

**INDIAN RIVER COUNTY, FLORIDA
MEMORANDUM**

TO: Board of County Commissioners

THROUGH: John Titkanich, Jr. County Administrator

THROUGH: Richard B. Szyrka, P.E., Public Works Director

FROM: Eric Charest, Natural Resources Manager

SUBJECT: **Sector 3, Hurricanes Ian and Nicole Pre-Construction and Engineering Services, APTIM, Work Order No. 2018006-15**

DATE: June 21, 2023

DESCRIPTION AND CONDITIONS

On January 9, 2018, the Board of County Commissioners (BCC) approved a contract with Aptim Environmental & Infrastructure, Inc. (APTIM) for professional coastal engineering and biological support services related to the management and nourishment of the Sector 3 (Wabasso Beach) Beach and Dune Nourishment Project. The Sector 3 project area is a critically eroded 6.6-mile section of engineered shoreline that extends from the Seaview Subdivision south to the Turtle Trail beach park. Beach and dune nourishment repair activities have historically taken place throughout Sector 3 to repair storm related sand losses as well as to address background erosion, with the most recent placement activity completing in February of 2022.

The Sector 3 coastline suffered significant storm related losses to the beach and dune system from the impacts of Hurricane Ian on September 28, 2022, followed closely by Hurricane Nicole on November 10, 2022. The impacts of these storms lasted well beyond the initial day of the storm, with the increased wave activity and high surf created by the Hurricanes in the Atlantic Ocean further contributing to beach and dune erosion throughout Sector 3 beaches for several days resulting in extensive areas in Sector 3 experiencing significant dune retreat and beach berm lowering, creating the need for repair.

Staff, along with the County's Coastal Engineering consultant, Aptim Environmental and Infrastructure, LLC (APTIM) have been working with representatives from the Federal Emergency Management Agency (FEMA), the Florida Department of Environmental Protection (FDEP), the US Army Corps of Engineers (USACOE) and others in quantitating the impacts from the 2022 Hurricane season in attempts to secure funding assistance for future beach and dune repair efforts.

As a result of these efforts, the FDEP released the *Hurricanes Ian and Nicole Recovery Plan for Florida's Beach and Dune System* (December 2022), in which Sector 3 was called out to receive both FEMA Category G federal assistance as well as State of Florida legislatively allocated funding. As of the time of authoring this agenda item, the FEMA Project Worksheet for Sector 3 has not been issued, but the County has received a grant award for Sector 3 in the amount \$1,288,727.40 under FDEP Grant 23IR2, and anticipates receiving an additional \$1,368,072.60 from the FDEP under the recently approved Senate Bill 2500 budget package.

The proposed Work Order No. 2018006-15 from APTIM includes five (5) separate tasks pertaining to pre-

construction services to address Hurricanes Ian and Nicole’s impacts to Sector 3. Task one (1) covers coordination efforts with the regulatory agencies in order to incorporate any post-storm stipulations into a repair design. Task 1 is to be billed at a lump sum cost of \$6,830.00. Task two (2) is for a design update to determine the required volume of sand within the project area based on summer 2023 routine semi-annual beach surveys provided by the County and any information obtained from the Agency Coordination task. Task 2 is a lump sum cost of \$13,540.00. Task three (3) covers bid development, solicitation and awarding assistance at a cost of \$14,811.30. Task four (4) covers pre-construction submittals and meetings for \$6,463.30. Task five (5) covers late season sea turtle monitoring for \$46,688.35. Work Order No. 2018006-15 for pre-construction and engineering services associated with the Sector 3 repair efforts is for a lump sum amount of \$88,332.95.

FUNDING

Partial funding for the Sector 3 Hurricanes Ian and Nicole Repair project is anticipated to be made available through FEMA funding. Additionally, the FDEP Local Governmental Funding Requests (LGFR) reimbursement grant 23IR2 has been made available for this project in the amount of \$1,288,727.40 with additional grant funds in the amount of \$1,368,072.60 expected at a later disbursement of legislatively approved funding.

Local funding of Beach Restoration includes a portion of Local Option Tourist Tax Revenue. Funding for the pre-construction bid and monitoring services, funds in the amount of \$19,433.25, will come from the Beach Restoration/CIP/Hurricane Ian – Sector 3 account, number 12814472-066514-22601, which is 22% of the total cost of \$88,332.95. The remaining 78%, or \$68,899.70, will come from the Beach Restoration/CIP/Storm Nicole – Sector 3 account, number 12814472-066514-23007.

Account Name	Account No.	Split	Amount
Beach Restoration/CIP/Hurricane Ian – Sector 3	12814472-066514-22601	22%	\$19,433.25
Beach Restoration/CIP/Storm Nicole	12814472-066514-23007	78%	\$68,899.70
Total			\$88,332.95

RECOMMENDATION

Staff recommends the BCC authorize Work Order No. 2018006-15 in the total lump sum amount of \$88,332.95. Additionally, staff recommends the BCC authorize the Chairman to execute Work Order No. 2018006-15.

ATTACHEMENT

APTIM Work Order No. 2018006-15
Work Order No. 2018006-15 execution agreement

APPROVED AGENDA ITEM FOR: JULY 11, 2023