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November 13, 2020

Mr. Eric Charest
Indian River County
Public Works - Coastal Division
1801 27th St, Building A
Vero Beach, FL 32960

**Subject: Indian River County, FL
Sector 3 – 2018006 – Work Order #8
Construction Administration**

Dear Eric:

This proposal outlines a scope of work for Aptim Environmental & Infrastructure, LLC (APTIM), to provide professional services to Indian River County (the County) in support of the Sector 3 Beach and Dune Restoration Project. The scope of work described herein is to support the County in administering construction for the Sector 3 project including periodic site observations and project certification.

This proposal is intended to follow WO#7 – Pre-Construction Services for the Sector 3 project, which includes services through the Bidding and Pre-Construction Services phase. The tasks to perform this work are listed below and described on the following pages. A breakdown of the hours and expenses to develop the cost is attached. The scope and fee proposal were developed following the provisions of the Professional Services Agreement between Indian River County and APTIM, dated January 9, 2018, to provide engineering and biological support services in support of the Sector 3 (Wabasso Beach) Beach and Dune Restoration Project (RFQ#2018006).

Task 1: Progress Meetings

APTIM will coordinate and conduct weekly construction progress meetings with the County and Contractor. APTIM will direct the meeting, covering work progress and schedule, conformance to plans and specifications, and other relevant issues that may need to be discussed. APTIM will also record and distribute meeting minutes to the project team. APTIM will collect and incorporate meeting minute comments and distribute final meeting minutes, if applicable. The proposed budget for this task includes up to twenty-one (21) construction progress meetings, based on the tentative schedule.

Deliverable

APTIM will distribute the final meeting minutes in PDF format to the project team.

Schedule

APTIM will distribute the draft meeting minutes within two (2) days of the meeting date. APTIM will distribute the final meeting minutes upon receipt of any comments from the project team, prior to the next meeting.

Cost

The lump sum cost for this task is \$20,076.00.

Task 2: Site Observations – Truck Haul

APTIM will assist the County with engineering services, technical assistance, and on-site observations during construction in order to certify the project was constructed in compliance with the contract documents as Engineer of Record. APTIM will perform site visits on days of active construction, which are assumed to be 6 days per week, and will provide up to eight (8) hours of observation per visit. It is assumed that one (1) site visit per week will be scheduled on the same day as the weekly progress meeting described in Task 1. APTIM will coordinate with the Contractor to perform site visits on days when on-site construction activities are scheduled. The activities, observations, photographs, discussions with the Contractor, and other issues will be documented in a daily observation report and submitted to the County. APTIM's on-site representative will:

- Observe construction activities at the beach and periodically visit the upland sand mine(s)
- Visually assess the quality of fill material delivered to the project site and placed on the beach
- Observe the Contractor's work for compliance with the contract documents and permits
- Photograph and document the project as the work progresses
- Communicate issues, deviations, and/or consistencies that may arise
- Attend progress meetings

The proposed budget for this task includes up to 98 days of construction observations, based on the tentative schedule.

Upon completion of sections of constructed beach, two (2) duplicate sand samples will be collected at each FDEP Reference Monument profile line to assess the grain size, silt content, gravel content, and Munsell color for compliance, in compliance with the approved Sediment QA/QC Plan. One (1) sample will be quantitatively tested and the other archived for 120 days after project completion.

Deliverable

APTIM will prepare observation reports summarizing each site visit, which will be used to document the project progress and events. APTIM will prepare a summary table of the sediment samples and test results for the sediment compliance parameters, and a complete set of laboratory testing results as required by the approved Sediment QA/QC Plan. The sediment testing results will be included in the Project Completion Report.

Schedule

A fixed timeline cannot be provided because it is dependent upon the Contractor's progress and construction schedule.

Cost

The lump sum cost for this task is \$207,028.40.

Task 3: Site Observations – Dredge

APTIM will assist the County with engineering services, technical assistance, and on-site observations during construction in order to certify the project was constructed in compliance with the contract documents as Engineer of Record. APTIM will perform site visits on days of active construction, which are assumed to be 7 days per week, and will provide up to twelve (12) hours of observation per visit. It is assumed that one (1) site visit per week will be scheduled on the same day as the weekly progress meeting described in Task 1. APTIM will coordinate with the Contractor to perform site visits on days when on-site construction activities are scheduled. The activities, observations, photographs, discussions with the Contractor, and other issues will be documented in a daily observation report and submitted to the County. APTIM's on-site representative will:

- Observe construction activities at the beach and/or dredge as needed
- Visually assess the quality of fill material delivered to the project site and placed on the beach
- Observe the Contractor's work for compliance with the contract documents and permits
- Photograph and document the project as the work progresses
- Communicate issues, deviations, and/or consistencies that may arise
- Attend progress meetings

The proposed budget for this task includes up to 42 days of construction observations, based on the tentative schedule.

Upon completion of sections of constructed beach, two (2) duplicate sand samples will be collected at each FDEP Reference Monument profile line to assess the grain size, silt content, gravel content, and Munsell color for compliance, in compliance with the approved Sediment QA/QC Plan. One (1) sample will be quantitatively tested and the other archived for 120 days after project completion.

Deliverable

APTIM will prepare observation reports summarizing each site visit, which will be used to document the project progress and events. APTIM will prepare a summary table of the sediment samples and test results for the sediment compliance parameters, and a complete set of laboratory testing results as required by the approved Sediment QA/QC Plan. The sediment testing results will be included in the Project Completion Report.

Schedule

A fixed timeline cannot be provided because it is dependent upon the Contractor's progress and construction schedule.

Cost

The lump sum cost for this task is \$127,890.40.

Task 4: Construction Administration

APTIM will provide necessary interpretations or clarifications of the contract documents requested by the Contractor through the County. APTIM will also make determinations on non-conforming and unauthorized work as described in the project plans and specifications. APTIM will assist the County to prepare field changes or change orders requested by the Contractor, recommended for approval by

APTIM, and agreed to by the County. These documents will be submitted electronically in PDF format unless they must be sealed, at which point a hardcopy will be provided along with an electronic copy at the time of issuance. This scope of work is based on the assumption that there will be a maximum of four (4) change orders and four (4) field adjustments.

APTIM will review daily quality control reports and other submittals provided by the Contractor. APTIM will review and respond to correspondence from the Contractor through the County on an as needed basis. APTIM will also respond to Contractor questions via phone. If the questions are sufficiently technical or the response may deviate from the plans and specifications, APTIM will document these conversations and circulate a summary to the County and Contractor via email. APTIM may require that the Contractor submit an official contract change request.

During construction, APTIM will confer with the County, the Contractor, and regulatory agency staff to review and document that the County has fulfilled reporting requirements cited in the permits. APTIM will assist the County with documentation of permit compliance.

Deliverable

APTIM will provide project-related documentation as described above.

Schedule

A fixed timeline cannot be provided because it is dependent upon the Contractor's progress, construction schedule, and any issues which may arise during construction. However, APTIM work with the project team to administer construction through completion.

Cost

The lump sum cost for this task is \$26,873.00.

Task 5: Payment Review

APTIM will review all invoices for payment submitted by the Contractor and determine the amounts of progress payments due based on completion of work. APTIM will analyze the survey data and compare the requested payment volume to APTIM's computed pay volume. APTIM will also assess whether the Contractor is eligible for other pay items and the amount due.

Deliverable

A letter of payment recommendation will be submitted to the County along with the Contractor's pay request in PDF format.

Schedule

Payment recommendations will be submitted to the County in accordance with the requirements of the County's standard terms and conditions for the project.

Cost

The lump sum cost for this task is \$10,390.00.

Task 6: Project Closeout

APTIM will conduct one (1) substantial completion site visit with the County and Contractor, which will be conducted following dune and beach fill placement. Upon completion of the substantial completion site visit, APTIM will assist the County in the preparation of a punch list of items to be completed by the Contractor prior to final acceptance. APTIM will conduct one (1) final acceptance walkthrough with the County following site restoration, installation of dune vegetation, and demobilization. This final site visit will be conducted to confirm that the Contractor has completed the punch list items.

Deliverable

APTIM will prepare and distribute a punch list to the project team upon completion of the substantial completion site visit. A letter summarizing recommendations for final payment to the Contractor and release of any retainage will be prepared at the completion of the project.

Schedule

APTIM will conduct the substantial completion site visit within seven (7) days of the receipt of written notice from the Contractor of substantial completion. APTIM will conduct the final walkthrough within seven (7) days of receipt of written notice from the Contractor that all punch list items have been completion.

Cost

The lump sum cost for this task is \$6,949.10.

Task 7: Project Report & Certification

After completion of the project and the Contractor has demobilized from the site, APTIM will provide a written Project Completion Report to the County, which will include a summary of the work performed along with a compilation of the pertinent correspondence and data. APTIM will provide a written statement of completion and certification to satisfy permitting requirements noting any deviations from the permitted projects. This certification will state whether the project was constructed in substantial compliance with the plans and specifications. Our certification will be qualified and based on the extent of APTIM's involvement in construction observation.

Deliverable

APTIM will provide one (1) hardcopy of the Project Completion Report and written statement of completion to the County; electronic copies in PDF format will also be provided.

Schedule

The Project Completion Report will be provided within approximately sixty (60) days after completion and acceptance of construction as required by the permit. The written statement of completion and certification will be provided within thirty (30) days after completion and acceptance of construction authorized by the permit.

Cost

The lump sum cost for this task is \$16,334.00.

Task 8: Check Surveys

APTIM will conduct up to two (2) independent check surveys to evaluate discrepancies that may arise between the Contractor's requested pay volume and APTIM's computed pay volume based on the construction plans. This will allow for a prompt, independent check should questions arise regarding the data obtained by the surveyor retained by the Contractor to perform pay surveys. The surveys will be conducted with land-based equipment and extend to sufficient wading depth to complete the data check.

Deliverable

APTIM will include the check survey cross-sections in the Project Completion Report, if applicable.

Schedule

A fixed timeline cannot be provided because it is dependent upon the Contractor's progress and pay survey results. APTIM will mobilize in an expeditious manner according to construction progress.

Cost

The lump sum cost for this task is \$6,050.00

Task 9: Construction Phase Sea Turtle and Shorebird Monitoring

APTIM will oversee the scope of work proposed by EAI and provide the necessary administrative coordination to the County. EAI has provided the enclosed proposal and cost breakdown for sea turtle and shorebird monitoring tasks, which states:

Construction-phase sea turtle and shorebird monitoring and ancillary professional services in support of the Sector 3 Beach and Dune Nourishment project. This scope of work was developed based on conditions and requirements set forth in standard regulatory permits and the following documents:

- *Florida Department of Environmental Protection (FDEP) Joint Coastal Permit (JCP) No. 0285993-009-JC*
- *U.S. Fish and Wildlife Service (USFWS) Revised Statewide Programmatic Biological Opinion (BO) dated March 13, 2015*

The following tasks will be performed under this work order include:

- *Task 1: Pre-construction Meeting*
- *Task 2: Daily Sea Turtle Monitoring and Data Management*
- *Task 3: Nighttime Sea Turtle Monitoring*
- *Task 4: Sea Turtle Nest Protection*
- *Task 5: Construction-phase Nesting Shorebird Monitoring and Protection*

Cost

The lump sum cost for this task is \$91,938.67.

Summary

The total lump sum cost to perform the proposed work described herein for Sector 3 – 2018006 – Work Order #8 is \$385,639.17 if the project is constructed via truck haul (omitting Task 3) or \$306,501.17

(omitting Task 2) if constructed via dredge. Please refer to Exhibit 2, attached to the end of this proposal, for a summary of the costs and labor hours of each Task. APTIM will proceed with the tasks upon receipt of a signed work order from Indian River County (unless stated otherwise in the schedule). It is noted that some aspects of this Work Order are dependent upon Contractor performance and are outside the control of APTIM and the County. As such, the scope, schedule and cost described herein is provided as an estimate. APTIM will strive to execute each phase of the work within budget and in as expeditious a manner according to construction progress. We will coordinate with the County in the event that the scope, schedule, or budget arise due to unforeseen issues or circumstances.

Thank you for the opportunity to serve Indian River County. We look forward to continuing to provide expert professional services to the County. Please do not hesitate to call if you have any questions.

Sincerely,



Nicole S. Sharp, P.E.
Coastal Restoration & Modeling Program Manager
Aptim Environmental & Infrastructure, LLC

Client Authorized Signature

Printed Name

Title



Authorized Corporate Signature

Beau C. Suthard
Printed Name

Program Director
Title

September 9, 2020
Date

cc: Beau Suthard, PG, APTIM
Debbie Neese, APTIM

EXHIBIT 2

**Indian River County, FL
Sector 3 - 2018006 - Work Order #8
Construction Administration**

Summary of Cost by Task

Task Number	Task Name	Labor	Subcontractors	Equipment	Materials	Other ODCs	Mobilization/Demob	Totals
Task 1	Progress Meetings	\$ 20,076.00	\$ -	\$ -	\$ -	\$ -		\$ 20,076.00
Task 2	Site Observations - Truck Haul	\$ 159,220.00	\$ 10,500.00	\$ -	\$ -	\$ -	\$ 37,308.40	\$ 207,028.40
Task 3	Site Observations - Dredging	\$ 98,740.00	\$ 10,500.00	\$ -	\$ -	\$ -	\$ 18,650.40	\$ 127,890.40
Task 4	Construction Administration	\$ 26,873.00	\$ -	\$ -	\$ -	\$ -		\$ 26,873.00
Task 5	Payment Review	\$ 10,390.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,390.00
Task 6	Project Closeout	\$ 6,614.00	\$ -	\$ -	\$ -	\$ -	\$ 335.10	\$ 6,949.10
Task 7	Project Report & Certification	\$ 16,134.00	\$ -	\$ -	\$ -	\$ 200.00	\$ -	\$ 16,334.00
Task 8	Check Surveys	\$ 5,060.00	\$ -	\$ 990.00	\$ -	\$ -	\$ -	\$ 6,050.00
Task 9	Construction Phase Sea Turtle and Shorebird Monitoring	\$ -	\$ 91,938.67	\$ -	\$ -	\$ -	\$ -	\$ 91,938.67
Totals =		\$ 343,107.00	\$ 112,938.67	\$ 990.00	\$ -	\$ 200.00	\$ 56,293.90	\$ 513,529.57

**Indian River County, FL
Sector 3 - 2018006 - Work Order #8
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Summary of Labor Hours and Cost

Labor Title	Labor Bill Rate	Progress Meetings		Site Observations - Truck Haul		Site Observations - Dredging		Construction Administration		Payment Review		Project Closeout		Project Report & Certification		Check Surveys		Construction Phase Sea Turtle and Shorebird Monitoring		Totals	
		Task 1		Task 2		Task 3		Task 4		Task 5		Task 6		Task 7		Task 8		Task 9			
		Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost	Labor Hours	Cost
Principal Engineer/Sr Proj Mgr	\$ 250.00																				
Expert Witness (Testimony)	\$ 300.00																				
Program Manager	\$ 190.00	63	\$ 11,970.00	213	\$ 40,470.00	171	\$ 32,490.00	103	\$ 19,475.00	36	\$ 6,840.00	30	\$ 5,700.00	24	\$ 4,560.00					640	\$ 121,505.00
Sr Coastal Engineer/Proj Mgr	\$ 165.00																				
Coastal Engineer III	\$ 150.00																				
Coastal Engineer II	\$ 125.00							37	\$ 4,625.00	20	\$ 2,500.00			8	\$ 1,000.00					65	\$ 8,125.00
Coastal Engineer I	\$ 105.00	63	\$ 6,615.00	1,028	\$ 107,940.00	528	\$ 55,440.00					6	\$ 630.00	82	\$ 8,610.00					1,707	\$ 179,235.00
Coastal Modeler II	\$ 130.00																				
Coastal Modeler I	\$ 110.00																				
Professional Surveyor & Mapper	\$ 145.00															4	\$ 580.00			4	\$ 580.00
Hydrographer	\$ 135.00																				
Surveyor	\$ 95.00																				
Survey Technician	\$ 80.00															56	\$ 4,480.00			56	\$ 4,480.00
Senior Marine Biologist	\$ 135.00																				
Marine Biologist II	\$ 95.00																				
Marine Biologist I	\$ 72.00																				
Professional Geologist	\$ 150.00			23	\$ 3,450.00	23	\$ 3,450.00													46	\$ 6,900.00
Geologist III	\$ 130.00																				
Geologist II	\$ 95.00																				
Geologist I	\$ 80.00			92	\$ 7,360.00	92	\$ 7,360.00													184	\$ 14,720.00
Senior CAD Operator	\$ 140.00																				
CAD Operator	\$ 105.00							21	\$ 2,205.00	10	\$ 1,050.00			16	\$ 1,680.00					47	\$ 4,935.00
GIS Operator	\$ 105.00																				
Boat Captain	\$ 80.00																				
Bookkeeper	\$ 80.00																				
Clerical	\$ 71.00	21	\$ 1,491.00					8	\$ 568.00			4	\$ 284.00	4	\$ 284.00					37	\$ 2,627.00
Technician	\$ 60.00																				
Subcontractors					\$ 10,500.00		\$ 10,500.00														\$ 112,938.67
Equipment																					\$ 990.00
Materials																					\$ -
Other ODCs																					\$ 200.00
Mobilization/Demob					\$ 37,308.40		\$ 37,308.40														\$ 56,293.90
TOTAL		147	\$ 20,076.00	1,356	\$ 207,028.40	814	\$ 127,890.40	169	\$ 26,873.00	66	\$ 10,390.00	40	\$ 6,949.10	134	\$ 16,334.00	60	\$ 6,050.00	-	\$ 91,938.67	2,786	\$ 513,529.57