

**INDIAN RIVER COUNTY, FLORIDA  
MEMORANDUM**

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**TO:** Board of County Commissioners

**THROUGH:** John A. Titkanich, Jr., County Administrator  
Kylie Yanchula, Natural Resources Director

**FROM:** Quintin Bergman, Coastal Resources Manager

**SUBJECT:** Work Order No. 07 - Morgan & Eklund, Inc., 2025 Beach Profile Monitoring Surveys (SUMMER & WINTER)

**DATE:** December 30, 2024

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**DESCRIPTION AND CONDITIONS**

On October 4, 2022, the Board of County Commissioners (BCC) approved a contract with Morgan and Eklund, Inc. (M&E) for Professional Surveying and Mapping Services for a two-year term. M&E is the selected County Consultant for professional onshore/offshore hydrographic surveying services. On September 24, 2024, the County requested the selected firm to execute the first extension to the agreements for an additional 2 years of service.

The County's Beach Preservation Plan (BBP) recommends semi-annual beach profile surveys to monitor the seasonal, summer and winter, fluctuations of the beach. Additionally, the construction permits from Florida Department of Environmental Protection (FDEP) require hydrographic surveys to monitor the performance of the County's various nourishment projects.

Work Order No. 7 provides summertime and wintertime hydrographic surveying (beach profile) services for the Sectors 3, 4, and 5 Beach Nourishment Projects, and additional surveying for the 2025 countywide (22.4 miles) monitoring effort. 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 3,000 feet offshore (cross-shore) to an estimated depth of -40 feet. For project and grant tracking purposes, Work Order No. 7 is divided into seven (7) separate sub-tasks.

**Task 1: Winter 2025 Survey Profiles****Task 1a: Sector 4 Winter Physical Monitoring Survey (R-55 to R-70) 16 Onshore/Offshore Profiles**

The County is required by the FDEP Permit to monitor the physical changes, in the form of hydrographic survey data, associated with the Sector 4 Hurricanes Ian & Nicole Dune Renourishment to determine the long-term performance of the project. Task 1a totals a lump sum amount of \$9,601.48.

**Task 1b: Sector 5 Winter Physical Monitoring Survey (R-71 to R-91) 21 Onshore/Offshore Profiles**

The County is required by the FDEP Permit to monitor the physical changes, in the form of

hydrographic survey data, associated with the 2020 Sector 5 Renourishment project to determine the long-term performance of the project. Task 1b totals a lump sum amount of \$12,601.94.

Task 1c: Winter 2025 Countywide Beach Monitoring (R-92 to R-119) 28 Onshore/Offshore Profiles  
For the shoreline outside of Sectors 3, 4 and 5 project areas, countywide beach profile surveys are necessary, and identified in the BPP, to identify areas of chronic beach erosion. Task 1c totals a lump sum amount of \$16,802.58.

**Task 2: Summer 2025 Survey Profiles**

Task 2a: Sector 3 Summer Physical Monitoring Survey (R-15 to R-60) 46 Onshore/Offshore Profiles  
The County is required by the FDEP Permit to monitor the physical changes, in the form of hydrographic survey data, associated with the Sector 3 Hurricanes Ian & Nicole Dune Renourishment to determine the long-term performance of the project. Task 2a totals a lump sum amount of \$27,599.34.

Task 2b: Sector 4 Summer Physical Monitoring Survey (R-61 to R-65) 5 Onshore/Offshore Profiles  
The County is required by the FDEP Permit to monitor the physical changes, in the form of hydrographic survey data, associated with the Sector 4 Hurricanes Ian & Nicole Dune Renourishment to determine the long-term performance of the project. Task 2b totals a lump sum amount of \$2,999.93.

Task 2c: Sector 5 Summer Physical Monitoring Survey (R-66 to R-91) 26 Onshore/Offshore Profiles  
The County is required by the FDEP Permit to monitor the physical changes, in the form of hydrographic survey data, associated with the upcoming Sector 5 Renourishment Project. Summer profiles are used to inform the engineered design. Task 2c totals a lump sum amount of \$15,599.63.

Task 2d: Summer 2025 Countywide Beach Monitoring (R-92 to R-119) 28 Onshore/Offshore Profiles  
For the shoreline outside of Sectors 3, 4 and 5 project areas, countywide beach profile surveys are necessary, and identified in the BPP, to identify areas of chronic beach erosion. Task 2d totals a lump sum amount of \$16,799.60.

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 share with the County their certified 2025 beach profile survey data to the County upon completion, resulting in a complete 22.4 mile countywide beach profile survey and a combined annual savings of approximately \$30,000 to the County. Sector 3 surveys were conducted under a separate work order following Hurricane Milton; therefore Sector 3 winter surveys are not included in this work order.

**FUNDING**

Funding for these tasks comes to a total lump sum fee of \$102,004.50. Funding for the individual tasks are detailed in the table below based on their task, storm, and sector allocation:

<b>Task</b>	<b>Account Name</b>	<b>Account No.</b>	<b>Amount</b>
1a	Coastal Engineering Fund/ Sec. 4 Hurr. Ian	12814472-066515-22601	\$2,112.33
	Coastal Engineering Fund/ Sec. 4 Hurr. Nicole	12814472-066515-23007	\$7,489.15
1b	Coastal Engineering Fund/ Sec. 5 Hurr. Ian	12814472-066510-22601	\$2,772.43
	Coastal Engineering Fund/ Sec. 5 Hurr. Nicole	12814472-066510-23007	\$9,829.51
1c	Coastal Engineering Fund/Other Professional Services	12814472-033190	\$16,802.58
2a	Coastal Engineering Fund/Sec. 3 Post-Con. Monitoring	12814472-033490-05054	\$27,599.34
2b	Coastal Engineering Fund/Sec. 4 Post-Con. Monitoring	12814472-033490-23040	\$2,999.93
2c	Coastal Engineering Fund/Sec. 5 Hurr. Ian	12814472-066510-22601	\$3,431.92
	Coastal Engineering Fund/Sec. 5 Hurr. Nicole	12814472-066510-23007	\$12,167.71
2d	Coastal Engineering Fund/Other Professional Services	12814472-033190	\$16,799.60
<b>Total for Work Order No. 7</b>			<b>\$102,004.50</b>

**RECOMMENDATION**

The recommendation of staff is for the BCC to approve Work Order No. 7 to the Professional Surveying and Mapping Services contract with Morgan and Eklund, Inc., in the amount of \$102,004.50 and authorize the Chairman to sign the Work Order on behalf of the County.

**ATTACHMENT**

1. M&E Work Order 7 Agreement

**APPROVED AGENDA ITEM FOR: January 14, 2025**