

**AMENDMENT #5 TO CONTRACT NO. 2005000193  
AGREEMENT BETWEEN CHARLOTTE COUNTY AND  
COASTAL ENGINEERING CONSULTANTS, INC.  
FOR ENGINEERING SERVICES FOR PIRATE HARBOR WATERWAY**

THIS AMENDMENT No. 5 to Contract No. 2005000193 (the "Amendment") is made and entered into this 22<sup>nd</sup> day of April, 2014, by and between CHARLOTTE COUNTY, a political subdivision of the State of Florida, 18500 Murdock Circle, Port Charlotte, Florida 33948-1094 (hereinafter referred to as County), and COASTAL ENGINEERING CONSULTANTS, INC., 3106 South Horseshoe Drive, Naples, Florida 34104 (hereinafter referred to as Consultant).

**WITNESSETH**

WHEREAS, the parties entered into Contract No. 2005000193 (the "Contract") on August 11, 2005, for Consultant to provide engineering services for the Pirate Harbor Waterway (hereinafter the "Project") for the Charlotte County Public Works Department, in accordance with the provisions of Section 287.055, Florida Statutes; and

WHEREAS County desires to acquire additional engineering services for the Project from Consultant, as described herein and Consultant desires to provide said additional services in accordance with the Contract, Consultant's proposal, this Amendment and subsequent negotiations between the parties.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, County and Consultant wish to amend the Contract to provide for the aforementioned additional engineering services for the Project.

**ARTICLE I**  
**INCORPORATION / COMPENSATION / SERVICES**

1.1 The above Recitals are hereby incorporated herein and made a part of this Amendment.

1.2 The attached Exhibit 1 is specifically incorporated into, and made a part of this Amendment. The provisions of this Amendment and Exhibit 1 attached hereto, are specifically incorporated into, and made a part of, the Contract.

1.3 This Amendment shall consist of the services which Consultant agrees to perform in accordance with the terms found in this Amendment, the attached Exhibit, and the Contract. Those services are as follows:

1.3.1 County agrees to pay to Consultant an amount not to exceed One Hundred Twenty Four Thousand Six Hundred Dollars (\$124,600.00) to perform those services listed in the attached Exhibit 1, entitled *Scope of Work: Pirate Harbor Entrance Channel Dredging, CEC File No. 11.132, April 8, 2014.*

**ARTICLE II**  
**MISCELLANEOUS**

2.1 Any terms used in the Amendment shall have the same meanings and definitions as they have in the Contract.

2.2 All other provisions of the Contact not in conflict with this Amendment shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have caused the execution of these premises as of the date and year first above written.

**WITNESSES:**

Signed By: Karen Taylor  
Print Name: KAREN Taylor  
Date: 5-5-14  
Signed By: Donna R. Behtfield  
Print Name: Dana R. Behtfield  
Date: 5/5/2014

COASTAL ENGINEERING  
CONSULTANTS, INC.  
Signed by: [Signature]  
Print Name: MICHAEL POE  
Title: V-P  
Date: 5/5/14

**ATTEST:**

Barbara T. Scott, Clerk of Circuit Court and Ex-officio Clerk to the Board of County Commissioners

By: Michelle DiBernardino  
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS  
OF CHARLOTTE COUNTY, FLORIDA

By: [Signature]  
Kenneth W. Doherty, Chairman  
Date: 4/23/14



APPROVED AS TO FORM  
AND LEGAL SUFFICIENCY

By: [Signature]  
Janette S. Knowlton, County Attorney  
LR 14-2804

Exhibit List

Exhibit 1 - Scope of Work: Pirate Harbor Entrance Channel Dredging, CEC File No. 11.132, January 17, 2014. APRIL 8, 2014



A CECI GROUP COMPANY

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Civil Engineering

Planning Services

Survey & Mapping

Coastal Engineering

Environmental Services

Website: [www.coastalengineering.com](http://www.coastalengineering.com)

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**SCOPE OF WORK: PIRATE HARBOR ENTRANCE CHANNEL DREDGING**

**CEC File No. 11.132**

**Revised April 8, 2014**

**PROJECT DEFINITION:**

The County and residents have expressed an interest in dredging the Entrance Channel to Pirate Harbor to accommodate the existing vessel fleet extending from the main channel in Charlotte Harbor to the existing residential canals maintained by the Pirate Harbor MSBU within the subdivision. The design of the channel shall utilize an appropriate dredge geometry, width, and depth. The County shall provide the design vessel characteristics.

**SCOPE OF SERVICES:**

**ADMINISTRATIVE CHANGE ORDER**

**TASK 1: PLAN UPDATE AND ERP SUBMITTAL**

**TASK 1 A: BATHYMETRIC AND NATURAL RESOURCE SURVEY UPDATE**

Conduct an update of the bathymetric survey of the Pirate Harbor Entrance Channel for use in channel design, determining the volume in the proposed channel, and permitting the Project. The centerline distance of the channel is estimated at 5,000 feet. Data will be collected along a continuous centerline of the channel, and cross sections will be measured at a minimum of 100-foot intervals. Tidal fluctuations will be measured and compensated for on the survey vessel using Real Time Kinematic (RTK) Global Positioning System (GPS) technology. Data will be collected along cross sections with an upland crew in areas averaging less than 2 feet of water. CEC shall reduce the collected survey data to the relative datum in order to produce the associated data deliverables. The data shall be presented on the aerial photograph and reference Florida West Zone 1983. Vertical elevations will be referenced to the North American Vertical Datum of 1988 (NAVD88). All work activities and deliverables shall be conducted in accordance with the latest State and Federal Technical Specifications for Topographic and Bathymetric Surveying.

Concurrently, conduct an update of the Natural Resource Survey including mapping of the submerged aquatic vegetation (SAV), oyster beds, hard or soft corals, and sponges for use in channel design, permitting the Project, and developing a mitigation plan to offset impacts to SAV.

**TASK 1 B: JET PROBE STUDY**

Conduct a geotechnical survey including jet probing and sediment sampling to determine subsurface characteristics within the proposed dredge area. Probes extending to a minimum of -2' below the design dredge depth or refusal shall be performed.

**TASK 1 C: UPDATE CHANNEL DESIGN**

Prepare a preliminary design plan to accommodate the design vessel draft and beam and to minimize impacts to natural resources while balancing dredge volume and avoiding underlying rock (if

present). Review the draft deliverables with the County to obtain their input and complete one round of edits to the Preliminary Design Plan.

Develop a Preliminary Opinion of Probable Construction Cost based on a  $\pm 25\%$  margin of error. Construction costs shall be broken down by project feature such as mobilization and demobilization, spoil site preparation, dredge channel excavation and spoil placement, rock removal and disposal, maintenance of traffic, and environmental protection.

**TASK 1 D: ENVIRONMENTAL RESOURCE PERMIT APPLICATION**

**Permit Drawings:** Prepare permit drawings detailing the proposed Project including the following information.

- Existing Conditions Plan
- Proposed Dredge Plan
- Proposed construction access, staging area, and barge transport routes
- Proposed construction methods; erosion, sediment, and turbidity control measures; and best management practices
- Manatee, water quality and sea grasses (if necessary) protection plans during construction.

**Permit Application:** Prepare technical materials for inclusion in the Project's ERP Application to the permit agencies including the following attachments. Provide County with a list of items they will be required to provide support of application (e.g. permit fees, executed application, letter of consistency with local Zoning and Comprehensive Plan).

- Permit drawings
- Justification Statement to document the need for the Project
- Maps and Aerial photos
- Adjacent property owners.

**Pre-Application Meetings:** Conduct one pre-application meeting with FDEP and USACE to engage agency staff to informally facilitate agency consideration of the Project and address initial questions.

**TASK 1 E: STAKEHOLDER MEETING**

Attend one meeting with the County and stakeholders to present the Preliminary Design Plan, identify issues, and address concerns related to Project elements.

**TASK 1 F: ERP PERMIT SUBMITTAL**

Incorporate stakeholder and agency comments in to the ERP Application package. Assemble and review the ERP package with the County. Make one set of revisions and submit the ERP to the state and federal permit agencies.

**PROFESSIONAL FEES:**

Below is a budget summarizing the Professional Fees for the above described Scope of Services.

<b>ADMINISTRATIVE CHANGE ORDER</b>	<b>BUDGET</b>
Task 1. PLAN UPDATE AND ERP SUBMITTAL	\$ 30,900
EXISTING FUNDS (Transferred from Amendment 4)	\$ (30,900)
CHANGE ORDER TOTAL	\$ 0

**ADMENDMENT 5: ADDITIONAL SERVICES AND FEES**

**TASK 2: ERP PERMIT PROCESSING**

**TASK 2 A: FDEP PERMIT RAI RESPONSE**

Utilizing existing information (including surveys, reports, design details, and analyses), assist the County prepare and submit a response to one FDEP Request for Additional Information (RAI).

**TASK 2 B: USACE PERMIT RAI RESPONSE**

Utilizing existing information (including surveys, reports, design details, and analyses), assist the County prepare and submit a response to one USACE RAI.

**TASK 2 C: AGENCY SITE VISIT**

Arrange, prepare for, and attend one on-site visit meeting with the County and appropriate agencies to discuss the Project elements and identify concerns and issues. Perform a one-time stake-out of the proposed dredge channel if requested by the agencies.

**TASK 2 D: MITIGATION PROJECT PLANNING AND DESIGN**

Arrange, prepare for, and attend one agency meeting to discuss the Project specific to its potential impacts to SAV and natural resources. Record and distribute meeting minutes.

Based on existing data, assist the County prepare and submit a mitigation plan in support of the ERP Application for mitigation of potential Project impacts to SAV and natural resources. The mitigation plan shall utilize existing data. Plan elements and may include some of the following: boater education, mangrove restoration, seagrass bed enhancement through propeller scar restoration, or habitat creation through in-water disposal of dredge sediment.

Develop a Preliminary Opinion of Probable Construction Cost for the Mitigation Plan based on a  $\pm 25\%$  margin of error.

Provide technical support to the County to prepare and respond to one agency request for additional information specific to the Mitigation Plan.

**TASK 3: CONSTRUCTION SERVICES**

**TASK 3 A: CONSTRUCTION DOCUMENTS AND BID PROCESS**

Prepare for incorporation into the County's Bid Documents, detailed construction plans to show the general scope, character, and extent of the work to be furnished and performed by the contractor. The plans shall include horizontal and vertical control, survey baseline, natural resource habitats, staging areas, upland and boat access corridors, channel dredge templates, disposal details, volume and quantity requirements, aids to navigation, and environmental protection measures.

Prepare for incorporation into the County's Bid Documents detailed construction specifications including description of work, special terms and conditions, quantity estimates, bid schedules, and technical specifications describing the general scope, character, and extent of work to be furnished and performed by the contractor.

Develop a Final Opinion of Probable Construction Cost based on a  $\pm 10\%$  margin of error. Construction costs shall be broken down by project feature such as mobilization and demobilization,

spoil site preparation, dredge channel excavation and spoil placement, maintenance of traffic, mitigation and environmental protection.

Review drafts of the deliverables with the County to obtain their input and complete one round of edits. Based on the review, prepare and submit to the County one reproducible 11" x 17" engineering scaled set of final drawings along with one electronic copy of both CADD and PDF files, and one reproducible set of technical specifications and special conditions along with one electronic copy of both Word and PDF files.

Assist the County in coordinating a one-time bid process. These services will include attending one meeting as requested by the County, e.g., pre-bid meeting; assisting the County issue addenda as appropriate to interpret, clarify or expand the Bid Documents; assisting the County in obtaining bids from contractors; assisting the County in evaluating the bids; and making a recommendation for award to the lowest responsive bidder.

### **TASK 3 B: CONSTRUCTION ADMINISTRATION**

Arrange, prepare for, and attend one (1) pre-construction meeting with the County, contractor, and appropriate stakeholders designated by the County Manager to discuss the Project construction; develop a Project schedule; review permits, plans, and specifications; identify concerns and issues; and establish lines of communication, and contact people. The budget is based on a 120-day construction window.

Present project status during a routine monthly meeting with to County staff and / or MSBU board. Budget includes up to four (4) meetings.

Consult with the County and contractor as reasonably required and necessary with regard to construction of the Project, assist the County issue interpretations and clarifications during construction, and prepare work change orders as directed by the County, if necessary.

Utilizing the survey data in accordance with State and Federal standards, determine the amounts owed to the contractor, and recommend, in writing, payments to the contractor(s) in such amounts. Such recommendations of payment will constitute a representation to County, based on such observations and review, that the work has progressed to the point indicated, and that, to the best of our knowledge, information, and belief, the quality of such work is generally in accordance with the Contract Documents (subject to an evaluation of such work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents and to any other qualifications stated in the recommendation). By recommending any payment, we will not thereby be deemed to have represented that exhaustive, continuous, or detailed reviews or examinations have been made to check the quality or quantity of contractor work as it is furnished and performed beyond the responsibilities specifically assigned in this Agreement and the Contract Documents. Our review of the contractor's work for the purposes of recommending payments will not impose on us the responsibility to supervise, direct, or control such work or for the means, methods, techniques, sequences, or procedures of construction or safety precautions or programs incident thereto, or contractor compliance with laws, rules, regulations, ordinances, codes, or orders applicable to their furnishing and performing the work. It will also not impose responsibility on us to make any examination to ascertain how or for what purposes the contractor has used the moneys paid on account of the Contract Price, or to determine that title to any of the work, materials, or equipment has passed to the County free and clear of any lien, claims, security interests, or encumbrances, or that there may not be other matters at issue between the County and the contractor that might affect the amount that should be paid. The budget includes up to four (4) pay request reviews.

**TASK 3 C: CONSTRUCTION OBSERVATIONS**

Conduct a limited number of inspections by a construction observer during active construction in support of certifying project completion. Based on information obtained during such inspections and on such observations, endeavor to determine in general if such work is proceeding in accordance with the Contract Documents and keep the County informed of the progress of the work. The budget is based on a 120-day construction window.

**TASK 3 D: CONSTRUCTION SURVEYS**

Upon written notification from the County that channel segments are ready for acceptance, conduct pay surveys of the dredge channel. Data will be collected along a continuous centerline of the canal and cross sections will be measured at approximate 100-foot intervals. Tidal fluctuations will be measured and compensated for on the survey vessel using Real Time Kinematic (RTK) Global Positioning System (GPS) technology.

Reduce the survey data to the relative datum and prepare a plan view and cross section views of the collected bathymetry. Volume quantities calculations will be conducted for each of the three (3) surveys. The data shall be presented on the aerial photograph and reference Florida West Zone 1983. Vertical elevations will be referenced to the North American Vertical Datum of 1988 (NAVD88). All work activities and deliverables shall be conducted in accordance with the latest State and Federal Technical Specifications for Topographic and Bathymetric Surveying.

The budget includes four surveys that may be used for pre-construction, pay, or as-built purposes at the County's discretion.

Perform the construction stake-out of the proposed dredge limits. The budget includes two one-day stake-outs (2500 ft. per day).

**TASK 3 E: PROJECT CERTIFICATION**

Upon receiving written notice from the County that the Project is substantially complete, conduct a one-time comprehensive review of the Project, develop a list of items needing completion or correction, forward said list to the contractor and provide written recommendations to County concerning the acceptability of work done and the use of the Project.

Upon receiving written notice from the County that the Project is finally complete, perform final site observations in conjunction with the County, and assist the County in closing out construction contract.

Prepare and submit to the County and agencies as required a Project Completion Report including the required agency Final Certifications along with routine monitoring reports and surveys.

**TASK 4: CONTINGENCIES**

Due to the presence of SAV within the Entrance Channel alignment, it is anticipated that both the state and federal agencies will require mitigation sufficient to offset impacts to these resources from channel dredging. Until the surveys and design are complete and the ERP is submitted and comments received from the agencies, the extent of impacts to SAV and required mitigation is unknown. Further, due to the complex nature of the work involving marine environments, it is anticipated that additional work may be necessary such as data collection, additional environmental compliance inspections, construction observations, field work, stakeholders meetings, or agency coordination. A contingency budget is

recommended for these circumstances. All scopes of work under this task must be reviewed and approved by the County prior to conducting the additional work.

**PROFESSIONAL FEES:**

Below is a budget summarizing the Professional Fees specific and limited to the above described Scope of Services.

<b>ADDITIONAL SERVICES</b>	<b>BUDGET</b>
TASK 2: ERP PERMIT PROCESSING	\$ 47,600
TASK 3: CONSTRUCTION SERVICES	\$ 56,200
TASK 4: CONTINGENCIES (20%)	\$ 20,800
<b>TOTAL</b>	<b>\$ 124,600</b>

Please contact us if you have any questions. I can be reached at 239-643-2324 ext. 126 or by email at mpoff@cecifl.com.

Sincerely,  
COASTAL ENGINEERING CONSULTANTS, INC



Michael T. Poff, P.E.  
Vice-President of Engineering