

**INDIAN RIVER COUNTY, FLORIDA
BOARD MEMORANDUM**

CONSENT AGENDA

TO: Jason E. Brown
County Administrator

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

FROM: James D. Gray, Jr.
Coastal Engineer

SUBJECT: **Work Order No. 3 Morgan & Eklund, Inc.
2017 Beach Profile Monitoring Surveys (SUMMER)**

DATE: May 31, 2017

DESCRIPTION AND CONDITIONS

On October 4, 2016, the Board approved a contract with Morgan and Eklund, Inc. (M&E) for Professional Land Surveying and Mapping Services for a two-year term. The Board amended the Contract on October 18, 2016. M&E is the selected County Consultant for professional onshore/offshore hydrographic surveying services.

The County's Beach Preservation Plan recommends semiannual beach profile surveys in order to monitor the seasonal, summer and winter, fluctuations of the beach. The proposed Work Order No. 3 provides summer-time countywide hydrographic surveying (beach profile) services for the Sector 3 and Sector 7 Beach Restoration Projects and additional surveying to complete a 2017 countywide (22.4 miles) monitoring program. All onshore and offshore beach profile surveys are conducted along The Florida Department of Environmental Protection (FDEP) Range Monuments at approximately 1,000 foot intervals (alongshore) and extend from the vegetated dune seaward to a location approximately -40 feet offshore (crossshore). For project tracking purposes, Work Order No. 3 is divided into three (3) separate tasks.

Task 1: Summer 2017 Sector 3 Beach and Dune Restoration Project Post Construction Monitoring Survey (R-20-R-60)

By Permit, annual Post Construction hydrographic surveying is required to assess the performance of the Sector 3 Beach and Dune Project area. Task 1 includes all surveying (7.5 miles) required to complete the 2017 physical monitoring of the Sector 3 Beach and Dune Project area. Task 1 totals a lump sum amount of \$22,550.

Task 2: Summer 2017 Sector 7 Post Construction Monitoring (R-97-R-108)

In the spring of 2007, the County completed construction of the Sector 7 Beach Restoration Project. The County has completed all Permit required post construction monitoring for the Sector 7 Project. However, hydrographic surveys of the project area have continued semiannually to determine the long term performance of the project. Task 2 includes all surveying (2 miles) required to continue the annual monitoring of the Sector 7 Beach Nourishment Project. Task 2 totals a lump sum amount of \$6,600.

Task 3: Summer 2017 Countywide Beach Monitoring (R-61 – R-96 and R-109-R-119)

For the shoreline outside of the Sector 3 and Sector 7 beach projects, countywide beach profile surveys are necessary to identify areas of chronic beach erosion and determine if infrastructure may be vulnerable to storm damage. The beach profile surveys will then be used to determine appropriate projects to mitigate erosion as identified in the County Beach Preservation Plan, including the upcoming Sector 5 Beach Restoration Project. Task 3 includes the remaining countywide (9 miles) beach profile surveys. Task 3 totals a lump sum amount of \$25,850.

Please note:

The Sebastian Inlet District (District), as part of their Inlet Management Plan, conducts semiannual beach profile surveys along the northern 5.6 miles of the County. The District continues to partner with the County and has agreed to provide their certified 2017 beach profile survey data (winter and summer) to the County, resulting in a complete 22.4 mile countywide (semiannual) beach profile survey and a combined annual savings of approximately \$33,000 to the County.

The Scope of Work for the services under Work Order No. 3 was submitted to the County on April 28, 2017. The aggregate of Tasks 1-3 under Work Order No. 3 totals a lump sum amount of \$55,000.

FUNDING

Local funding of Beach Restoration includes a portion of Local Option Tourist Tax Revenue as well as allocation of the One Cent Sales Tax. Funding for Work Order No. 3 will be provided from three (3) separate accounts.

Task 1: Summer 2017 Sector 3 Beach and Dune Restoration Project Post Construction Monitoring Survey (R-20-R-60)

Funding for Task 1 is budgeted and available for monitoring of the Sector 3 Beach Restoration Project in the Beach Restoration Fund, Sector 3 Beach Post Construction Monitoring Account No. 12814472-033490-05054. Task 1 totals a lump sum amount of \$22,500.

Task 2: Summer 2017 Sector 7 Post Construction Monitoring (R-97-R-108)

Funding for Task 2 is budgeted and available for monitoring of the Sector 7 Beach Restoration Project in the Beach Restoration Fund, Sector 7 Beach Preservation Monitoring Account No. 12814472-033490-05079. Task 2 totals a lump sum amount of \$6,600.

Task 3: Summer 2017 Countywide Beach Monitoring (R-61 – R-96 and R-109-R-119)

Funding for Task 3 is budgeted and available for countywide beach surveys in the Beach Restoration Fund, Other Professional Services Account No. 12814472-033190-01024. Task 3 totals a lump sum amount of \$25,850.

RECOMMENDATION

The recommendation of staff is for the Board to approve Work Order No. 3 to the Professional Land Surveying and Mapping Services contract with Morgan and Eklund, Inc. and authorize the Chairman to sign on behalf of the County.

ATTACHMENT

Morgan and Eklund, Inc. Work Order No. 3

APPROVED AGENDA ITEM FOR: JUNE 13, 2017