

**INDIAN RIVER COUNTY, FLORIDA
MEMORANDUM**

TO: Jason E. Brown, County Administrator

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

FROM: James W. Ennis, P.E., PMP, Asst. Public Works Director

SUBJECT: Sector 5 Beach & Dune Restoration Project- Hurricane Dorian Repairs
Change Order No. 1 (IRC-1923)

DATE: November 27, 2019

DESCRIPTION AND CONDITIONS

On September 17, 2019 the Board of County Commissioners awarded Bid No. 2019066 to Rio-Bak Corporation (Contractor) for the Sector 5 Beach and Dune Restoration Project in the amount of \$4,511,712.00. A notice to proceed was issued on October 27, 2019 with a contract time of 210 days to final completion.

During the time when the project was being advertised and award of the project was being prepared by staff for action by the Board, Indian River County was impacted by Hurricane Dorian. The eye of Hurricane Dorian passed approximately 105 miles offshore of Vero Beach on September 3, 2019. At the time of the September 17, 2019 Board meeting, it was estimated that 50,000 cubic yards of sand was eroded from the Sector 5 project area due to storm activity and Public Works Staff estimated the cost to replace sand lost from Hurricane Dorian at approximately \$1,250,000.00. This was noted in the Public Works Department's recommendation of award to IRC Board of County Commissioners.

Public Works staff in concert with our Design Consultant, APTIM, has determined that due to Hurricane Dorian an additional 61,555 cubic yards (83,100 tons) of sand is required to restore the permitted beach profile of Sector 5 to the intended design conditions set forth in the originally advertised construction bid plans. Based upon this quantity, a cost proposal was requested from the Contractor for the placement of additional sand with the stipulation that all sand placement had to occur within the current allotted project time.

The Contractor provided a cost proposal to accomplish the additional work as detailed in proposed Change Order #1 (see attached). The cost for supply/deliver/placement of sand by the ton increased by \$0.58 from \$21.60 per ton to \$22.18 per ton. This is a reasonable increase due to the fact that the additional sand will need to be added without an extension of the contract time. Additional costs for Mobilization/Demobilization (\$27,772.02) and Environmental Compliance (\$8,310) for the Post-Dorian placement of sand were also included in Change Order #1.

County staff has reviewed the proposed change order for \$1,879,240.02 and found the cost to be in line with similar work and consistent with additional materials, labor, equipment, bonding, and compliance efforts required for the Contractor to successfully construct the project within the original allotted timeframe.

FUNDING:

Local Funding for beach restoration is provided by a portion of Local Option Tourist Tax. Funding for construction of the Sector 5 Beach and Dune Restoration Project in the amount of \$4,511,712.00 was

budgeted and available in the Beach Restoration Fund/Sector 5 Beach Renourishment/Hurricane Matthew account # 12814472-066510-17001. Sector 5 grant funding is summarized in the table below.

Funding Type	Federal Funding	State Funding	Local Match	Total
Hurricane Matthew PW 828	\$737,617.73	\$122,936.28	\$122,936.29	\$983,490.30
Hurricane Irma PW 3025	\$174,447.90	\$9,691.55	\$9,691.55	\$193,831.00
DEP Grant 19IR3*	\$0.00	\$821,833.00	\$927,299.91	\$1,749,132.91
Total	\$912,065.63	\$954,460.83	\$1,059,927.75	\$2,926,454.21

*Federal match listed in grant agreement to be provided by Federal and State portion of Hurricane Matthew and Irma Project Worksheets (PW's).

Federal estimated project cost is not subject to any DEP cost share percentages. FDEP has allocated \$1.7M, with the remaining \$878,167 to be awarded via grant amendment.

Funding for the proposed \$1,879,240.02 outlined in Change Order No. 1 will be funded by a budget amendment from Beach Restoration Fund/Cash Forward Oct. 1st. The County is included in FEMA's Hurricane Dorian disaster declaration and beach erosion expenses are eligible for reimbursement. However, no project worksheet has been formulated at this point. While staff plans to submit these expenses to FEMA for reimbursement, some or all of the expenses could be deemed ineligible for various reasons. For planning purposes, staff anticipates 75% Federal reimbursement and 12.5% State reimbursement for this change order. The remaining 12.5% local match would be provided by reserves, which are provided by Local Option Tourist Tax (approximately \$234,905). In the event that FEMA determines these expenses ineligible for reimbursement, then the entire cost would be funded from Local Option Tourist Tax dollars.

ALTERNATIVES

Alternative 1 - Authorize additional funding for Change Order No. 1 in the amount of \$1,879,240.02 producing a new total contract price of \$6,390,952.02. Additionally, authorize the Chairman to execute Change Order No.1 on behalf of the County.

Alternative 2 – Deny Change Order No. 1 and continue the project with the original quantities. This alternative may impact reimbursement from the DEP and FEMA for not filling the sand to the original template. This alternative will end the current project at whatever location the original quantities of sand are exhausted, leaving the remaining portion of sector 5 in its current condition. The current permit would need to be amended to reflect the final ending location of the project.

RECOMMENDATION

Staff recommends Alternative 1 - the Board authorizes additional funding for Change Order No. 1 in the amount of \$1,879,240.02 producing a new total contract price of \$6,390,952.02. Additionally, Staff recommends the Board authorize the Chairman to execute Change Order No.1 on behalf of the County.

ATTACHMENTS

Change Order No. 1

AGENDA ITEM FOR DECEMBER 10, 2019