



## THE CITY OF KEY WEST

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### EXECUTIVE SUMMARY

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

**FROM:** Jay Gewin, Utilities Manager

**DATE:** November 1, 2010

**SUBJECT:** **Approval of the Low Bid of Encore Construction Company, LLC in the Amount of \$3,056,000 for the Construction of Headworks Modifications at the Richard A. Heyman Environmental Protection Facility. Award Includes Additive Alternate Proposal. Authorizing Use of Reserves to Fund Acceleration of Project Schedule.**

#### **ACTION STATEMENT:**

This request is to approve the low bid of Encore Construction Company, LLC for the headworks modifications at the Richard A. Heyman Environmental Protection Facility (Wastewater Treatment Plant) in the amount of \$3,056,000. The award amount includes an \$86,000 additive alternate within the bid to replace the entire motor control center of the headworks.

The resolution will also authorize the use of \$2,000,000 in sewer fund reserves to fund the acceleration of this project.

#### **BACKGROUND:**

The need for this 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

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

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 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 near shore waters.

CH2M Hill was tasked to design the headworks improvements and create the bid documents for this project. (Resolution 10-056) There is also a task order that will be brought before the City Commission for CH2M Hill to serve as engineers during construction. City Staff and OMI will also assist in construction inspection.

#### **PURPOSE & JUSTIFICATION:**

A total of seven construction firms attended the mandatory pre-bid meeting. Six of these firms submitted bids to the City. Encore Construction LLC was the low-bidder.

The bid included an additive alternate to replace the entire motor control center within the headworks of the plant. This will replace the existing 25 year old unit that is the key cog to all of the headworks' operating equipment. Staff and our engineering consultant CH2M Hill have reviewed the quote and determined it to be cost-effective and beneficial. We have therefore decided to include the additive alternate work from Encore Construction in the amount of \$86,000.00.

The bid also included two deduct alternatives. One was for the new pipeline entering into the WWTP, and another for the construction work that will be required at the Eaton and White St. intersection. Both deduct alternatives represent work that is necessary to the successful completion of the project, and staff constructed the bid this way in an attempt to expedite the project so that Army Corps of Engineering grant funding could be secured.

Staff secured quotes for the scope of work listed within each deduct alternatives from the two firms the City has contracted for General Services. Upon examination of each General Services Contract quote (from Charley Toppino and Sons and DN Higgins), City Staff has determined it would be most cost-effective to utilize Encore Construction for the entire project.

We have reviewed the qualifications, experience, and references of Encore Construction LLC, and have feel that they are fully capable of performing the work.

Therefore it is staff's recommendation to award the WWTP Headworks Modifications project to Encore Construction in the amount of \$3,056,000.

**OPTIONS:**

1. The City could elect to not increase the sewer system capacity; nor replace the WWTP's aging headworks. This option is not recommended as it leaves the city and its residents more vulnerable to potential sewer overflows in the residential areas of the City during extreme rain events and storm surges. EPA has adopted a zero tolerance policy as it relates to sewer spills. Spills relating to high flow conditions could result in fines. City Staff, OMI, and engineering consultant CH2M Hill are in agreement that the WWTP's headworks are showing the effects of aging and wear and tear, and are in definite need for replacement.
2. The City could elect to re-bid the project. This option is not recommended as Staff does not believe that doing so would result in a lower bid. The proposal of Encore Construction was below the Engineer's estimate of \$3,613,979.
3. The City could award the low bid of Encore Construction in the amount of \$3,056,000. This construction firm has good references and experience, and the bid is within the City's total budget for the project. We would also utilize \$2,000,000 in sewer fund reserves to cover the acceleration of the project schedule. It will enable the WWTP headworks to be replaced, and the sewer collections capacity expansion efforts to move forward.

**FINANCIAL IMPACT:**

The WWTP Headworks project is a City Commission-approved capital expense, and this 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 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.

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
<u>TOTAL</u>	<u>\$3,706,033</u>

**RECOMMENDATION:**

Staff recommends option # 3, the award of the WWTP Headworks Modifications project to Encore Construction Company LLC in the amount of \$3,056,000, and authorizing a \$2,000,000 transfer from sewer fund reserves to fund the acceleration of the project. Staff and our Engineering Consultant have conducted a thorough analysis of this bid, resulting in a recommendation to award the bid to Encore Construction.