



April 20, 2023

Andy Miller, P.E.
Manager
Collier County Coastal Zone Management
2685 South Horseshoe Drive, Unit 103
Naples, Florida 34104

EMAILED

Re: Collier County Dune Restoration Planting Construction Plans, Technical Specifications, and Bid Assistance Services (P2023-063)

Dear Mr. Miller:

On behalf of Taylor Engineering, I am pleased to submit this proposal for professional engineering and environmental services to provide planting design, construction plans and technical specifications, and bid administration assistance in support of the Collier County Dune Restoration Project. Exhibit A describes our proposed scope of work, proposed total fee, and proposed schedule. Exhibit B provides a detailed breakdown of our proposed fees. Exhibit C lists Taylor Engineering's negotiated rates under Agreement No. 18-7432-CZ.

We greatly appreciate the opportunity to continue our service to Collier County. If you have any questions or require additional information, please contact me at (904) 731-7040 or cellis@taylorengeering.com.

Best regards,

Christopher B. Ellis
Vice President, Environmental Services

Attachments



TAYLOR ENGINEERING, INC.**SCOPE OF WORK
FOR
COLLIER COUNTY
PROFESSIONAL SERVICES LIBRARY – COASTAL ENGINEERING CATEGORY
18-7432-CZ****COLLIER COUNTY DUNE RESTORATION PLANTING CONSTRUCTION PLANS,
TECHNICAL SPECIFICATIONS, AND BID ASSISTANCE SERVICES****Introduction**

Collier County (County) is currently constructing a Federal Emergency Management Agency (FEMA)-funded emergency berm project along County beaches. The project aims to restore dunes lost to Hurricane Ian in late September 2022. The project area includes Reach A (Park Shore to Naples Beach; FDEP Reference Monument R-44.3 to R-89), Reach B (Barefoot Beach, Vanderbilt Beach, and Pelican Bay; R-1 to R-36.3), and Marco Island (R-142.3 to G-2). Aptim Environmental & Infrastructure, LLC developed the engineering design for the project. Following construction, the County intends to vegetate the dune with native species to stabilize the berm and enhance the dune ecosystem. To support this effort, the County selected Taylor Engineering (Taylor) to develop construction plans and technical specifications and provide bid assistance services for the dune planting effort. Taylor presents the following scope of work for the requested services.

Assumptions

Taylor made several assumptions in developing this scope of work and associated fees for the project. The assumptions listed below, and throughout this scope of work, affect the proposed level of effort and associated costs. If any of the assumptions prove incorrect, Taylor will submit a proposal to modify our scope of work and fees accordingly. Taylor developed this scope of work under the following assumptions and background information:

- The project area extends from R-1 to R-36.3, R-44.3 to R-89, and R-142.3 to G-2 in Collier County.
- The constructed dune will follow the construction plans developed by Aptim Environmental & Infrastructure, LLC dated February 10, 2023 and provided to Taylor by the County. The County will provide Taylor with the construction plans in AutoCAD format.
- The County has secured the necessary regulatory authorizations for this work.
- The County will advertise the project.
- The County will conduct inspections during planting operations.
- Taylor is not responsible for regulatory compliance and/or completion of permit compliance documentation.
- The County will be responsible for construction observation, inspection, and project certification.
- The County will secure all necessary easements from property owners.

Task 1 Construction Plans and Technical Specifications

Taylor environmental scientists and engineers will develop draft construction plans and technical specifications for the dune restoration planting, post and rope fencing, educational signage, and exotic vegetation removal (if necessary). Taylor will work with County staff and stakeholders (as identified and directed by the County) to develop the dune planting plan. Taylor will participate in two stakeholder meetings to discuss the planting concept plan with the goal of developing a consensus among participants. Taylor will record meeting minutes and distribute the draft meeting minutes to meeting participants for review and comment. Following receipts of comments, Taylor will revise the draft minutes as necessary and prepare final minutes for distribution. We anticipate the planting design will generally consist of sea oats (*Uniola paniculata*) with lesser quantities of other dune grasses and flowering species intermixed or grouped among the sea oats. The draft construction plans will depict the dune restoration design plan provided by the County, limits of the proposed vegetation planting zones (dune foreslope, dune crest, dune backslope, etc.), typical cross sections, planting details (species, size, quantities, and spacing), post and rope locations and details, and educational signage locations and details. The construction plans will include general notes regarding exotic vegetation species removal and will depict specific locations if those areas are provided by the County. This scope of work does not include fieldwork to identify and map exotic vegetation removal locations within the project area.

Taylor will submit the draft construction plans and specifications to the County for review and comment. Following County review, Taylor will schedule and participate in virtual meetings as necessary to discuss the draft construction plans and specifications and requested revisions. Taylor will revise the construction plans and specifications as necessary based on County comments. Taylor will prepare an opinion of probable construction cost for submittal with the final plans and specifications. Taylor will provide final deliverables in digital (.pdf, .dwg, and .doc) and hardcopy (if requested) formats to support project bidding and construction.

Task 2 Bid Administration Assistance

Taylor Engineering will develop the final construction bid package (contract documents) and support the County during the bid solicitation and award phase of the project. We assume the County will prepare and provide its standard "front-end" contract documents for incorporation into the project bid package. We will review these documents for consistency with the construction plans and specifications. Under this scope of work, Taylor's bid administration assistance services include the following activities:

- Compile the contract documents to include the County's standard front-end contracting and purchasing documents, construction plans, technical specifications, and other pertinent documents.
- Assist the County with the distribution of construction contract documents to prospective contractors, if required.
- Attend and provide technical support for a pre-bid conference if the County organizes such a meeting for this project.
- Assist with the development of contract document addenda in response to technical questions from potential bidders.
- Attend the bid opening meeting, if required.
- Review bids, check contractor's technical references, and prepare a written recommendation for contractor selection.

Taylor's review and recommendations will be limited to engineering and technical issues. The County will be responsible for review and evaluation of contractors' financial condition, business licenses or authorizations, bonding, contractual requirements, and any other non-engineering or non-technical information. We will review the bid recommendations with the County and assist it in verifying that all the necessary bid components are in order.

Task 3 Miscellaneous Grant Assistance (Optional Task)

Taylor will provide miscellaneous FEMA grant assistance services as directed by the County. This task may include assistance with grant progress report submittals, compliance documentation, and general coordination related to the FEMA grant. This work would likely occur during and after dune construction and planting is complete. We have allocated a maximum budget of 5,000 for this task. If the labor required to complete this task exceeds this limited budget, Taylor will consult with the County and request a contract amendment for the additional work, if necessary.

Schedule

Taylor Engineering will complete the above-described scope of work within 150 calendar days from receipt of the of the County's written notice to proceed.

Fee

Taylor Engineering will complete the work described herein on a time and materials basis for a total cost not to exceed \$57,007. Exhibit B provides a detailed breakdown of the proposed fees on a task-by-task basis. Taylor will invoice for completed work with labor billed based on the negotiated rates as documented in Agreement No. 18-7432-CZ and included here as Exhibit C.

TAYLOR ENGINEERING, INC.
COST SUMMARY BY TASK (ESTIMATE)
P2022-063: COLLIER CO. DUNE PLANTING DESIGN, SPECIFICATIONS, AND BID ASSISTANCE

TASK 1: Construction Plans and Technical Specifications

<i>Labor</i>	Hours	Hourly Rate	Cost	Task Totals
Principal	12.0	231.00	2,772.00	
Project Manager	28.0	160.00	4,480.00	
Senior Engineer	38.0	177.00	6,726.00	
Engineer	48.0	130.00	6,240.00	
Senior Environmental Specialist	56.0	167.00	9,352.00	
Environmental Specialist	20.0	120.00	2,400.00	
CADD Technician	68.0	107.00	7,276.00	
Clerical/Administrative	8.0	73.00	584.00	
Total Man-Hours	278.0			
Labor Cost				39,830.00
<i>Total Task 1</i>				39,830.00

TASK 2: Bid Administration Assistance

<i>Labor</i>	Hours	Hourly Rate	Cost	Task Totals
Project Manager	12.0	160.00	1,920.00	
Senior Engineer	22.0	177.00	3,894.00	
Senior Environmental Specialist	36.0	167.00	6,012.00	
Clerical/Administrative	4.0	73.00	292.00	
Total Man-Hours	74.0			
Labor Cost				12,118.00
<i>Total Task 2</i>				12,118.00

TASK 3: Miscellaneous Grant Assistance (Optional Task)

<i>Labor</i>	Hours	Hourly Rate	Cost	Task Totals
Project Manager	6.0	160.00	960.00	
Senior Engineer	6.0	177.00	1,062.00	
Engineer	6.0	130.00	780.00	
Senior Environmental Specialist	6.0	167.00	1,002.00	
Environmental Specialist	6.0	120.00	720.00	
CADD Technician	5.0	107.00	535.00	
Total Man-Hours	35.0			
Labor Cost				5,059.00
<i>Total Task 3</i>				\$ 5,059.00

Total \$ 57,007.00

Rate Schedule
(Agreement No. 18-7432-CZ)

Title	Hourly Rate
Principal	\$231
Senior Project Manager	\$203
Project Manager	\$160
Senior Engineer	\$177
Engineer	\$130
Senior Inspector	\$126
Inspector	\$93
Senior Planner	\$150
Planner	\$120
Senior Designer	\$140
Designer	\$105
Environmental Specialist	\$120
Senior Environmental Specialist	\$167
Scientist/Geologist	\$115
Senior Scientist/Geologist	\$153
Marine Biologist/Hydrogeologist	\$120
Senior Marine Biologist/Hydrogeologist	\$145
Senior GIS Specialist	\$155
GIS Specialist	\$115
Clerical/Administrative	\$73
Senior Technician	\$103
Technician	\$83
Surveyor and Mapper	\$125
CADD Technician	\$107
Survey Crew - 2 man	\$145
Survey Crew - 3 man	\$180
Survey Crew - 4 man	\$215
Senior Architect	\$160
Architect	\$125

The above hourly rates are applicable to Time and Materials task(s) only. The above list may not be all inclusive. Hourly rates for additional categories required to provide particular project services shall be mutually agreed upon by the County and firm, in writing, on a project by project basis, as needed, and will be set forth in the Work Order agreed upon by the parties.

Grant Funded: The above rates are for purposes of providing estimate(s), as required by the grantor agency.

TAYLOR ENGINEERING, INC.

ESTIMATED SCHEDULE
FOR
COLLIER COUNTY
PROFESSIONAL SERVICES LIBRARY – COASTAL ENGINEERING CATEGORY
18-7432-CZ

COLLIER COUNTY DUNE RESTORATION PLANTING CONSTRUCTION PLANS,
TECHNICAL SPECIFICATIONS, AND BID ASSISTANCE SERVICES

Estimated Project Schedule

Task No.	Description	Days from Notice to Proceed				
		30	60	90	120	150
1	Construction Plans and Technical Specifications	■	■			
2	Bid Administration Assistance		■	■		
3	Miscellaneous Grant Assistance (Optional Task)			■	■	■

Note: Please note this is an estimated schedule. Actual project schedule may vary depending on County-controlled timeframes for project elements including stakeholder coordination, bidding, and construction.



Rotation Request Form

Request Date	Contract No.	Proposal Cost Estimate	Construction Cost Estimate
3/13/2023	18-7432 CZ	\$40,000.00	\$2,000,000.00
Requested By (Use name as it appears in Outlook): Larry Humphries		Division / Department: Capital Project Planning, Impact Fees, & Program Management / Transportation Management Services	
Library Category: Coastal Engineering			▼
Work Assignment Title: Hurricane Ian - Dune Replanting			
Brief Description of Requested Services: <p>In September 2022, Hurricane Ian destroyed our dune system along the Gulf side of Collier County. Emergency Dune replacement is scheduled to begin April 2023 and will require new vegetation to be planted on newly completed dunes. Engineering firm to provide a design, technical specifications and bid administration for Barefoot, Vanderbilt, Park Shore, Naples and Marco Island Beach Dune Vegetation Planting Project.</p>			
Requestor: Larry Humphries		Signature: HumphriesLa rry	Digitally signed by Humphries.Larry Date: 2023.03.13 11:05:09 -04'00' Date: 3/13/2023
Procurement Use Only			
Vendor on Rotation: Taylor Engineering, Inc.		Approved by: McCannaC ynthia	Digitally signed by McCannaCynthia Date: 2023.03.13 14:18:39 -04'00' Date: 3/13/2023

Return this completed form to: ProcurementSrvcsReq@colliercountyfl.gov

Please be sure to attach the fully approved form to the requisition in SAP.

Also note that Rotations are valid for 90 days.

If you do not need these services within this time frame please let us know so we can put the vendor back into rotation.

Firms wishing to reject an assignment must complete a Work Rejection Form. The completed form must be provided to both the Procurement Division and Project Manager.