

May 17, 2021

Rob Weber Coastal Program Manager Public Works Department P.O. Box 2029 Palm Beach, FL 33480-2029

### RE: 2021 Town Wide Annual Beach Physical Monitoring and Beach Management Project Proposal

Dear Mr. Weber:

Please find attached our proposal for the above referenced project. This effort will be conducted with primary support provided by Terraquatic, Inc. (TER) for surveys and Aerial Cartographics of America (ACA) for aerial photography. Their proposal is provided as an attachment to this letter in addition to ATM's cost summary.

This Work Order, when executed, shall be incorporated in and become an integral part of the Agreement for professional services between the Town of Palm Beach (TOWN), Florida and Applied Technology & Management (CONSULTANT), hereafter referred to as the Agreement.

#### Introduction

At the request of the TOWN, the CONSULTANT shall provide coastal surveying, analysis and reporting services to support 2021 Town-wide physical monitoring efforts. The physical monitoring field surveys will be conducted by a sub-contractor (TER) in close coordination with the CONSULTANT under a separate (attached) Scope. This Scope includes all efforts required to collect and analyze physical monitoring survey data consistent with the Beach Management Agreement (BMA). This proposal includes a storm response survey task though it is acknowledged that this task is not specifically authorized under the annual monitoring and would be initiated only on an as needed basis as directed by the TOWN.

This effort will be conducted on a Time and Materials Not to Exceed Basis at rates consistent with the CONSULTANT's General Services Agreement with the TOWN.



# **Scope of Services**

The following is a description of the Scope of Services to be provided under this Work Proposal. The CONSULTANT shall provide the following services:

# Task 1 – Beach Profiles, Bathymetric Surveys and Aerial Photography

Survey data will be collected as defined within the proposal letter from TER dated May 14, 2021 (included in whole by reference). ATM will coordinate survey execution and provide QA/QC of all survey data prior to submission to the Town. Survey tasks include the collection of profile data north of the Lake Worth Inlet in addition to Town-wide beach profile surveys and aerial photography. Effort includes intermediate lines in the vicinity of Clarke Avenue and the Sloan's Curve area to support ongoing analysis in these areas.

**Task 1 Deliverable:** ATM will submit task deliverables to the Town as defined within the proposal letter from TER dated May 14, 2021.

## Task 2 – Town-Wide Physical Monitoring Analysis

Under this task, the CONSULTANT shall perform Town-wide physical monitoring data analysis and reporting efforts consistent with previous annual monitoring efforts, the Beach Management Agreement (BMA) and TOWN Staff consultation. This will include the evaluation of erosion and accretion trends along the extent of the TOWN's beaches. The CONSULTANT will update the TOWN's sediment budget in a manner consistent with previous studies and provide a summary of shoreline and volumetric performance. No specific geomorphic change plots will be prepared. The analysis will include volumetric changes for beach area north of Lake Worth Inlet including the expanded settling basin. Results of this analysis will be presented in tables and figures suitable for inclusion within the annual Town-wide report. Results of the study will be presented at the BMA annual update meeting and to the Shore Protection Board.

**Task 2 Deliverable:** Results of this analysis will be summarized within an annual physical monitoring report and PowerPoint document which will be presented to the Shore Board and at the BMA annual status update meeting.

The CONSULTANT will submit a draft report to the TOWN within 90 days of data receipt from TER. Upon receipt of comments from the TOWN regarding the draft report, ATM will incorporate these comments into the document and submit the final report to the TOWN.

#### Compensation

This effort will be conducted on a Time and Materials Not to Exceed Basis for a total cost of **\$164,360**. Task costs are summarized below and a detailed cost breakdown is provided as an attachment.





Table 1Cost Breakdown by Task

	Task Description and Breakdown	ATM Total Labor	Sub- consultant*	Internal Direct Expenses*	Total Task Budget
	Physical Monitoring Surveys and Aerial				
Task 1	Photography				
1.1	Physical Monitoring Surveys (Beach Profiles)	\$1,430	\$73,000	\$0	\$74,430
1.2	Aerial Photography (2 Events)	\$1,040	\$44,000	\$0	\$45,040
	Total Cost - Task 1	\$2,470	\$117,000	\$0	\$119,470
Task 2	Town-Wide Survey Analysis and Reporting				
2.1	Physical Monitoring Survey Analysis	\$27,810	\$0	\$0	\$27,810
2.2	Report and Exhibit Preparation and Presentation	\$16,830	\$0	\$250	\$17,080
	Total Cost - Task 2	\$44,640	\$0	\$250	\$44,890
	Total Task Order Costs	\$47,110	\$117,000	\$250	\$164,360

## **Project Schedule**

Physical monitoring surveys will be conducted (weather permitting) within the July to August timeframe or as directed by Town Staff. The physical monitoring report will be provided to the Town within 90 days of receipt of the survey data by ATM.

Should you have any questions regarding this proposal, please feel free to contact me at your convenience.

Sincerely,

Applied Technology & Management, Inc.

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Michael G. Jenkins, Ph.D., P.E. Coastal Engineering Principal

cc: Terraquatics, Inc. (TER)





