

## **EXECUTIVE SUMMARY**

**Recommendation for the TDC to approve a Time and Material Work Order under Contract 09-5262 for Doctors Pass North Jetty Repairs as outlined in the attached CP&E proposal dated September 30, 2010 not to exceed \$24,794.**

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**OBJECTIVE:** Approve Doctors Pass North Jetty Repairs as outlined in the proposal dated September 30, 2010 by CP&E.

**CONSIDERATIONS:** The scope covers the redesign of the previously permitted jetty rebuild project along with the preparation of plans, specifications and bidding documents. The goal of this redesign will be a new design that is simpler, less expensive and reutilizes the existing base course of jetty stone that remains intact and serviceable. Operational life of the revised design is expected to be from 15 to 20 years.

The plans will be based on the existing surveys and permit sketches. Surveys will be taken by the contractor as a basis for updating the construction cross-section, verifying pay quantities and for use in a post-construction report. CPE will assist the County with bidding and pre-construction services of this project. Permitting assistance will be provided to prepare this and related work for construction, including submitting final plans and specification to FDEP for the Notice to Proceed. During and post-construction services are not included in this SOW and will be proposed when the scope is defined.

**ADVISORY COMMITTEE RECOMMENDATIONS:** At the CAC meeting on October 14, 2010 this item was approve unanimously 6-0.

**FISCAL IMPACT:** The Source of funds is from Category "A" Tourist Development.

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

**LEGAL CONSIDERATIONS:** This item has been reviewed and approved by the County Attorney's Office and is legally sufficient for Board action. - CMG

**RECOMMENDATION:** For the TDC to approve a Time and Material Work Order under Contract 09-5262 for Doctors Pass North Jetty Repairs, Coastal Design Services as outlined in the attached CP&E proposal dated September 30, 2010 not to exceed \$24,794.

**PREPARED BY: Gail Hambright, CZM**



## COASTAL PLANNING & ENGINEERING, INC.

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September 30, 2010

Gary McAlpin  
Collier County Government  
W. Harmon Turner Bldg., Suite 103  
3301 E. Tamiami Trail  
Naples, FL 34112

**Subject: Doctors Pass North Jetty Repairs, Coastal Design Services, Collier County, Florida, Scope of Work under Contract No. 09-5262**

Dear Gary:

Enclosed is a scope of work, fee proposal and rate sheet for the Doctors Pass North Jetty Repairs for Collier County, Florida. The hourly not to exceed cost for these services is \$24,794. The services include, design, preparation of plans and specifications, permitting, bidding and pre-construction assistance supporting the Coastal Zone Management and Purchasing Departments. During and post-construction service are not included, pending a better understanding of these phases. All surveys have previously been conducted or will be assigned to the contractor during construction.

If you have any questions regarding this scope of work, please call me.

Sincerely,

COASTAL PLANNING & ENGINEERING, INC.

Stephen Keehn, P.E.  
Senior Coastal Engineer

cc: Sheri Dindial, CPE

**Doctors Pass North Jetty Repairs Coastal Design Services**  
**Collier County, Florida**  
**Scope of Work under Contract No. 09-5262**  
**September 30, 2010**

**Introduction:** This scope of work describes the preparation of contract documents for a Doctors Pass North Jetty Repair. The scope covers preparation of plans, specifications and a bidding form based on previous plans, surveys, permit sketches or technical specifications. CPE will assist the County with bidding and pre-construction services of the project. Permitting assistance will be provided to prepare this and related work for construction, including submitting final plans and specification to FDEP for the NTP. The goal will be a new design that is simpler for the contractor to build and easier for the County inspector to manage, while still providing an extended life. During and post-construction services are not included in this SOW and will be proposed when the scope is better understood.

The plans will be based on the existing surveys and permit sketches. Surveys will be taken by the contractor as a basis for updating the construction cross-section, verifying pay quantities and for use in a post-construction report.

**B. Design, Plans and Specification:**

CPE has previously designed and permitted a rehabilitation of the North Jetty at Doctors Pass for the City of Naples. The design included complete reconstruction of the majority of the jetty to an industry standard cross section. The bids received during the bidding of Phase 1 indicated that the project costs exceeded the budget provided by the Collier County TDC to the City of Naples. As a result, the project was postponed. The County desires an economical repair of the existing jetty rather than a comprehensive rehabilitation of the structure. Thus, modifications will be concentrated in the top groin layer without major changes to the underlying layers in order to extend the life of the existing structure economically. A site visit will be made to assess current conditions.

CPE will value engineer the existing design with the goal of minimizing project costs and complexity while extending the life of the existing structure. The following preliminary concepts will be evaluated:

1. Reconstruct the head of the structure, the most vulnerable segment.
2. Construct a one stone overlay to the trunk section of the jetty with minimal adjustment of the existing rock layers.
3. Place toe stones as needed to increase stability of the structure slopes on the inlet side of the structure.
4. Other concepts may be evaluated and incorporated into the final design.
5. Avoid the need for a permit modification.

The scope will be:

1. CPE engineers will review existing construction plans and permits obtained for the City of Naples to determine an economical means of repairing the existing structure.
2. CPE will design repairs to extend the life of the structure. Construction plans and technical specifications will be modified, along with a probable estimate of construction cost for the repairs.

The specifications will require the contractor to take pre- and post-construction surveys of the groin area at specified spacing. The post-construction survey will be an as-built survey. These surveys will be used to update the plans, verify placed volumes and prepare an as-built report. The survey will extend seaward to just beyond the toe of fill.

The Engineer will provide a set of plans and technical specifications for use by the County, along with copies in Acrobat and word formats, to support bidding. CPE will submit two copies of the plans and specifications to FDEP and request the Notice to Proceed.

The project will be considered for joint bidding with the berm restoration and Wiggins Pass Dredging projects.

### **B. Final Permitting Approval**

CPE will aid the County with final permitting assistance for the three projects. Work will include responding to final Request for Additional Information as part of the permitting or NTP phase, assembling plans for submittal for a notice to proceed required by the Florida Department of Environmental Protection (FDEP), and coordination between County and FDEP and other agencies. The permitting effort will be based on the agency demands, and cannot be predicted.

### **C. Bidding and Pre-Construction Task**

#### **Bidding**

The Engineer will assist the County in the selection of a contractor for the project. The County's purchasing department will manage the bidding process with assistance from the Engineer and Coastal Zone Management Department. The Engineer will provide a list of eligible contractors to the County for bidding purposes. In conjunction with the County, the Engineer will attend a pre-bid conference (by telephone if required). The pre-bid conference will provide an opportunity to describe the project and to solicit questions from potential contractors. The conference will be conducted at the location determined by the County and a tour of the project area should be conducted with the potential contractors to address any additional questions. County representatives may be present to address issues related to infrastructure, County requirements and any other issues affecting the local government. The potential contractors will be provided sufficient time to submit a bid for the project. The Engineer will answer questions during

bidding from the purchasing department and Coastal Zone Management. The Engineer will assist the County in reviewing the bids and evaluation of the low bidder, taking into consideration the capability of the contractor (low bidder) in constructing the project. Materials proposed for the project will be evaluated. The Engineer will provide the County a recommendation concerning the selection of the contractor or contractors.

### **Pre-Construction Services**

The pre-construction services will consist of a pre-construction meeting in Naples with all the interested parties. The meeting will include the contractor, the County, CPE, permit agency representatives and the County observer. The meeting will review the construction methods and constraints and be an opportunity to train the inspector on his duties for the County. In support of the construction plan, CPE will prepare a QA/QC check list for the project along with a daily observation checklist for use by the inspector for each segment. Contractor surveys will be taken prior to the beginning of the project which will be observed by the County observer. Based upon these surveys, the plans will be reviewed to see if an update is needed.

### **D. To Be Determined**

Based on the bidding results and construction schedule of the groin, a construction services proposal may be prepared for:

- During Construction Services.
- Post-Construction Services.

**DOCTORS PASS NORTH JETTY REPAIR  
 COASTAL ENGINEERING SERVICES FEE PROPOSAL**

| ITEM   | LABOR COSTS                     |                                 |                               |                                  |                                |                         |                  | DIRECT COSTS |                                |       |
|--|---------------------------------|---------------------------------|-------------------------------|----------------------------------|--------------------------------|-------------------------|------------------|--------------|--------------------------------|-------|
|  | Project Manager (Hours)         | Senior Coastal Engineer (Hours) | Senior Inspector (CE) (Hours) | Environmental Specialist (Hours) | Designer (Senior CADD) (Hours) | CADD Technician (Hours) | Clerical (Hours) | TRAVEL       | PRINTING FIELD & LAB COST (\$) |       |
| <b>1 DESIGN, PLANS, SPECIFICATIONS AND BIDDING FORM</b>        |                                 |                                 |                               |                                  |                                |                         |                  |              |                                |       |
| A. DOCTORS PASS NORTH JETTY REPAIR                             |                                 | 22                              | 32                            |                                  | 20                             | 8                       | 4                |              |                                |       |
| B. SUBMIT SIGNED AND SEALED PLANS TO FDEP                      |                                 | 2                               | 1                             |                                  | 2                              | 2                       | 1                |              | \$25                           |       |
|  |                                 |                                 |                               |                                  |                                |                         |                  |              | <b>\$9,900</b>                 |       |
| <b>2 PERMIT ASSISSTANCE AND APPROVALS</b>                      |                                 |                                 |                               |                                  |                                |                         |                  |              |                                |       |
| A. PERMIT ASSITANCE WITH RAI, NTP AND OTHER ISSUES             |                                 | 16                              | 20                            | 10                               | 2                              |                         | 3                | \$785        |                                |       |
|  |                                 |                                 |                               |                                  |                                |                         |                  |              | <b>\$6,495</b>                 |       |
| <b>3 BIDDING AND PRE-CONSTRUCTION SERVICES</b>                 |                                 |                                 |                               |                                  |                                |                         |                  |              |                                |       |
| A. PRE-BID MEETING AND ADDRESS BIDDERS QUESTIONS               |                                 | 16                              | 4                             |                                  |                                |                         | 2                | \$127        |                                |       |
| B. BID AND MATERAIL REVIEW AND RECOMMENDATION                  |                                 | 2                               | 1                             |                                  |                                |                         |                  |              | \$160                          |       |
| C. PREPARE QA PLAN CHECK LIST & ATTEND PRE-CONSTUCTION MEETING |                                 | 16                              | 10                            |                                  |                                | 2                       | 4                | \$127        |                                |       |
| D. REVIEW PRE-CONSTRUCION SERVEYS                              |                                 | 4                               | 2                             |                                  |                                |                         | 2                |              |                                |       |
|  |                                 |                                 |                               |                                  |                                |                         |                  |              | <b>\$8,399</b>                 |       |
| <b>4 DURING- AND POST-CONSTRUCTION SERVICE - TBD</b>           |                                 |                                 |                               |                                  |                                |                         |                  |              | <b>\$0</b>                     |       |
|  |                                 |                                 |                               |                                  |                                |                         |                  |              |                                |       |
|  | Total =                         | 0                               | 78                            | 70                               | 10                             | 24                      | 12               | 16           | \$1,039                        | \$185 |
|  | Labor Rate / Hour =             | \$148.00                        | \$155.00                      | \$85.00                          | \$115.00                       | \$100.00                | \$85.00          | \$60.00      | \$1                            | \$1   |
|  | Labor Cost =                    | \$0.00                          | \$12,090.00                   | \$5,950.00                       | \$1,150.00                     | \$2,400.00              | \$1,020.00       | \$960.00     | \$1,039                        | \$185 |
|  | <b>LABOR COST =</b>             |                                 | <b>\$23,570</b>               |                                  |                                |                         |                  |              |                                |       |
|  | <b>DIRECT COST =</b>            |                                 |                               |                                  |                                |                         |                  |              | <b>\$1,224</b>                 |       |
|  | <b>TOTAL COST NTE T&amp;M =</b> |                                 |                               |                                  |                                |                         |                  |              | <b>\$24,794</b>                |       |

## Schedule B

### Contract No: 09-5262 "County Wide Engineering Services"

#### Standard Hourly Rate Schedule for all disciplines

| <u>Personnel Category</u> | <u>Standard Hourly Rate</u> |
|---------------------------|-----------------------------|
| Principal                 | \$195                       |
| Senior Project Manager    | \$165                       |
| Project Manager           | \$148                       |
| Senior Engineer           | \$155                       |
| Engineer                  | \$119                       |
| Senior Inspector          | \$85                        |
| Inspector                 | \$65                        |
| Senior Planner            | \$140                       |
| Planner                   | \$110                       |
| Senior Designer           | \$115                       |
| Designer                  | \$100                       |
| Environmental Specialist  | \$115                       |
| Senior GIS Specialist     | \$145                       |
| GIS Specialist            | \$100                       |
| Clerical                  | \$60                        |
| Surveyor and Mapper       | \$130                       |
| CADD Technician           | \$85                        |
| Survey Crew - 2 man       | \$130                       |
| Survey Crew - 3 man       | \$160                       |
| Survey Crew - 4 man       | \$180                       |

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