

## **EXECUTIVE SUMMARY**

**Recommendation to approve Work Order with Coastal Engineering Consultants (CEC) to permit a long term maintenance program to reshape the beach on Marco Island under contract CE-FT-09-5262-CZ for a not to exceed amount of \$35,190.**

---

**OBJECTIVE:** To move forward to permit a long term maintenance program to reshape the beach on Marco Island from monuments R-135 to R-143.

**CONSIDERATIONS:** The purpose of this program is to mechanically grade the beach using existing sand to remove high spots and fill low areas where water tends to accumulate.

This scope of services defines the data collection and analysis need necessary to determine if a CCCL, Joint Coastal Permit (JCP) or other application is the appropriate mechanism for permitting this work and to then assist the County prepare and submit the required permit application and supporting documents.

**FISCAL IMPACT:** The Source of funds is from Category "A" Tourist Development Tax. Budget is available for the project in Fund 195.

**GROWTH MANAGEMENT IMPACT:** There is no impact to the Growth Management Plan related to this action.

**ADVISORY COMMITTEE RECOMMENDATION:** At the January 12, 2012 CAC meeting award of this Work Order in the amount of \$35,190 to CEC was approved 6 to 1.

**LEGAL CONSIDERATIONS:** This item has been reviewed by the County Attorney's Office, requires majority vote, and is legally sufficient for Board action. – CMG

**RECOMMENDATION:** To approval Work Order with CEC in establishing a long term maintenance program to reshape the beach on Marco Island under contract CE-FT-09-5262-CZ for a not to exceed amount of \$35,190.

**PREPARED BY:** J. Gary McAlpin, P.E., Director, Coastal Zone Management Department

**SCHEDULE "A"**  
**WORK ORDER NO. 1**

Coastal Engineering Consultants Inc. (CEC) proposes to assist Collier County in establishing a long term maintenance program to reshape the beach on Marco Island from monuments R-135 to R-143. The purpose of this program is to mechanically grade the beach using existing sand to remove high spots and fill low areas where water tends to accumulate.

This scope of services defines the data collection and analysis need necessary to determine if a CCCL, Joint Coastal Permit (JCP) or other application is the appropriate mechanism for permitting this work and to then assist the County prepare and submit the required permit application and supporting documents.

**TASK 1: DESIGN SURVEY**

Conduct a topographic design survey of the project area consisting of profiles at each R-monument and mid-way between each monument beginning at R134.5 and ending at R-143. Each survey line will extend from 25' landward of the vegetation line (or the boundary with a developed property) seaward to approximately 50 feet beyond the mean low water line (MLW).

**TASK 2: PRELIMINARY DESIGN**

Utilizing the results of the survey, prepare the preliminary design to improve drainage by reshaping the beach. Compute the necessary volumes to achieve the regrading and balance the cut versus fill quantities. The design plan will include the following: project location map, site plan of existing conditions, drawing of proposed "re-shaped" beach; and typical existing and proposed sections at each survey line. The existing conditions site plan and sections drawings will identify the 0.0 contour line, mean high and low water lines, seasonal high water line and the vegetation/ limits of development line.

Using the existing and proposed conditions, apply the SBEACH model to analyze how the proposed grading would result, if at all, in a change to the protective value of the beach compared to existing conditions. CEC will submit the draft preliminary design plan and modeling results to Collier County Coastal Zone Management (CZM) for review and approval. CEC shall incorporate County review comments and prepare the preliminary design plan for use in permitting the project.

**TASK 3: PRE-APPLICATION MEETING**

CEC shall arrange, prepare for, and attend via teleconference or webinar a pre-application meeting with the Florida Department of Environmental Protection (FDEP). CEC will present the preliminary design plan and modeling results to FDEP and request determination from FDEP on the type of permit (CCCL, JCP, or other) required to complete the project. CEC will also request guidance on the information and fees FDEP required to process the permit.

#### **TASK 4: PERMIT APPLICATION AND SUBMITTAL**

Based on the direction provided by DEP at the pre-application meeting, CEC shall prepare for County review and approval, a draft permit application for the FDEP authorizations required for the Project. The application shall include the following:

- Project Description, Justification Statement, and Schedule,
- Description of Construction Methods,
- County provided documents (e.g. agent authorization letter, permit fees),
- City of Marco Island consistency letter with comprehensive plan (provided by County), and
- Permit drawings.

CEC will verify the application processing fee amount and notify the County when payment by the County is due to FDEP. In the application, CEC will request: Construction plans and technical specifications be a condition of the permit for issuance of a "Notice to Proceed."

CEC shall incorporate County review comments and submit the permit application and supporting documents to the FDEP.

#### **TASK 5: REQUEST FOR ADDITIONAL INFORMATION (RAI) RESPONSE**

CEC will prepare a draft RAI response for review and comment by CZM. CEC shall incorporate County review comments and submit the RAI response to FDEP. It is assumed that existing information will be sufficient to meet permit application requirements with minor adjustments, clarifications, or analysis. If FDEP mandates additional surveys, geotechnical data, modeling analyses, or studies beyond those identified herein, CEC will undertake these additional tasks under the Contingency Task or separate authorization as may subsequently be approved by the County.

#### **TASK 6: OWNER COORDINATION/STAKEHOLDER MEETINGS**

This task includes coordination with the CZM and attending up to two (2) stakeholder meetings (e.g. CAC, City Council); and written or phone correspondence in reference to the project beyond the scope of tasks described above.

#### **TASK 7: CONTINGENCY**

In the event additional field work, design services, meetings, or agency coordination beyond those specified in the above scope is required, a contingency budget is recommended.

#### **ASSUMPTIONS**

The scope and budget estimates for the Project are based on the following assumptions.

1. A State CCCL or JCP permit will be the preferred permit for authorization of a long term maintenance program.
2. A permit will not be required from the U.S. Army Corps of Engineers
3. All construction work will be performed outside of shorebird and sea turtle nesting seasons.

**Collier County**

**CEC Contract No. 09-5262**

*Marco Beach Laser Grading*

*Scope of Work*

4. Collier County will provide copies of past permits that authorized previous grading events for this segment of Marco Island Beach.
5. Collier County CZM will provide the required local consistency letter and any other documents required by the local governing agencies.
6. No final design, bid, or construction administration services are included in this scope.

**BUDGET**

<b>TASK</b>	<b>DESCRIPTION</b>	<b>TIME AND MATERIALS</b>
1	Design Survey	\$3,900
2	Preliminary Design	\$6,620
3	Pre-application Meeting	\$2,090
4	Permit Application and Submittal	\$6,155
5	RAI Response	\$6,035
6	Owner Coord. & Stakeholder Mtgs	\$5,460
7	Contingency	\$4,930
	<b>TOTAL</b>	<b>\$35,190</b>

## Marco Beach Laser Grading Detailed Summary of Estimated Fees

CEC File No. 12.002

January 9, 2012

Coastal Engineering Consultants														
Task Description	Principal Engineer	Principal Geologist	Sen. Project Manager	Coastal Modeler	Surveyor & Mapper	One-man RTK	Coastal Planner	CADD Technician	Clerical	Total Fees	Direct Costs		Subtask Total	Task Total
	\$195	\$195	\$165	\$135	\$130	\$130	\$110	\$85	\$60		Amount	Description		
<b>Task 1: Design Survey</b>														<b>\$3,900</b>
Topographic Survey	1		1		12	10		8		\$3,900			\$3,900	
<b>Task 2: Preliminary Design</b>														<b>\$6,620</b>
Data analysis and prepare preliminary design plan	1	1	2	4	4			16		\$3,140			\$3,140	
Modeling	4			20						\$3,480			\$3,480	
<b>Task 3: Pre-application Meeting</b>														<b>\$2,090</b>
Coordinate and attend pre-application meeting	4		6		2				1	\$2,090			\$2,090	
<b>Task 4: Permit Application and Submittal</b>														<b>\$6,155</b>
Permit preparation and submittal	4	1	16	8			4	8	4	\$6,055	\$100	Repro & Delivery	\$6,155	
<b>Task 5: RAI Response</b>														<b>\$6,035</b>
Prepare and submit RAI response	4	1	16	8			4	8	2	\$5,935	\$100	Repro & Delivery	\$6,035	
<b>Task 6: Owner Coordination/Stakeholder Mtgs</b>														<b>\$5,460</b>
Owner Coordination	4		4						2	\$1,560		\$0	\$1,560	
Stakeholder Meetings	8		8				2	8	2	\$3,900			\$3,900	
<b>Task 7: Contingency</b>														<b>\$4,930</b>
	8		8	6			2	8	4	\$4,830	\$100	\$0	\$4,930	
<b>Total Hours :</b>	38	3	61	46	18	10	12	56	15					
<b>Total Costs:</b>	\$7,410	\$585	\$10,065	\$6,210	\$2,340	\$1,300	\$1,320	\$4,760	\$900	\$34,890	\$200		\$35,090	<b>\$35,190</b>

\* Assumptions for the work and associated fees are included in the Scope of Work Proposal