other Interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this determination, comments are used to assess impacts to endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

COASTAL ZONE MANAGEMENT CONSISTENCY: In Florida, the State approval constitutes compliance with the approved Coastal Zone Management Plan. In Puerto Rico, a Coastal Zone Management Consistency Concurrence is required from the Puerto Rico Planning Board. In the Virgin Islands, the Department of Planning and Natural Resources permit constitutes compliance with the Coastal Zone Management Plan.
REQUEST FOR PUBLIC HEARING: Any person may request a public hearing. The request must be submitted in writing to the District Engineer within the designated comment period of the notice and must state the specific reasons for requesting the public hearing.
MANASOTA KEY 10-YEAR BEACH MANAGEMENT PLAN
PERMIT DRAWINGS

PREPARED FOR:
CHARLOTTE COUNTY BOARD OF COMMISSIONERS
SARASOTA COUNTY BOARD OF COMMISSIONERS

NOTES:
1. BEACH FILL AND MEAN HIGH WATER SURVEYS CONDUCTED BY COASTAL ENGINEERING
   CONSULTANTS, INC., OCTOBER 2017 (R1 TO R15) AND FEBRUARY 2018 (R175 TO R183).
2. OFFSHORE SURVEYS FOR BORROW AREAS A AND B CONDUCTED BY SONOGRAPHICS,
   INC. AND COASTAL ENGINEERING CONSULTANTS, INC., 2013.
3. OFFSHORE SURVEYS FOR BORROW AREAS 1-1, 3 AND 4 CONDUCTED BY OCEAN
   SURVEYS, INC., 2017.
4. PLANE COORDINATES ARE BASED ON THE TRANSVERSE MERCATOR PROJECTION FOR
   THE WEST ZONE OF FLORIDA AND REFERENCED TO THE NORTH AMERICAN DATUM OF
   1983 (NAD 83).
5. ELEVATIONS SHOWN HEREON ARE IN FEET AND TENTHS AND REFERENCED TO THE
   NORTH AMERICAN VERtical DATUM OF 1988 (NAVD 88).
6. TIDAL REDUCtIONS WERE OBTAINED UTILIZING REAL-TIME KINEMATIC GPS AND
   REFERENCED TO NAVDG8.
7. SURVEY ACCURACY STANDARDS, QUALITY CONTROL, AND QUALITY ASSuRANCE
   REQUIREMENTS WERE FOLLOWED DURING THIS SURVEY IN ACCORDANCE WITH USACE
   EM 1110-2-1003, HYDROGRAPHIC SURVEYING MANUAL, 1 JAN 02.
8. INFORMATION SHOWN HEREON REFLECTS CONDITIONS AS THEY EXISTED ON THE
   SURVEY DATE SHOWN AND CAN ONLY BE CONSIDERED INDICATIVE OF CONDITIONS AT
   THAT TIME.
9. MEAN HIGH WATER ELEVATION OF +0.32 FEET NAVD88 IS BASED ON INTERPOLATION
   BETWEEN TIDE STATIONS 872 5838 VENICE AIRPORT AND 872 5110 NAPLES. TIDAL EPOCH
10. LANDWARD LIMIT OF BEACH FILLS SHALL TIE INTO EXISTING CONTINUOUS DUNE
    VEGETATION/ARMORING LINE.
11. ROADS AND RIGHT OF WAYS ARE SHOWN FOR GENERAL INFORMATION ONLY.
12. CONTRACTOR’S WORK AREA ON BEACHES SHALL EXTEND FROM CONTINUOUS DUNE
    VEGETATION/ARMORING LINE TO 100 FEET SEAWARD OF CONSTRUCTION TOE OF FILL.
13. PIPELINE ACCESS CORRIDOR SHALL RUN FROM BORROW AREAS VIA A SUBMERGED LINE
    TO ADJACENT BEACHES, THEN ALONG BEACH, AS FAR LANDWARD AS PRACTICAL TO
    AVOID IMPACTS TO EXISTING VEGETATION AND STRUCTURES, FROM R-175 TO R-15.4. ONE
    OR MORE BOOSTERS ARE ANTICIPATED TO BE UTILIZED, THEY SHALL EITHER BE BARGE
    MOUNTED WITHIN APPROVED CORRIDORS OR PLACED ON BEACH IN LINE WITH PIPELINE.
14. INITIAL CONSTRUCTION BEACH FILL VOLUME EQUALS 1,009,000 CUBIC YARDS.
15. AERIAL PHOTOGRAPHY PROVIDED BY PICKETT & ASSOCIATES, INC., DATED 2017.

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22. PIPELINE CORRIDOR DETAILS
23. ARTIFICIAL REEF PLACEMENT

FOR PERMITTING PURPOSES ONLY.
NOT TO BE USED FOR CONSTRUCTION.
LEGEND
- MAPPED HARD BOTTOM PER SIDESCAN SONAR SURVEYS (SONOGRAPHICS: MAY 2013)
- MAPPED HARD BOTTOM PER DIVER SURVEYS (CEG: NOV. 2015)
- DIVER MAPPED NEARSHORE HARD BOTTOM (CEG: NOV. 2018 AND JAN. 2017)
- DIVER MAPPED OFFSHORE HARD BOTTOM EDGE (CEG: JUNE 2018)

CONSTRUCTION ACCESS AND STAGING AREA
PROPOSED LIMITS OF ANCHORING AND CONVEYANCE CORRIDOR
CONSTRUCTION ACCESS AND STAGING AREA
PROPOSED 300' CONVEYANCE CORRIDOR
PROPOSED PIPELINE CORRIDOR
MEAN HIGH WATER (OCTOBER 2017)
BORROW AREA 3
BORROW AREA "A"
BORROW AREA 4
BORROW AREA "B"
LIMIANTS OF ANCHORING AND PIPELINE CORRIDOR
300' CONVEYANCE CORRIDOR
LIMIANTS OF ANCHORING AND PIPELINE CORRIDOR

GULF OF MEXICO

NOTE: SEE SHEET 22 FOR PIPELINE CORRIDOR DETAILS

NOAA NAUTICAL CHART NO. 11426
AVAILABLE VOLUME IN OFFSHORE BORROW AREA 1-1 IS APPROXIMATELY 1.38 MCY.
AVAILABLE VOLUME IN OFFSHORE BORROW
AREA B IS APPROXIMATELY 355,000 CY.

LEGEND
-33.5 = DESIGN DEPTH
-35.5 = TOLERANCE DEPTH
-40 = CONTOUR (FT NAVD)
- = AVOIDANCE AREA
- = MAPPED HARD BOTTOM PER
SIDESCAN SONAR SURVEYS
(SONOGRAPHICS: MAY 2013)

CHARLOTTE COUNTY BOARD OF COMMISSIONERS
ECP PERMITTED
OFFSHORE BORROW AREA "B"
PLAN VIEW

MICHAEL T. P. PORTO
PROFESSIONAL ENGINEER
STATE OF FLORIDA
LICENSE No 48218
LEGEND
- MAPPED HARD BOTTOM PER SIDESCAN SONAR SURVEYS (SONOGRAPHICS: MAY 2013)
- MAPPED HARD BOTTOM PER DIVER SURVEYS (CEG: NOV. 2015)
- PATCHY HARD BOTTOM, RUBBLE AREA (CEG: NOV. 2015)
- MAPPED HARD BOTTOM PER SIDESCAN SONAR SURVEYS (OSI: FEB. 2018)
- AVOIDANCE AREA

NOTE: PRESENTED HEREON ARE DETAILS OF AREAS OF DIVER MAPPED HARD BOTTOM AND HARD BOTTOM SUGGESTED BY SIDESCAN SONAR IN THE PIPELINE CORRIDORS.