RESOLUTION NO. 12-168

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA APPROVING TASK ORDER NO. 3-12-PORTS FROM CH2M HILL ENGINEERING, INC. IN AN AMOUNT NOT TO EXCEED $184,984.00 FOR ENGINEERING SERVICES FOR DESIGN, PERMITTING, AND BID PHASE SERVICES FOR BULKHEAD REPAIR/REPLACEMENT AT ZERO DUVAL AND BERTHING IMPROVEMENTS TO THE MALLORY SQUARE T-PIER; PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, in Resolution No. 07-331, the City Commission approved a three-year contract with CH2M Hill, Inc. for General Engineering Services and in Resolution No. 10-287 the contract was extended for an additional two years; and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COMMISSION OF THE CITY OF KEY WEST, FLORIDA, AS FOLLOWS:

Section 1: That Task Order No. 3-12-PORTS for CH2M Hill Engineering, Inc. for engineering services to design, permitting, and bid phase services for bulkhead repair/replacement at zero Duval and Berthing Improvements to the Mallory Square T-Pier is hereby approved in an amount not to exceed $184,984.00.

Section 2: That funds for this project are included under budget line 101-1900-519-6300-EN1002.

Section 3: That this Resolution shall go into effect immediately upon its passage and adoption and authentication by the signature of the presiding officer and the Clerk of the Commission.

Passed and adopted by the City Commission at a meeting held this 15 day of May, 2012.

Authenticated by the presiding officer and Clerk of the Commission on May 16, 2012.

Filed with the Clerk May 16, 2012.

CRAIG CATES, MAYOR

ATTEST:

CHERYL SMITH, CITY CLERK

THE CITY OF KEY WEST
3140 Flagler Ave Key West, FL 33040 (305) 809-3792

EXECUTIVE SUMMARY

TO: Jim Scholl, City Manager

Cc: E. David Fernandez, Asst. City Manager – Operations
Mark Finigan, Asst. City Manager - Administration

FROM: Doug Bradshaw, Senior project Manager

DATE: April 30, 2012

SUBJECT: Engineering Services for Design, Permitting, and Bid Phase Services for Bulkhead Repair/Replacement at Zero Duval and Berthing Improvements to the Mallory Square T-Pier by CH2M Hill.

ACTION STATEMENT:
This request is to approve Task Order # 3-12 Ports in the Amount of $184,984 from CH2M Hill to provide engineering for the design, permitting, and bid phase services for the proposed improvements to repair and/or replace the bulkhead at Zero Duval and berthing improvements to the Mallory Square T-Pier.

The engineering services for these two (2) projects are being combined in order to produce one bid document for construction. By combining the projects they City will realize cost savings for design and construction. The agreement will be executed pursuant to F.S. 287.055 (CCNA), City Code 2-841, and the City's contract with CH2M Hill approved by Resolution #07-331 and extended and amended through Resolution 10-287.

BACKGROUND:

Project 1: Zero Duval-The City of Key West has completed a preliminary investigation of the seawall and stormwater outfall piping at Zero Duval as well as completed the geotechnical investigation. The investigation concluded that the seawall is failing and material from behind the wall is being washed out causing the land side surface to sink. Additionally the existing stormwater outfall pipe is becoming dislodged from the wall and does not appear to be functioning as intended.

Project 2: Mallory T-Pier- In order to address the needs to safely and securely dock cruise ships and other vessels at Mallory Wharf and use the T-Pier as part of the berthing plan and for passenger and crew access, improvements must be made. It is recognized that currently the T-Pier does not meet the structural load capacity being placed by cruise ships that are moored there. Improvements need to be made to the

mooring structures and fenders to take the berthing loads off of the existing T-Pier structure.

This task order includes the following

- Collection of field data including survey
- Design including full set of construction drawings and bid documents
- Benthic Survey and coral relocation plan
- Permitting from SFWMD and USACE
- Bid phase services

PURPOSE & JUSTIFICATION:
The seawall and stormwater pipe are failing. The seawall failure is causing the existing roadway and brick walkway to subside. The stormwater pipe flap is not operating as intended and is allowing stormwater to back up into the street during certain times. The installation of the new seawall will stabilize the land surface and the new internal flap for the stormwater pipe will allow for correct stormwater flow.

At Mallory, the T-Pier is being subject to structural loads by larger cruise ships that based on the age and condition of the T-Pier it cannot continue to take. By extending the fenders on the existing berthing dolphins and construction of a new berthing dolphin out from the T-Pier, these loads from cruise ships will be eliminated.

OPTIONS:
1. Approve the Engineering Services Task Order # 3-12 Ports in the Amount of $184,984 from CH2M Hill to provide engineering for the design, permitting, and bid phase services for the proposed improvements to repair and/or replace the bulkhead at Zero Duval and berthing improvements to the Mallory Square T-Pier.
2. Disapprove the task order.

Option 1 allows for the City to begin the design phase of the projects with the goal of completing the construction in late summer/early fall. Staff feels that CH2M Hill is the most qualified firm currently under contract to complete the designs. If the task order is not approved, the City will need to go through the full RFQ process in order to hire a marine engineering firm thus delaying the projects.

FINANCIAL IMPACT:
The 2011-2012 budget includes $1,200,000 (account #101-1900-519-6300-EN1002) for Zero Duval Seawall Replacement and Mallory Pier Fender Rearrangement. The total cost of the design, permitting, and bid phase services is $184,984.

RECOMMENDATION:
City staff recommends option # 1: Approve the Engineering Services Task Order # 3-12 Ports in the Amount of $184,984 from CH2M Hill to provide engineering for the design, geotechnical, permitting, and bid phase services for the proposed improvements to repair and/or replace the bulkhead at Zero Duval and berthing improvements to the Mallory Square T-Pier.

TASK ORDER 3-12 PORTS

ENGINEERING SERVICES FOR DESIGN, PERMITTING AND BID PHASE SERVICES FOR REPAIRS AT ZERO DUVAL STREET AND MALLORY SQAURE T-PIER

This TASK ORDER 3-12 PORTS is issued under the terms and conditions of the MASTER AGREEMENT TO FURNISH GENERAL ENGINEERING SERVICES TO THE CITY OF KEY WEST ("AGREEMENT") between the City of Key West ("CITY") and CH2M HILL, Inc. ("ENGINEER") executed on September 18, 2007, which is incorporated herein by this reference.

A. SCOPE OF SERVICES

Specific services which the ENGINEER agrees to furnish are summarized on the attached statement entitled TASK ORDER 3-12 PORTS "SCOPE OF SERVICES." The "Scope of Services" defines the work effort anticipated for the Task Order.

This Task Order, when executed, shall be incorporated in and shall become an integral part of the September 18, 2007, Master Agreement.

B. TIME OF COMPLETION

Work under this Task Order will begin immediately following acceptance and completed expeditiously subject to coordination with the City of Key West staff. Work may be performed at any time as requested by the CITY within 12 months after the date of execution of this Task Order, at which time the Task Order will expire.

C. COMPENSATION

Compensation for the labor portions of TASK ORDER 3-12 PORTS, Task A will be on a lump sum fee basis as stipulated in Article 2, Paragraph 2.1 of the AGREEMENT. Compensation for the labor portions of Tasks B and C and all expenses will be on a Cost Reimbursable-Per Diem basis as stipulated in Article 2, Paragraph 2.2 of the AGREEMENT. The estimated compensation is shown on the attached statement entitled TASK ORDER 3-12 PORTS COMPENSATION.

D. ACCEPTANCE

By signature, the parties each accept the provisions of this TASK ORDER 3-12 PORTS, and authorize the ENGINEER to proceed at the direction of the CITY's representative in accordance with the "SCOPE OF SERVICES." Start date for this project will be no later than ten (10) days after execution of this authorization.

For CH2M HILL, INC.

By: _____
William D. Beddow, P.E.
Vice President

_____
Andrew H. Smyth, P.E.
Key West Office Manager

For CITY OF KEY WEST

By: _____
Jim Scholl
City Manager

Dated the 17th day of MAY, 2012

ATTEST: Cheryl Smith

TASK ORDER 3-12 PORTS

ENGINEERING SERVICES FOR DESIGN, PERMITTING AND BID PHASE SERVICES FOR REPAIRS AT ZERO DUVAL STREET AND MALLORY SQAURE T-PIER

SCOPE OF SERVICES

Project Description

The City of Key West has completed a preliminary investigation of the seawall and stormwater outfall piping at northern end of Duval Street (Zero Duval). (G. M. Selby, Inc. Duval Street Seawall Inspection Report dated October 2008 with Reference No. KWC280390) The investigation concluded that the seawall is showing signs of failure and material from behind the wall is being washed out causing the landside surfaces to sink. Additionally the existing stormwater outfall pipe is becoming dislodged from the wall and does not appear to be functioning as intended.

It appears from the initial site investigations that both adjacent seawalls (Pier House and Ocean Key Resort) have been recently repaired and appear in good condition. Also, the Fury Watersports dock and registration booth are located directly over the City owned seawall and will need to be relocated during construction and replacement upon construction completion.

Another area of concern in the general vicinity of the Zero Duval project is at Mallory Wharf. In order to address the needs to safely and securely dock cruise ships and other vessels at Mallory Wharf and use the T-pier as part of the berthing plan and for passenger and crew access, improvements must be made. It is recognized that currently the T-pier does not meet the structural load capacity being placed by cruise ships that are moored there. Improvements need to be made to the mooring structures and fenders to take the berthing loads off of the existing T-pier structure and put it on the proposed breasting dolphin. These project improvements will take the excessive ship berthing loads off the T-pier, and not make general improvements otherwise to the pier itself.

The design and construction of these T-pier improvements will be compatible with the City's planned long range cruise port plans.

The City has determined that due to the close proximity and multiple similarities in the design and construction of the projects it would make sense to combine the two projects, thus the two projects will be designed and bid as one single construction project. This approach would appear to save the City money in the design, bidding and permitting process, as well as the overall construction costs.

Purpose

The City has requested the ENGINEER to provide design, permitting and bid phase services for the repair and/or replacement of a bulkhead at Zero Duval and the repairs and improvements to the T-Pier at Mallory Square.

Scope of Services

The scope of services provided below addresses the work to be completed for the project and includes; Task A (Design Services), Task B (Permitting), and Task C (Bid Services).

Task A – Design Services

This task entails activities related to the design of the seawall repair/replacement at the Zero Duval and improvements to the T-pier at Mallory Wharf. These designs will be consistent with industry standard best practices related to bulkhead design and will include best efforts to implement a program that minimally impacts the existing businesses in the area. The task is divided into three subtasks: A.1 Data Collection and field services, A.2 Conceptual Design and A.3 Final Design.

A.1 Data Collection

The ENGINEER will communicate with the City and obtain the data required for design services:

- Review the existing documentation by G.M. Selby, Inc. including the inspection report, construction plans and cost estimate. The ENGINEER may request the City staff to obtain/discuss background information pertaining to the area. This information may include copies of relevant planning, geotechnical and engineering reports, existing surveys, topographic maps, and land use maps, as appropriate.
- Field Investigation: The ENGINEER shall complete a walking review of the seawall and surrounding areas to observe existing conditions of the area. This field investigation shall also be used to identify the existing businesses in order to minimally impact their operations during construction activities. A walking review of the wharf and T-pier areas will also be performed to observe existing conditions of the area. This field investigation shall also be used to identify operational issues regarding ship berthing and passenger and crew activities specifically related to operations, safety and security.
- Determine Americans with Disability Act (ADA) Requirements: In conjunction with the data obtained above, the Consultant will review the ADA requirements for the proposed improvements.
- Wind & Wave - (set environmental parameters for a ship at berth/design)

Field Survey Services

The ENGINEER will provide the following investigation services:

- The ENGINEER shall obtain the services of a Florida Registered Surveyor to perform a bathometric survey of the bay bottom adjacent to the Zero Duval seawall as well as a site survey to locate the existing facilities within close proximity of the proposed construction work. Sufficient elevation data shall be taken to generate 1-foot contours adjacent to the seawall and vertical accuracy shall conform to national mapping accuracy standards of +/- one-half a contour intervals. Regardless of survey methodology used to capture bathymetric data, Subconsultant shall base vertical data on elevations obtained from a local tidal benchmark.
- Additional points at the Mallory Square T-Pier will be surveyed to determine the structure locations and alignment along the berthing line.

- Topographic survey at Zero Duval site shall include Duval Street from existing seawall to Front Street and approximately 100′ of Wall Street east from Duval, for future City use.
- Elevations will be provided in accordance with accepted standards using NGVD 1929 Datum. Horizontal coordinates shall be in U.S. Survey feet and reflect a projection of grid coordinates in the State of Florida Plane Coordinate System Transverse Mercator-West Zone, NAD 1983-1990.
- An allowance of $20,000 is included as part of this task to cover the cost of retaining a professional land surveyor.

Field Geotechnical Services

- Geotechnical exploration services and reports have been provided to the City under separate contract.

A.2 Conceptual Design (40% Design)

The ENGINEER will perform the work to develop the conceptual project design for the repair/replacement of the Zero Duval seawall. The objectives of this task are to define the design approach and intent and to communicate the design assumptions to the CITY.

Specific work activities in this task are identified below:

- Develop conceptual plans for replacement of the existing sheet pile bulkhead. ENGINEER will review several methods of replacement and provide an evaluation matrix to the CITY for their review.
- Determine methodology for removing existing building and appurtenant structures.
- Cost analysis on a preliminary basis that provides initial guidance to the CITY for each item listed in the matrix. Maintenance of each alternative will be considered during the analysis of alternatives.
- Preliminary schedule that provides initial guidance to the CITY for each item listed in the matrix.

In addition to the above tasks, the tasks related to the modifications to the T-Pier will also be preformed. The ENGINEER will perform the work to develop the conceptual project design and cost estimate for the T-pier berthing improvements. The objectives of this task are to define the design approach and intent and to communicate the design assumptions to the CITY.

Specific work activities in this task are identified below:

- Develop criteria for a "design vessel" indicating maximum vessel criteria for docking at the improved wharf and T-pier.
- Develop a mooring analysis to dock the "design vessel" at the improved T-pier and wharf.
- Develop conceptual design plans for the structural and fender improvements in order to evaluate safe and secure berthing and cruise ship operations at the pier.

- Evaluate the cost and effectiveness of the proposed mooring design alternatives and deliver the proposed design solution. Clearly show mooring structures, fenders, access catwalks and pile specifications on the conceptual design plans according to the proposed design solution.
- Develop preliminary project design construction specifications outline for the T-pier improvements
- Identify key constructability issues.
- Prepare budget-level cost estimate.

After the completion of the 40% Design, the ENGINEER will conduct a review meeting in Key West to review the 40% design with the City. Review comments will be incorporated into the 90% design documents.

Deliverables

The following deliverables will be provided under this Task:

- Three (3) copies: Conceptual Design Technical Memorandum and Drawings
- Two (2) copies of Conceptual Design review meeting minutes
- Two (2) copies of 40% Construction cost estimates

A.3 Final Design

During this subtask, the ENGINEER will complete the technical design based on the outcome of the 40% Review Meeting. At the end of this subtask the design documents will be considered complete and ready for bidding.

- Design the bulkhead and T-Pier improvements based on the geotechnical data, conceptual design, and mooring evaluations.
- Develop project design construction documents for the bulkhead and T-Pier improvements.
- Develop technical specifications for the project.
- Prepare legal and technical specifications, contract documents, including Bid Form, Notice to Bidders, General and Supplemental Conditions, Bond Forms, etc.
- Based on 90% documents, prepare updated final construction cost estimate and schedule.
- Conduct 90% review meeting in Key West to review the 90% design with the City and incorporate review comments from City into final contract documents.
- Submit final contract documents to the CITY for bidding

Deliverables

The following deliverables will be provided under this Task:

- Three (3) copies: 90%Design Drawings and specifications

- Three (3) copies: Design Calculations
- Three (3) copies: Design Data
- Two (2) copies: Final Opinion of Construction Cost and Schedule
- Two (2) copies of 90% review meeting minutes
- Six (6) copies: Final Contract Documents, including drawings and specifications plus one (1) CD

Task B – Permitting

B.1 Pre-Permitting

ENGINEER will conduct permit pre-application phone calls with State and Federal agencies:

- Research appropriate State agency for wetlands and stormwater permitting.
- Research appropriate permit type (e.g., general, state programmatic, nationwide, etc.)

B.2 Permit Application Completion and Submittal

ENGINEER will prepare two permit applications for each specific project site and submit to the following agencies:

- FDEP (or SFWMD) and USACE Joint Environmental Resource Permit (ERP) Application

Each application will include the following information:

- Requisite permit drawings (e.g., location map, plan views, and cross sections) indicating the proposed improvements.
- Administrative information including applicant data and legal information.
- Ownership documents for submerged land areas.
- Project narrative discussing the need for the projects.
- Volume and area calculations associated with the proposed structures.
- Description of benthic organisms, identification of flora and fauna, characterization of dominate and important flora and percent cover sampling locations and dates, and measurements and methods.
- Any additional, pertinent information obtained during the data collection phase of the project that supports the issuance of the required permit.

All draft application packages will be submitted to the City for review and comment. Revised application packages will be compiled and submitted individually to the State and USACE. The CITY will be responsible for all permit application fees.

B.3 Benthic Resource Assessment

ENGINEER will perform a submerged benthic survey to determine the presence of any submerged aquatic vegetation or corals. If present, ENGINEER will document species composition, coverage, and relative health within the project area.

The relocation of coral communities (if required) is not included in this scope of work.

B.4 Permit Inquiry and Response

ENGINEER will prepare a response to a single Request for Additional Information (RAI) inquiry for each permit application from each of the involved State and Federal agencies. A response will also be provided to comments from the review agencies such as the FFWCC, USFWS, and NMFS. All responses will be submitted to the CITY for review and comment. Revised responses will then be submitted directly to the appropriate agencies.

Deliverables

The following deliverables will be provided under this Task:

- Electronic copies of all completed permit applications associated with the project.
- Electronic copies of RAI responses.

Task C – Bid Phase Services

Bidding services are based on a Bid Period of 30 days. The improvements at both Mallory Square and Zero Duval will be bid as one project. The ENGINEER will provide the following services to the CITY to assist in the bidding process:

- Coordinate with CITY to provide contract documents to DemandStar for bidding.
- All direct communications with bidders on matters related to the technical aspects of the design will be handled directly by the ENGINEER.
- Coordinate and conduct one pre-bid meeting to familiarize each bidder with the scope of work and to answer any questions that may arise.
- Issue ADDENDA, if required.
- Bids will be received, opened, and read aloud by the CITY at the designated time and location.
- Review and evaluate bids for compliance and completeness. The engineer will prepare an award letter for the CITY recommending the successful bidder.
- After award, the ENGINEER will distribute to the successful contractor six sets of contract documents for execution. The contractor will be directed to return the documents to the ENGINEER for compliance review of the bidding requirements. After the ENGINEER reviews the contract documents, these six sets of documents will be sent to the CITY for final review and signatures.
- Prepare conformed contract documents for use by CITY, ENGINEER, and Contractor during construction.

Bid services will be considered complete upon the ENGINEER's review and forwarding of the Contractor's executed documents to the CITY, and submittal of conformed documents to the CITY.

Deliverables

- Two (2) copies pre-bid meeting minutes
- Two (2) copies Recommendation of Award letter
- Six (6) copies Contract Documents for execution
- Four (4) copies Conformed Contract Documents, two (2) sets full size drawings, one (1) CD with PDF files

Assumptions

The following assumptions were used in the development of this Task Order:

- The design and bid phase work on this project will be completed in calendar year 2012.
- The design work included in this Task Order 3-12 is for design of bulkhead repair and/or replacement at Zero Duval Street and for the design of improvements related to the T-Pier at Mallory Square. Additions to the scope will require an amendment to this Task Order.
- CH2M HILL will not develop plans or determine locations of relocate tenants. Existing tenant structures (on or above existing seawall) will be not be designed or replaced under the scope of work for this project.
- Design work for Stormwater systems is limited to the replacement of the storm pipe from the westernmost catch basin to the seawall.
- The design will be based on the federal, state, and local codes and standards in effect at the start of the project. Any changes in these codes may necessitate a change in scope.
- The 40% and 90% design review meetings will be held in Key West and attended by up to two (2) ENGINEER's staff. Additional staff may attend via conference call.
- Archeological/historical surveys, water or sediment quality testing, circulation/flushing surveys or assessments, Sovereign Submerged Lands permitting/approval and mitigation planning and design are not included in this scope of work.
- The ENGINEER'S master specifications will be used as the basis for all technical sections in Division 1 through 49. The ENGINEER'S master specifications incorporating CITY requirements will be used for General Conditions, Supplemental Conditions, and other front-end documents.
- Existing topographic survey information will be used as available. A $20,000 allowance has been included for survey work.
- Concepts will be frozen at the end of each design phase and redesigns after those milestones may be considered additional services.

- The design documents will be prepared for a single construction contract.
- No land or bottomland costs shall be included in cost estimating for the project.
- Legal, easement, or plat survey or acquisitions will be the responsibility of CITY.
- Relocation of coral communities (if required) are not included in this scope of work.
- The CITY will pay for all permit application fees.
- Engineer assumes up to one (1) RAI response to each permitting agency will be required. A total of three (3) RAI's are assumed.
- Bid phase services are based on a 30-day bid period and assume up to three (3) addenda will be issued. All bid documents and addenda will be provided in electronic format for uploading to DemandStar by CITY.
- The construction contract will be awarded after the first bidding process. Re-bidding will be considered as an "Additional Services."
- Bid services will be considered complete upon the ENGINEER's review and forwarding of the Contractor's executed documents to the CITY and submittal of conformed documents to the CITY.

Obligations of the CITY

To assist meeting schedule and budget estimates contained in this proposal, the CITY will provide the following:

- Provide any existing or conceptual design for the project (including AutoCAD drawings) and any available surveyed limits or established coordinates of the existing uplands, marine structures, locations of wells, trenches, other existing drainage infrastructure and underground utilities.
- Any existing environmental and sediment testing data from the project area.
- The City will identify temporary location for tenant structures and will coordinate or execute the plan to relocate and/or replace tenant structures.
- Prompt review and comment on all deliverables.
- Facilitate access to any required facilities.
- Attendance of key personnel at meetings as requested.
- Execution of the permit applications as Owner.
- Payments of all permit application fees.
- Prior to start of preliminary engineering work the CITY and ENGINEER will agree in writing to the conceptual design.
- CITY to provide existing topographic maps, data, or existing subsurface investigation information.
- The City will contract, monitor and manage the geotechnical subconsultant during the exploration and the reporting phase

Additional Services

The ENGINEER will, as directed, provide additional services that are related to the project but not included within this Scope of Services. These and other services can be provided, if desired by the CITY, as an amendment to the Task Order. Work will begin for the Additional Services after receipt of a written notice to proceed from the CITY. Additional services may include, but are not limited to, the following:

- Design services for the replacement of existing tenant structures
- Additional design work related to stormwater systems, upstream of existing catch basin.
- Re-bidding any, or all, portions of this project or bidding of multiple projects.
- Coral community relocation or additional environmental studies or analyses required by the permitting agencies.
- Additional permitting involving agencies other than those listed under Task C.
- Construction phase services.

Compensation

The estimated compensation for TASK ORDER NO 3-12 PORTS, is shown on Attachment A entitled Compensation.

Completion Dates

The proposed completion dates for the tasks are as follows:

Submit 40% design documents	90 days after notice to proceed
Submit 90% design documents	45 days after receipt of City 40% review comments
Submit Bid documents	30 days after receipt of City 90% review comments
Permitting	Ongoing throughout project

Attachment A

TASK ORDER NO 3-12 PORTS

COMPENSATION

TASK ORDER 3-12 PORTS - ZERO DUVAL/MALLORY T-PIER

ENGINEERING SERVICES FOR DESIGN, PERMITTING AND BID PHASE SERVICES ZERO DUVAL IMPROVEMENTS AND MALLORY T-PIER IMPROVEMENTS

Task	Hours	Labor Cost	Expenses	Total Cost
Task A - Design Services	962	$110,048	$23,700	$133,748
Task B - Permitting	294	$34,272	$3,850	$38,122
Task C - Bid Phase	96	$11,564	$1,550	$13,114
Total	**1352**	**$155,884**	**$29,100**	**$184,984**

COMPENSATION BREAKDOWN
Task Order 3-12 PORTS

TASK NO.	TASK DESCRIPTION	HOURLY RATE	TOTAL HOURS	LABOR	EXPENSES	TOTAL COST
A	**Design Services**					
	Principal Project Manager	$172.00	36	$6,192		$6,192
	Senior Project Manager	$158.00	80	$12,640		$12,640
	Senior Professional	$148.00	126	$18,648		$18,648
	Project Professional	$122.00	220	$26,840		$26,840
	Tech 5	$103.00	96	$9,888		$9,888
	Tech 4	$ 93.00	244	$22,692		$22,692
	Technical Editor	$ 84.00	56	$4,704		$4,704
	Sr Project Assistant	$ 63.00	39	$2,457		$2,457
	Clerical	$ 55.00	29	$1,595		$1,595
	Cost Estimator	$122.00	36	$4,392		$4,392
	Survey Subconsultant				$20,000	$20,000
	Travel 2 - (2) day Key West				$3,000	$3,000
	PRINTING/REPRO/SHIPPING/EQUIPMENT				$700	$700
Design Services SUBTOTAL			962	$110,048	$23,700	$133,748
B	**Permitting (T&M)**					
	Principal Project Manager	$172.00	50	$8,600		$8,600
	Senior Technologist	$158.00	20	$3,160		$3,160
	Assoc Engineer	$110.00	152	$16,720		$16,720
	Tech 4	$ 93.00	44	$4,092		$4,092
	Sr Project Assistant	$ 63.00	20	$1,260		$1,260
	Clerical	$ 55.00	8	$440		$440
	Travel 2 - (2) day Key West				$3,000	$3,000
	PRINTING/REPROGRAPHICS/SHIPPING				$850	$850
Permitting (T&M) SUBTOTAL			294	$34,272	$3,850	$38,122
C	**Bid Phase (T&M)**					
	Principal Project Manager	$172.00	14	$2,408		$2,408
	Senior Technologist	$158.00	30	$4,740		$4,740
	Senior Professional	$148.00	4	$592		$592
	Project Engineer	$122.00	4	$488		$488
	Tech 4	$ 93.00	12	$1,116		$1,116
	Sr Project Assistant	$ 63.00	14	$882		$882
	Technical Editor	$ 84.00	12	$1,008		$1,008
	Clerical	$ 55.00	6	$330		$330
	Travel 1 - (2) day Key West				$1,000	$1,000
	PRINTING/REPRO/SHIPPING/EQUIPMENT				$550	$550
Bid Phase (T&M)SUBTOTAL			96	$11,564	$1,550	$13,114
PROJECT TOTALS						
	TOTAL HOURS		1,352			
	TOTAL FEE ESTIMATE			$155,884	$29,100	$184,984