



March 21, 2024

Patricia Strayer, PE
Town Engineer
Public Works Department
P.O. Box 2029
Palm Beach, FL 33480-2029

**RE: 2024 Town Wide Annual Beach Physical Monitoring and Beach Management
Project Proposal**

Dear Ms. Strayer:

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 2024 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 March 2, 2024 (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.

Specific Sub-Tasks are as follows:

Task 1.1 Physical Monitoring Surveys (Beach Profiles)

Under this sub-task beach profiles will be collected along established profile lines from the landward limit of change (dune or seawall line) seaward to an approximate depth of (-40ft. MTL).

Task 1.2 Aerial Photography

Under this sub-task up to two aerial photography campaigns will be conducted to delineate nearshore hardbottom extent adjacent to the Town. Flights will be implemented under appropriate protocols for nearshore delineation and will be deferred if conditions are not nominal or if PBC-ERM are able to execute a county wide aerial effort.

Task 1.3 Post Storm Beach Profile Surveys (Beach Profiles)

If directed by Town staff additional surveys of the Phipps and Mid-Town project areas will be conducted to document impacts from a storm event to support possible FCCE or FEMA claims. This task will only be conducted if a storm event of sufficient impact warrants a post storm survey and will only be conducted under direction by Town staff.

Task 1 Deliverables: ATM will submit task deliverables to the Town as defined within the proposal letter from TER dated March 2, 2024.

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 **\$214,020**. Task costs are summarized below, and a detailed cost breakdown is provided as an attachment.

Table 1
Cost Breakdown by Task

	Task Description and Breakdown	ATM Total Labor	Sub-consultant*	Internal Direct Expenses*	Total Task Budget
Task 1	Physical Monitoring Surveys and Aerial Photography				
1.1	Physical Monitoring Surveys (Beach Profiles)	\$1,430	\$81,750	\$0	\$83,180
1.2	Aerial Photography (2 Events)	\$1,040	\$49,100	\$0	\$50,140
1.3	Post Storm Survey Contingency	\$2,200	\$33,100	\$0	\$35,300
	Total Cost - Task 1	\$4,670	\$163,950	\$0	\$168,620
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	\$17,340	\$0	\$250	\$17,590
	Total Cost - Task 2	\$45,150	\$0	\$250	\$45,400
	Total Task Order Costs	\$49,820	\$163,950	\$250	\$214,020

Project Contingency

The TER proposal includes optional, additional post storm surveys (subtask 1.3) that may be implemented at the direction of the Town should there be a significant storm event.

Project Schedule

Physical monitoring surveys will be conducted (weather permitting) within the June 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 – A Geosyntec Company

A handwritten signature in dark ink, appearing to read 'M. G. Jenkins', with a stylized flourish at the end.

Michael G. Jenkins, Ph.D., P.E.
Senior Principal

cc: Terraquatic, Inc. (TER)