

EXECUTIVE SUMMARY

Recommendation to accept a proposal from CB&I Environmental & Infrastructure, Inc. dated July 13, 2015 for the Tropical Storm Debby beach renourishment design, permitting and Engineer of Record certification; approve a Work Order under Contract 15-6382 for a not to exceed amount of \$57,649, authorize the County Manager or his designee to execute this work order and make a finding that this item promotes tourism (Project No. 90061).

OBJECTIVE: To provide design, permitting and Engineer of Record services as required to execute a beach renourishment to repair damages caused by Tropical Storm (TS) Debby and authorized by Federal Emergency Management Agency (FEMA) PW 1079.

CONSIDERATIONS: The Federal Emergency Management Agency (FEMA) has authorized the repair of South Marco Island with 13,228 CY's of sand as a result of damages incurred from Tropical Storm Debby. CB&I Environmental & Infrastructure, Inc. (CB&I will provide the engineering and permitting services to support the County during preparations and construction of a truck haul beach renourishment on Marco Island to replace Tropical Storm Debby losses.

This project will be grant reimbursed by FEMA, Florida Department of Emergency Management (FDEM) and the Florida Department of Environmental Protection (FDEP).

FISCAL IMPACT: Funding for this project is available in TDC Beach Renourishment Fund (195), Project No. 90061. This project will be grant reimbursed by FEMA at 75% and FDEM at 12.5%. The remaining 12.5% will be reimbursed by FDEP at approximately 20%.

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

ADVISORY COMMITTEE RECOMMENDATIONS: At the September 10, 2015 CAC meeting this item was unanimously recommended for approval by a 6 to 0 vote.

LEGAL CONSIDERATIONS: This item has been approved as to form and legality and requires majority vote for approval. – CMG

RECOMMENDATION: That the Board of County Commissioners accepts a proposal from CB&I Environmental & Infrastructure, Inc. dated July 13, 2015 for the Tropical Storm Debby beach renourishment design, permitting and Engineer of Record certification; approve a Work Order under Contract 15-6382 for a not to exceed amount of \$57,649, authorizes the County Manager or his designee to execute this work order and make a finding that this item promotes tourism.

Prepared By: J. Gary McAlpin, P.E., Coastal Zone Management, Capital Project Planning, Impact Fees and Program Management Division

Attachments: A) Proposal



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July 13, 2015

Gary McAlpin, Director
Collier County Coastal Zone Management
2800 N. Horseshoe Drive
Naples, FL 34104

**Re: Collier County Marco Island: Design, Permitting, Construction Plans & Specifications,
Bidding Assistance and Engineer of Record
(Contract No. 15-6382-CZ "Grant Funded Professional Services for Coastal Zone")**

Dear Gary:

This letter is in response to Collier County's request for a proposal for CB&I Environmental & Infrastructure, Inc. (CB&I) to perform staff engineering tasks under the above referenced contract, to support the County during preparations and construction of a truck haul construction on Marco Island. CB&I will design the fill placement templates, pursue minor permit modifications to allow for the use of upland sand sources, produce construction plans and technical specifications, provide bidding assistance to the County, and serve as the engineer of record for construction. A detailed scope of work is attached in Exhibit A.

A fee proposal is included as Exhibit B, and the rate schedule is provided as Exhibit C. The cost with time and materials is not to exceed \$57,649.00.

All work will be completed within 365 days of receiving the Notice to Proceed.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Tom P.", written over a blue horizontal line.

Thomas P. Pierro, P.E., D.CE.
Vice President
CB&I Environmental & Infrastructure, Inc.

cc: Tara Brenner, P.G., CB&I
Stephen Keehn, P.E., CB&I



Exhibit A
Scope of Work

South Marco Island: Design, Permitting, Construction Plans & Specifications
Collier County, Florida
Scope of Work
Contract Number 15-6382

Introduction

Federal Emergency Management Agency (FEMA) has authorized the repair of South Marco Island with 13,228 cy of sand as a result of damages incurred from Tropical Storm Debby (PA-04-FL-4068-PW-01079). CB&I Environmental & Infrastructure, Inc. (CB&I) will provide the engineering services described below as required to support the County during preparations and construction of a truck haul beach renourishment on Marco Island to replace Tropical Storm Debby losses.

1. Design

Assuming the County will provide data from an existing 2015 monitoring survey for use as the pre-construction design condition, CB&I will review the survey data and design fill placement templates in accordance with the existing permits. The objective of the design will be to place sand in accordance with FEMA's PW.

The design fill template will include berm elevations and range from the R-monument, design slopes and taper sections. Volume calculations will be completed to determine the quantity of sand needed to fill the template at each profile. The distribution of sand will be in accordance with the FEMA PW and the established permit limits. A complete set of design documents will be provided to the County for review. Upon approval from the County, CB&I will incorporate this final design into the construction documents.

2. Permitting

On behalf of the County, CB&I will pursue minor permit modifications to existing South Marco Island Nourishment permits (FDEP: Permit No. 0235209-003-JC and USACE: Permit No. SAJ-2005-2726 (IP-MN)). The modifications will be to allow for the use of upland sand sources for nourishment of South Marco Island.

CB&I will provide the additional sand source data to FDEP in order to add the three previously permitted upland sand mines (Stewart's Immokalee, Vulcan Witherspoon & CEMEX Lake Wales). Geologists familiar with these upland sand sources and the County's needs will conduct compatibility analyses and provide an upland sand source sediment QA/QC plan. Beach samples from the most recent nourishment project will be used to represent existing beach conditions for FDEP requirements.

It is expected that a minor permit mod for use of upland sands will result in the USACE reinitiating consultation with U.S. Fish and Wildlife Service (USFWS) in order to amend the Biological Opinion (BO) to include an upland sand source for this project. Part of this coordination will likely include consultation on possible impacts to the Florida panther due to the transport from upland mines to the project area. Recently listed loggerhead turtle critical habitat

is not located within the project area; however, the USACE may choose to consult with USFWS and National Marine Fisheries Service (NMFS) for potential impacts to critical habitat located immediately south of the project area. CB&I biologists and engineers will coordinate with the FDEP, Florida Fish and Wildlife Conservation Commission (FWC), USACE, USFWS and NMFS and reply to their requests for additional information to support the modifications to the FDEP and USACE permits to allow use of upland sand sources. This proposal assumes that the minor permit modifications will not require preparation of a Biological Assessment (BA) or Essential Fish Habitat (EFH) Assessment.

3. Pre-Construction

To prepare for construction of the truckhaul project, CB&I will prepare construction plans and technical specifications, provide bidding assistance, and obtain a notice to proceed.

CB&I will prepare construction documents including construction plans and specifications necessary for bidding the project. CB&I will prepare technical specifications and supplemental general provisions to support the County's bid process. Detailed drawings incorporated into the plans will be prepared to scale and will serve as the basis for the contract drawings in the final package sent to prospective bidders. Drawings will include the topographic & bathymetric survey data, in plan and profile views and include construction access points and easements. Submittals will be provided to the County for review and comment. We will revise any changes promptly and furnish the final construction drawings for approval prior to reproduction of signed and sealed copies of the plans suitable for distribution to FDEP and the County. CB&I will also provide the constructions plans and specifications in pdf format, suitable for electronic bidding.

CB&I will assist the County in their lead of the bidding process. CB&I will attend the Pre-Bid Meeting, and will prepare a basic addendum if needed. Once the bids have been opened, CB&I will assist the County in reviewing the bids and provide a recommendation to the County based on a review of the submitted bids.

In support of acquiring a Notice to Proceed from FDEP, CB&I will submit the following information:

1. Sediment analysis results of a recent sample collected from the upland sand mine, representative of the fill that will be used for construction of this project.
2. Turbidity monitoring qualifications. The names and qualifications of individuals performing water quality functions along with 24-hour contact information shall be submitted for approval.

4. Engineer of Record

As the engineer of record, CB&I will conduct during- and post-construction tasks necessary for certification of the project. A CB&I engineer will attend the pre-construction conference. During construction, CB&I will support the County's inspection efforts and perform occasional site visits to inspect the work. Based largely on surveys, daily reports and observations made by the contractor and County inspectors, CB&I will prepare an as-built report and certification to meet permit requirements.

Summary

This work will be performed on a time and materials (T&M) basis with a cost not to exceed \$57,649.00 as outlined in the attached fee spreadsheet. The work will be completed within 365 days of receipt of the Notice to Proceed.

Confidentiality Statement

The information contained in this proposal is confidential commercial information and shall not be disclosed, except for evaluation purposes, provided that if a contract is awarded to CB&I Environmental & Infrastructure, Inc. as a result of or in connection with the submission of this proposal, the requester shall have the right to use or disclose the data to the extent provided in the contract. This restriction does not limit the requestor's right to use or disclose any technical data obtained from another source without restriction.



**Exhibit B
Fee Proposal**

EXHIBIT B

Fee Proposal For:
 South Marco Design, Permitting, Construction Plans & Specs, Bidding Assistance, and Engineer of Record
 Collier County, Contract No. 15-6382

July 9, 2015

| Task Item | Cost | Principal (Hours) | Senior Project Manager (Hours) | Project Manager (Hours) | Planner/ Coastal Engineer (Hours) | Senior Environmental Specialist/ Professional Geologist (Hours) | Scientist/ Geologist (Hours) | Senior Marine Biologist/ Hydrogeologist (Hours) | Marine Biologist/ Hydrogeologist (Hours) | Senior GIS Specialist (Hours) | GIS Specialist (Hours) | Senior Designer (Hours) | Surveyor and Mapper/ Professional Surveyor & Mapper (Hours) | Environmental Specialist/ Surveyor (Hours) | Clerical/ Administrative (Hours) | Meals | Mileage | Tolls |
|--|--------------------|----------------------|--------------------------------------|-------------------------------|--|--|------------------------------------|--|--|-------------------------------------|------------------------------|-------------------------------|--|---|--|----------|----------|---------|
| 1 Design | \$11,308.00 | 1 | 4 | 24 | 12 | | | | | 4 | | 40 | 1 | 2 | | | | |
| 2 Permitting | \$15,411.00 | 1 | 4 | 28 | 10 | 4 | 16 | 36 | 8 | 2 | 10 | | | | | | | |
| 3 Pre-Construction - Plans & Specs., Bidding Assistance, NTP, Pre-Con. Conference | \$17,722.25 | 2 | 6 | 40 | 36 | 1 | 4 | 2 | 2 | 4 | | 40 | | | 1 | 250 | 1 | |
| 4 Engineer of Record - Construction Services & As-Built Certification | \$13,207.75 | 1 | 4 | 36 | 40 | | | 1 | | 2 | | 12 | | | 4 | 3 | 750 | 3 |
| | Total Hours = | 5 | 18 | 128 | 98 | 5 | 20 | 39 | 10 | 12 | 10 | 92 | 1 | 2 | 4 | 4 | 1000 | 4 |
| | Rate = | \$207 | \$173 | \$148 | \$111 | \$135 | \$94 | \$139 | \$111 | \$146 | \$103 | \$115 | \$121 | \$110 | \$63 | \$36.00 | \$0.445 | \$12.00 |
| | Cost = | \$1,035 | \$3,114 | \$18,944 | \$10,878 | \$675 | \$1,880 | \$5,421 | \$1,110 | \$1,752 | \$1,030 | \$10,580 | \$121 | \$220 | \$252 | \$144.00 | \$445.00 | \$48.00 |
| TIME & MATERIALS TOTAL | \$57,649.00 | | | | | | | | | | | | | | | | | |



Exhibit C
Rate Schedule

SCHEDULE B

RATE SCHEDULE

| Title | Rate |
|--|-------------|
| Principal | \$207.00 |
| Senior Project Manager | \$173.00 |
| Project Manager | \$148.00 |
| Senior Engineer | \$158.00 |
| Engineer | \$124.00 |
| Senior Inspector | \$97.00 |
| Inspector | \$77.00 |
| Senior Planner | \$140.00 |
| Planner | \$111.00 |
| Senior Designer | \$115.00 |
| Designer | \$95.00 |
| Environmental Specialist | \$110.00 |
| Senior Environmental Specialist | \$135.00 |
| Scientist/Geologist | \$94.00 |
| Senior Scientist/Geologist | \$119.00 |
| Marine Biologist/Hydrogeologist | \$111.00 |
| Senior Marine Biologist/Hydrogeologist | \$139.00 |
| Senior GIS Specialist | \$146.00 |
| GIS Specialist | \$103.00 |
| Clerical/Administrative | \$63.00 |
| Senior Technician | \$86.00 |
| Technician | \$73.00 |
| Surveyor and Mapper | \$121.00 |
| CAD Technician | \$82.00 |
| Survey Crew - 2 man | \$136.00 |
| Survey Crew - 3 man | \$172.00 |
| Survey Crew - 4 man | \$205.00 |
| Senior Architect | \$155.00 |
| Architect | \$122.00 |

This list is not intended to be all inclusive. Hourly rates for other categories of professional, support and other services shall be mutually negotiated by Collier County and firm on a project by project basis as needed.

