

**FOURTH AMENDMENT  
TO AGREEMENT**

**THIS FOURTH AMENDMENT** (the “Fourth Amendment”) to the Continuing Contract for Professional Services is made and entered into **this 7th day of September, 2005** by and between the CITY OF NAPLES, a Florida Municipal Corporation (the “City”), and **Tetra Tech, Inc. - Hartman and Associates, Inc.** (the “Consultant”).

**WITNESSETH**

**WHEREAS**, the City and the Consultant entered into that certain Continuing Contract for Professional Services, dated October 1, 2003 (the “Original Agreement”) for **public works/treatment plant processes design services** (‘Project’); and

**WHEREAS**, the parties desire to amend the Original Agreement by this Fourth Amendment **to provide for the preparation and submission of a Florida Department of Environmental Protection Underground Injection Control (UIC) permit and bid specifications, pursuant to the terms and conditions contained herein.**

**NOW, THEREFORE**, for good and valuable consideration, the receipt of which is hereby acknowledged, and in consideration of the mutual covenants, promises and conditions herein set forth, it is hereby acknowledged and agreed as follows:

1. The above recitals are true and correct and are incorporated herein by this Reference.
2. “Article Four, Compensation” shall be amended in accordance with Exhibit “A” attached hereto and incorporated herein for the provision of additional fees by the Contractor **in the amount not-to-exceed \$75,000 to provide for the preparation and submission of a Florida Department of Environmental Protection Underground Injection Control (UIC) permit and bid specifications, pursuant to the terms and conditions contained herein** (‘Project’).
3. The terms of this Fourth Amendment shall control and take precedence over any and all terms, provisions and conditions of Original Agreement which might vary, contradict or otherwise be inconsistent with the terms and conditions hereof. All of the other terms, provisions and conditions of Original Agreement, except as expressly amended and modified by this Fourth Amendment, shall remain unchanged and are hereby ratified and confirmed and shall remain in full force and effect.
4. This Fourth Amendment may be executed in any number of counterparts, each of which shall be deemed to be an original as against any part whose signature appears thereon and all of which shall together constitute one and the same instrument.

**IN WITNESS WHEREOF**, the City and the Consultant have caused this Fourth Amendment to be duly executed by their duly authorized officers, all as of the day and year first above written.

**CITY:**

**ATTEST:**

**CITY OF NAPLES, FLORIDA**

By: \_\_\_\_\_  
Tara Norman, City Clerk

By: \_\_\_\_\_  
Dr. Robert E. Lee, City Manager

Approved as to form and legal sufficiency:

By: \_\_\_\_\_  
Robert D. Pritt, City Attorney

**Tetra Tech, Inc. - Hartman and Associates, Inc.**

\_\_\_\_\_  
Witness

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

## **Proposal for Hydrogeological and Engineering Services for FDEP UIC Permitting of an Exploratory ASR Test Well**

**Tt HAI # 05.0157.M00**

As you requested, please find attached our proposal to provide hydrogeological and engineering services to apply for a UIC permit to construct an exploratory well to test the feasibility of aquifer storage and recovery in the City's service area. The anticipated test location is near the intersection of Goodlette-Frank Road and Golden Gate Parkway. The following are our proposed scope of services listed by task.

### **Task 1 - Preapplication Meeting with FDEP**

We will meet once with the FDEP in Fort Myers to discuss the ASR exploratory well concept, and determine if there is specific information that they will want, that may not necessarily be contained in Rule 62-528. Based upon that meeting, we will begin preparation of the exploratory well construction and testing specifications, as well as the required technical report that must accompany the permit application.

### **Task 2 - Prepare Exploratory Well Test Specifications**

Obtain from FDEP, SFWMD and the Big Cypress Basin existing hydrologic and hydrogeologic data within Collier and Lee Counties. Data will include core samples analyses, vertical and horizontal hydraulic conductivity of the aquifers and confining layers, groundwater quality, and other physical data (lithology, aquifer thickness, etc.) of the aquifers and confining units. Review of pertinent testing program data submitted to the FDEP UIC program will be obtained and reviewed.

Current FDEP and SFWMD records will be reviewed, and information collected on the deep injection wells and ASR that have been constructed in Collier and Lee Counties. The data to be collected will include compilation of injection and/or storage zones, the hydraulic and geochemical properties of the injection and/or storage zones, as well as other information that was collected during testing and operation.

It is the intent to use as much of the existing databases as possible to compile a complete inventory and historical record of the hydrologic cycle and water quality as possible. To the extent that the Big Cypress Basin has the framework and basic data in useable format, their database will be used.

Using these data, the exploratory well construction and testing methods will be developed, such that they are suitable for submittal to the FDEP for permitting.

Because these specifications must be submitted with the FDEP UIC permit application, we will meet with the FDEP prior to submittal to review the specifications to ensure that the FDEP requirements are met.

### **Task 3 - Assist with Golden Gate Canal Sampling**

We understand that the City will be responsible for collection and analysis of water from the Golden Gate Canal system. We will work with the City to establish the sampling protocol from the canal system. Analysis will include the FDEP Primary and Secondary Drinking water standards. Because the water stored in the aquifer system must meet primary and secondary drinking water standards, as described in 62-528, it will be necessary to collect water samples at least twice to determine the quality

of water in the Golden Gate Canal system. If any parameter exceeds the MCL, then treatment may be required prior to injection and storage. If it is determined through the testing described herein that ASR is feasible, the FDEP will require at least 6 primary/ secondary sampling events over the course of one year. This additional testing would not be required until the City applies for a testing permit.

#### **Task 4 - Prepare and Submit FDEP UCI Permit Application**

We will prepare the UIC permit application form, and include the hydrogeological report that is described in Chapter 62-528. The report will be prepared to identify the most likely storage zones, the quality of surface water to be stored, and the testing that will be conducted as part of the exploratory testing program.

The report will summarize the hydrogeology of the region, as described in previous reports conducted by other governmental agencies in their exploratory well testing and operating programs. The anticipated hydrogeology of the Naples area will be identified and described with emphasis on potential storage zones, confining units, and groundwater quality. This will take the format of the report required in 62-528

We will include additional information that the FDEP may request during the pre-application meeting.

This task does not include responding to any requests for additional information that the FDEP may ask. If these are sent by the FDEP, we will review them and meet with the City to estimate the cost to respond to the questions.

We will accomplish the tasks described above for the amount of \$75,000. The cost estimate per task is as follows:

<b>Task 1 - Preapplication Meeting with FDEP</b>	<b>\$ 2,000</b>
<b>Task 2 - Prepare Exploratory Well Test Specifications</b>	<b>\$23,000</b>
<b>Task 3 - Assist with Golden Gate Canal Sampling</b>	<b>\$ 1,500</b>
<b>Task 4 - Prepare and Submit FDEP UIC Permit Application</b>	<b>\$48,500</b>
<b>Total</b>	<b>\$75,000</b>

We will have the permit application and supporting technical documentation prepared for review by the City within two months of the notice to proceed. Upon receipt of the City's modifications, we will prepare and submit to the FDEP the final application within two (2) weeks.

We have not included the application fee for the permit application. The City will pay the application fee directly to the FDEP.