



THE CITY OF KEY WEST

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EXECUTIVE SUMMARY

TO: Jim Scholl, City Manager
E. David Fernandez, Asst. City Manager - Operations

FROM: Jay Gewin, Utilities Manager

DATE: November 3, 2010

RE: **Approval of a Task Order 6-11-SWR from CH2M Hill in the Amount of \$298,194 for Engineering and Construction Phase Services of the Headworks Modification Project at the Richard A. Heyman Environmental Protection Facility.**

ACTION STATEMENT:

This resolution will approve task order 6-11-STM from CH2M Hill in the amount of \$298,194.00 to provide Engineering and Construction Phase Services for the Headworks Modification Project at the Wastewater Treatment Plant (WWTP).

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:

The need for the WWTP Headworks Modification project is twofold. First, the City needs to replace the aging headworks at the location where sewer flow enters the WWTP. It hasn't been replaced or received significant improvements or repair in approximately 25 years of heavy wear and tear.

Second, the work will be incorporated within our City's plan to increase our sewer collection capacity. The City of Key West has completed a hydraulic analysis of our wastewater collection and transmission system. The City currently pumps all wastewater to the Richard A. Heyman Environmental Protection Facility (WWTP) through one 30" transmission main. With the installation of the second Deep Injection Well at the WWTP, the City can utilize the abandoned 30-inch effluent pipeline to direct additional wastewater flows to the WWTP.

The City plans to connect the pump station D/DA force main to the 30-inch

Key to the Caribbean – Average yearly temperature 77° F.

abandoned pipeline which currently runs to the WWTP, and upgrade our 25 year old existing headworks facility to handle the additional capacity at the plant. Additionally, work will be performed at the Eaton St. and White St. intersection that includes required pipe work as part of the plans to increase flow capacity.

The proposed improvements to the wastewater collection system will help reduce surcharging of the sewer system in residential areas during extreme rain events and storm surges. This reduction of sewer back ups and potential overflows in the City during these events would further reduce potential health risks to the citizens of Key West and nearshore waters.

CH2M Hill designed the headworks improvements and created the bid documents for this project. (Resolution 10-056) The City has also bid out the construction portion of the project and the low bidder is Encore Construction Company, LLC in the amount of \$3,056,000. A separate resolution has been prepared for the City Commission to award the construction of this project. City Staff and OMI will also assist in construction inspection. This resolution will approve CH2M Hill to provide Engineering and Construction Phase Services

PURPOSE AND JUSTIFICATION

The Headworks Modification Project involves many technical components that require the assistance of an engineer. This task order will include project management, engineering services to review RFI, RFQ's and project correspondence, and field services to monitor the progress and performance of construction that will make sure the project drawings and terms of the construction contract are followed.

The scope of work within the task order includes the following:

- *Monthly Meetings* – CH2M Hill will coordinate 12 project meetings over the term of the project. They will also coordinate the pre-construction meeting.
- *Review of Shop Drawings and Other Materials* – CH2M Hill will review up to 140 shop drawings and other construction materials
- *Review of Requests for Information (RFI)* – The engineering consultant will review up to 60 contractor-initiated RFI's, including technical interpretations and will evaluate any requested deviation from the approved drawings or specs.
- *Weekly Specialty Inspections on Site* – CH2M Hill will be on-site to conduct specialty inspections 2 days per week for a period of 10 months.
- *Final Inspections and Start-Up* – CH2M Hill will prepare a punch-list, substantial and final completion inspection, and will provide on-site start-up assistance. This will include a total of four five-day visits. They will also provide record drawings incorporating the mark-ups of the construction contractor.

The City or OMI does not have the staff available with the technical expertise required to perform this work independently. Staff has reviewed this submittal and found it consistent with the new hourly rates established in the City's contract extension with CH2M Hill.

Further, Staff does not feel that the hours that will be billed under this task order are disproportionately allotted to higher-wage management staff. In fact, the Principal Project Manager/Principal Technologist and Senior Technologist combined only account for

approximately 12.9% of the hours allotted in this task order.

The task order also includes CH2M Hill staff's trips to Key West over the course of the project. City staff feels that this number of trips, and the associated costs, are reasonable to assure that the consultant staff has sufficient oversight for the successful completion of the project.

OPTIONS / ADVANTAGES / DISADVANTAGES:

1. The City Commission can award the task order to CH2M Hill and proceed with the Headworks Modification Project on a timely basis. The contractor has successful experience working with the City on other projects of a technical nature, and has very capable staff to ensure successful project completion. This option is recommended by City Staff, as the City nor OMI have the staff available with the ability to perform the scope of work included in this task order.
2. The City Commission can decline the task order from CH2M Hill. This option is not recommended by Staff, as the City will not have the engineering services that are essential in completing the project. City Staff believes that CH2M Hill is the firm that can best manage the Headworks Modification Project of the engineering firms we have under contract.

FINANCIAL IMPACT:

The WWTP Headworks project is a City Commission-approved capital expense, and this \$298,194 task order coupled with the amount of the construction bid is well within the City's total budgeted amount for the Headworks Project. Funds are budgeted in account number 401-3503-535-65/SE0903.

The project is eligible for ACOE funding at a rate of 65% up to the City's total funding cap of \$10.3 million. \$1,698,641.91 is the current remaining amount eligible to be invoiced to the US Army Corps for reimbursement from a combination of the WWTP Headworks Modifications Project, the Pump Station F/Capacity Expansion project, and the remaining stormwater invoices.

We are accelerating the project so that we can be reimbursed by the Army Corps of Engineers. We will use \$2,000,000 from unappropriated fund balance (Account # 401-3501-535-99) to pay for the cost of accelerating the project so most of the expenditures will be paid in FY 2011, rather than spanning the course of two fiscal years. A request to utilize sewer fund reserves is included with the City Commission resolution for the construction award to Encore Construction Company that is being presented.

The original budget for the Headworks project was approved by the City Commission at \$6,104,600. The revised budget total now that we have received bids and quotes for a construction engineering task order is as follows:

Design Services.....	\$ 350,839
Construction.....	\$ 3,056,000
Construction Engineering.....	\$ 298,194
Permitting.....	\$ 1,000
TOTAL	\$3,706,033

RECOMMENDATION:

Staff recommends that the City Commission select option 1, approving task order 6-11-SWR from CH2M Hill in the amount of \$298,194 for Engineering and Construction Phase Services for the Headworks Modifications Project at the WWTP.