



## THE CITY OF KEY WEST

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MEMORANDUM

### EXECUTIVE SUMMARY

**TO:** Bogdan Vitas, City Manager  
E. David Fernandez, Asst. City Manager - Operations

**FROM:** Jay Gewin, Utilities Manager

**DATE:** December 30, 2013

**SUBJECT:** **Approving Task Order 14-01 from Perez Engineering for Professional Services for Mechanical Integrity Testing and Permitting of WWTP Deep Injection Wells IW-1 and IW-2 in the Amount of \$64,840.**

#### ACTION STATEMENT:

This resolution will approve Work Order 14-01 for Perez Engineering in the amount of \$64,840 for Deep Injection Well Mechanical Integrity Testing and Permitting Professional Services for IW-1 and IW-2 and the WWTP site.

The agreement will be executed pursuant to F.S. 287.055 (CCNA), City Code 2-841, and the City's contract with Perez Engineering approved by Resolution # 12-280

#### BACKGROUND:

The City utilizes two (2) deep injection wells for disposal of treated effluent from the Richard A. Heyman Environmental Protection Facility. The deep injection well system consists of two (2) deep injection wells (IW-1 and IW-2) and associated monitoring wells.

Rule 62-528, Florida Administrative Code requires that each injection well undergo mechanical integrity testing (MIT) every five (5) years. They are also required to be permitted by the Florida Dept. of Environmental Protection. The most recent MIT of IW-1 and IW-2 was performed in 2009. Therefore, the next MIT and permitting for both deep wells needs to be submitted to FDEP prior to the existing permit expiration date of September 21, 2014.

Performance of the MIT requires the services of a well service company  
*Key to the Caribbean – Average yearly temperature 77° F.*

familiar with MIT of deep injection wells. The City groups the MIT of both IW-1 and IW-2 together to reduce contractor fees by allowing only one mobilization for the MIT of both wells. Grouping the MIT of both wells also reduces the amount of consulting fees associated with the MIT of the wells since only one MIT plan for both wells will be required to be submitted to FDEP for review and approval and only one set of technical specifications will need to be prepared instead of needing to produce separate sets of documents if the MIT of the wells were not grouped.

## **PURPOSE & JUSTIFICATION:**

This request is for MIT professional services for deep injection wells IW-1 and IW-2. The project will result in one MIT plan and contract documents for both IW-1 and IW-2. Perez Engineering & Development, Inc. (PE&D) in association with McNabb Hydrogeologic Consulting, Inc. (MHC) will prepare the MIT plan; technical specifications, provide bid services, field services during testing and prepare a MIT report for each injection well. .

PE&D is very familiar with the deep injection well system at the Richard A. Heyman Environmental Protection Facility. Perez Engineering capably performed similar tasks the last time the tests were performed in 2009.

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

- *Operating Permit Renewal Services* – The consultant will perform all required analysis, draft operational plans, and conduct geologic mapping that is required to complete the FDEP permit application. The consultant will also respond to any questions from the permitting agency.
- *Mechanical Integrity Testing Plan Preparation* – Perez Engineering will provide a detailed mechanical integrity testing plan for both injection wells. It will include provisions for both external and internal evaluation, video survey, temperature log, and pressure tests. PE&D will also respond to an unlimited number of questions from FDEP.
- *Mechanical Integrity Technical Specifications Preparation* – Perez Engineering will prepare technical specifications and a bid form for performance of the MIT work.
- *Bid Phase Services* – Perez Engineering will evaluate the proposals received to ensure the capability of the firm that would perform the MIT work, including a reference check.
- *Mechanical Integrity Testing Field Services*– Perez Engineering will provide inspection services during the MIT work, which is expected to last 5 days per well, 12 hours per day. They will also review shop drawings and payment applications from the contractor.
- *Mechanical Integrity Testing Reports Preparation* – Perez Engineering will prepare a report that summarizes the MIT work.

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 hourly rates established in the City's contract with Perez Engineering and Development.

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 will only account for approximately 24% of the hours totaling just 9% of the total fees allotted in this task order.

#### **OPTIONS:**

1. Using Perez Engineering to provide professional services provides the City with additional resources that are readily available, experienced, and knowledgeable of the City of Key West deep injection well system.
2. The City could choose not to use Perez Engineering and use another consultant for the MIT project. The use of another consultant will require hours for them to become familiar with the City's deep injection well system that PE&D has already learned by performing prior deep injection well projects with the City. Using PE&D will help result in the completion of the MIT work prior to the expiration date of the permits.

#### **FINANCIAL IMPACT:**

The fees for this task order total \$64,840. Funds are available in sewer budget line item 401-3503-535-31 to fund this task order.

The City had budgeted \$45,000 for this task. However, the original budgeted amount did not include the costs for MIT permitting, which is \$20,280 of this task order. City Staff decided we should combine permitting into this one task order, and will use available funds in this line item that were budgeted for non-capital sewer engineering expenses.

#### **RECOMMENDATION:**

The staff recommends option # 1, that the City approves this task order from Perez Engineering & Development, Inc. to provide the required deep injection well professional MIT services.