

TASK ORDER APPROVAL FORM

CONTRACT #: C18-2637-TDD

TASK ORDER #: 8

TASK ORDER AMOUNT: \$ 22,405.00

CONTRACT: C18-2637-TDD
MRD ASSOCIATES, INC.
ENGINEERING & ARCHITECTURAL
CONSULTING SERVICES
EXPIRES: 10/30/2022

OFFERED BY CONSULTANT:

MRD Associates, Inc.

FIRM'S NAME

Michael R. Dombrowski

REPRESENTATIVE'S PRINTED NAME: Digitally signed by Michael R.
Dombrowski

Michael R. Dombrowski

Date: 2022.03.21 16:31:12

SIGNATURE

-05'00'

President

03/21/2022

TITLE

DATE

**RECOMMENDED FOR APPROVAL
(Department Director)**

**APPROVED BY OKALOOSA COUNTY
(Per Purchasing Manual) Table 1**

Jennifer Adams

SIGNATURE

Director

TITLE

April 11, 2022

DATE

DeRita Mason on behalf of

PURCHASING MANAGER

04/13/2022

DATE

OMB Director/DATE

DATE

COUNTY ADMINISTRATOR (if applicable)

CHAIRMAN (if applicable)

DATE

DATE

VIA EMAIL

March 21, 2022

Mr. Alex Fogg, Coastal Resource Manager
Tourist Development Department
Okaloosa County
1540 Miracle Strip Parkway
Fort Walton Beach, Florida 32548
afogg@myokaloosa.com



mrd associates, inc.

Coastal, Marina & Water Resources Engineering

543 Harbor Blvd., Suite 204

Destin, Florida USA 32541

850.654.1555 • (fax) 654.0550

Subject: COASTAL AND ENVIRONMENTAL ENGINEER SERVICES
CONTRACT NUMBER: C18-2637 TDD
Task Order 8 – Okaloosa Island Beach and Offshore Surveys
Okaloosa Island Shoreline and Volume Assessment 2022

Dear Mr. Fogg,

At your request, attached is Task Order 8 for the *Okaloosa Island Beach and Offshore Surveys, and the Okaloosa Island Shoreline and Volume Assessment 2022* under the County's Contract Number C18-2637 TDD with MRD Associates, Inc.

If you have any questions, please feel free to give me a call at 850.654.1555.

Sincerely,

mrd associates, inc.

A handwritten signature in black ink that reads "Michael R. Dombrowski". The signature is written in a cursive style with a large, stylized 'M' and 'D'.

Michael Dombrowski, P.E.
Principal Engineer
md@mrd-associates.com

**COASTAL AND ENVIRONMENTAL ENGINEER SERVICES
CONTRACT NUMBER C18-2637-TDD
Task Order 8 – Okaloosa Island Beach and Offshore Surveys, and
Okaloosa Island Shoreline and Volume Assessment 2022
Scope of Work**

This Task Order will provide an update to the “Okaloosa Island, Shoreline and Volume Assessment – 2020, Okaloosa County, Florida”, prepared by MRD Associates, Inc., dated March 30, 2021, conducted along the 2.8 miles of Okaloosa Island coastline between Department of Environmental Protection (FDEP) Reference Monument R-1 and R-16 (Figure 1). The 2020 report calculated shoreline (Mean High Water Line, MHWL) position, and shoreline and volume changes and rates by applying surveys collected in November 1989/90 (Pre-Opal), June 2007, June 2016 and December 2020.

In general, the purpose of this Task Order is to update the assessment by MRD Associates, Inc. (MRD) (2021) with 2022 data. MRD will perform the followings tasks for Okaloosa County (COUNTY):

- 1) perform beach and offshore surveys for 16 profile lines (R-1 to R-16);
- 2) update the historical shoreline position and volume changes; and,
- 3) prepare a report.

I. SCOPE OF WORK

Task 1.0 Beach and Offshore Profiles

Dewberry Engineers, Inc. (sub-contractor to MRD) will perform beach and offshore profile surveys from FDEP Monuments R-1 through R-16 (16 profiles) as shown in Figure 1. The surveys are anticipated to be performed in June 2022 (NTP and weather dependent) to coincide with the 2007 and 2016 surveys. All work shall be conducted under the direct responsible charge of a Florida Licensed Professional Surveyor and Mapper and be in accordance with “Section 01000 Beach Profiling Topographic Surveying” and “Section 01100 Offshore Profile Surveying” specified in “Monitoring Standards for Beach Erosion Control Projects”, prepared by DEP, edited October 2014 (or later), as well as Chapter 5J-17, Florida Administrative Code (FAC). Vertical and horizontal data will be collected and presented in feet based upon the North American Vertical Datum of 1988 (NAVD 88) and Florida State Plane Coordinate System, North American Datum of 1983/1990 (NAD 83/90), respectively.

Beach profiles shall begin at least 200 feet landward of the R-monument and extend seaward to a reasonable wading depth. The beach profiles will be conducted using standard Real-Time Differential Global Positioning System (RTK/DGPS) surveying techniques. Elevations shall be taken at a maximum of 10-foot intervals along each profile line and at all grade breaks or major changes.

Offshore profiles shall extend a minimum of 3,000 feet seaward of the R-monument and have adequate overlap with the seaward limit of the wading survey. Soundings shall be obtained

continuously along the offshore profiles and be acquired using a survey vessel with centrally located, hull-mounted transducer. Horizontal positioning will be acquired, and soundings obtained by RTK using a single-frequency fathometer and Trimble Real-time RTK/DGPS. Coastal Oceanographics' "HYPACK" system will be used for vessel navigation, data collection/storage and for merging the beach and offshore data. All calibrations including fathometer, horizontal position, measurement of static draft, squat and settlement shall be conducted and documented in accordance with published requirements.

Upon completion of the surveys, the raw data will be reviewed and processed. Electronic spikes and/or other anomalies shall be removed and/or reconciled after comparison with fathometer charts. The beach and offshore data will be merged and edited to form a continuous string of profile data and plotted along with historic profile lines. The bathymetric data will be contoured at appropriate scaled intervals and plotted. The Task 1.0 surveys will extend offshore beyond the depth of closure and will be used to calculate the shoreline position, and shoreline and volume changes and rates both above and below the MHWL.

Task 2.0. Shoreline and Volume Assessment

The surveys conducted in Task 1.0 are anticipated to be performed in June 2022 (NTP and weather dependent). The 2022 beach and offshore profile data will be compared to the 2020 surveys. Shoreline position, and shoreline and volume changes and rates will be presented in both tabular and graphic format. The narrative will include an interpretation of the data and the results will be summarized in a written report.

II. INFORMATION TO BE PROVIDED BY THE COUNTY

The COUNTY will provide MRD with any survey data of the Study Area (beach and offshore surveys) in digital format, monitoring reports, and other relevant information.

III. ASSUMPTIONS AND EXCLUSIONS

This investigation will be limited to best available data and information, unless data collection is listed herein.

The following items are excluded from this Task Order.

- 1) Permitting phase services and State Lands authorizations.
- 2) Regulatory permit, building permit or any other fees outside of listed herein.
- 3) Geotechnical Investigations.
- 4) Value engineering or development and assessment of multiple conceptual layouts.
- 5) Preliminary and final design and the preparation of construction drawings and specifications.
- 6) Bidding, bid award and construction phase services.
- 7) Post-construction monitoring.

IV. FEES AND EXPENSES, AND SCHEDULE

Total estimated Fees and Expenses for the described services shall be \$22,405.00.

The beach and offshore surveys are anticipated to be performed in June 2022 – weather dependent and may commence within 2 weeks of receiving the Notice to Proceed. The survey data will be processed and submitted to the COUNTY within 60-days of completion of the field surveys. The monitoring report for Okaloosa Island may be completed and submitted to the COUNTY within 90-days of the completion of the Okaloosa Island surveys. Refer to the attached breakdown of fees.

Michael R. Dombrowski

Signature

March 21, 2022

Date

Michael Dombrowski, P.E., President
Printed Name, Title

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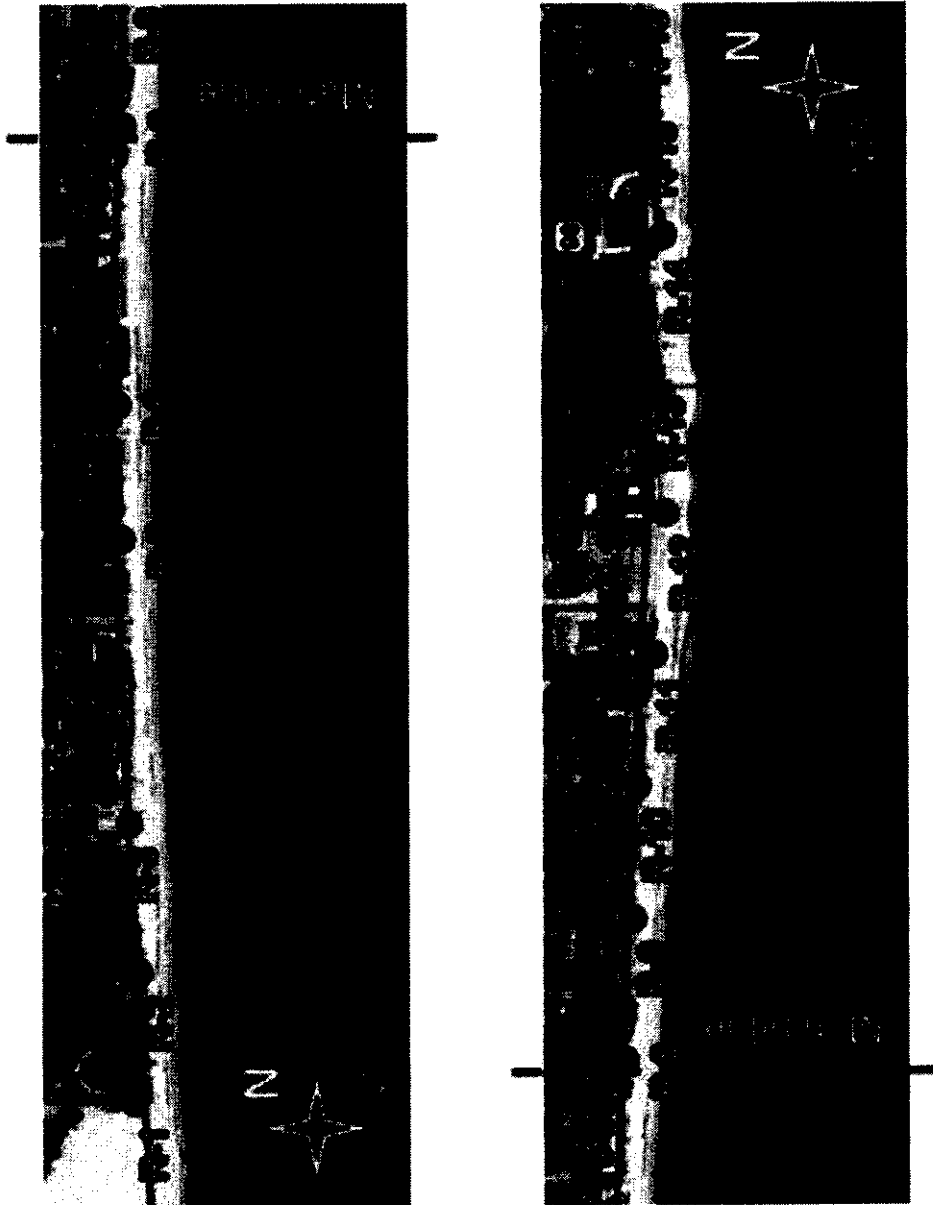


Figure 1. Okaloosa Island – Monitoring limits from DEP Monument R-1 to R-16.

Okaloosa Island, Florida
Surveys, and Shoreline and Volume Assessment
Contract Number C18-2637-TDD
March 21, 2022

HOURS AND FEE ESTIMATE BY TASK

	<i>MRD Associates, Inc.</i>						<i>DEWBERRY Engineers, Inc.</i>						<i>Totals</i>			
	Principal Engineer	Senior Engineer	Engineer II	Engineer Tech I	Sub-Totals		Surveyor VII	Survey Crew	Surveyor IV	CADD Tech III	Admin. Pro. II	Sub-Totals		FEES	EXPENSES	FEES AND EXPENSES
	\$195	\$145	\$120	\$80	FEES	EXPENSES	\$140	\$180	\$100	\$95	\$85	FEES	EXPENSES			
Island (16 profiles)	0.0	1.0	0.0	1.0	\$225.00	\$0.00	16.0	32.0	32.0	24.0	8.0	\$14,160.00	\$0.00	\$14,385.00	\$0.00	\$14,385.00
Island	2.0	4.0	24.0	8.0	\$4,490.00	\$0.00	0.0	0.0	0.0	0.0	0.0	\$0.00	\$0.00	\$4,490.00	\$0.00	\$4,490.00
	2.0	4.0	16.0	8.0	\$3,530.00	\$0.00	0.0	0.0	0.0	0.0	0.0	\$0.00	\$0.00	\$3,530.00	\$0.00	\$3,530.00
TOTALS:	4.0	8.0	40.0	16.0	\$8,020.00	\$0.00	0.0	0.0	0.0	0.0	0.0	\$0.00	\$0.00	\$8,020.00	\$0.00	\$8,020.00