

PORT ST. LUCIE CITY COUNCIL  
AGENDA ITEM REQUEST

COUNCIL ITEM 13F  
DATE 8/24/12

Meeting Date: September 24, 2012

Public Hearing \_\_\_ Ordinance \_\_\_ Resolution \_\_\_ Motion X

Item: Contract #20120098 "Hydro Geologic Services"

Recommended Action:

Pursuant of Section 35.04 (C) waive the bidding and Approval of Award for contract # 20120098 as good cause shown by Ardaman and Associates, Inc. to perform "Hydro Geologic Services" for the investigation and rehabilitation of Well F6. The Hydro Geologic services necessary for the project will not exceed the amount of \$32,026.00 as provided herein. Contract period is for three hundred (300) calendar days.

Exhibits:

Department memo attached [X] yes [ ] no  
Copy of Ardaman and Associates proposal breakdown is attached.  
City Manager Waive the Bidding Memo.

Summary Explanation/Background Information:

Hydro Geologic services are necessary for Well F6 due to the increase in chloride concentration, which increases feed pressures at the Prineville RO Water Treatment Plant when the well is in operation. The well rehabilitation is required to improve water quality. Ardaman and Associates has extensive knowledge of the underground geological formations beneath the Utilities service area.

The need for the above is:

Purchase ( ) is (X) is not a replacement Purchase (X) was budgeted ( ) was not budgeted.

Expenditure: \$32,026.00

Department requests expenditure from the following:

Fund	431	Water and Sewer
Cost Center	3310	Water-Plant Operation
Object Code	531000	Professional Services
Project		

Director of OMB concurs with award: \_\_\_\_\_ City Manager concurs with award: \_\_\_\_\_

Department requests 0 minutes to make a presentation.

Submitted by: Jesus A. Merejo

Title: Director, Utility Department

**RECEIVED**

SEP 10 2012

Date Submitted: September 7, 2012  
City Manager's Office

## MEMORANDUM

To: City Council

From: Gregory J. Oravec, City Manager

Date: September 7, 2012

Re: **Waive Bidding Process**

---

The Utility Department is requesting to waive the bidding process and approve a contract with Ardaman and Associates, Inc. for Hydro Geologic Services associated with the rehabilitation of Well F6. This firm is familiar with our Utility and the geological formations in our service area. This service is required to maintain water quality for our Utility customers and thus it is requested that the sealed bid requirement be waived for good cause shown. This will expedite the required work.

Under chapter 35.04 (C) and by recommendation of this office, the City Council may waive the bidding process for good cause. Please advise if any further information is needed.

GJO:dkp

20120828

---

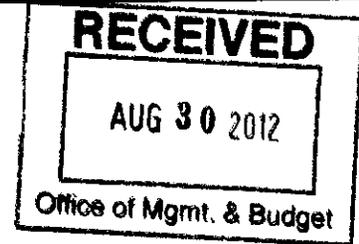
---

**INTEROFFICE MEMORANDUM**

---

---

To: Dave Pollard, Budget Director  
From: Jesus A. Merejo, Utility Director *JAM*  
Subject: Hydrogeologic Services for Well F6  
Date: August 28, 2012



Floridan Well 6 has had an increase in chloride concentration, which increases feed pressures at the Prineville RO Water Treatment Plant when the well is in operation. A well rehabilitation is required to improve water quality.

Hydrogeologic Services are necessary for the project, and the Utility has received a proposal from Professional Geologist, Douglas Dufresne, PG, CFEA. He has been instrumental in design, construction, development and hydrological modeling of the Utility's Surficial and Floridan wells, as well as securing the 2003 and 2005 Water Use Permit. Mr. Dufresne has extensive knowledge of the underground geological formations beneath the Utility's service area.

Utility staff requests the bidding process be waived and award the project to Douglas Dufresne, PG, CFEA, with Ardaman & Associates, Inc. due to his extensive background knowledge.

The cost is \$32,026.00 and funds are available in 431-3310-531000.

Your assistance in forwarding this item for the City Council's consideration will be appreciated.

PV/

copy: Brad Macek, Assistant Utility Director  
Pierre Vignier, Water Facilities Superintendent  
Jeanette Thompson, Budget Manager  
Cheryl Shanaberger, OMB Deputy Director



Ardaman & Associates, Inc.

Geotechnical, Environmental and  
Materials Consultants

August 21, 2012  
File Number 10166

City of Port St. Lucie  
Utility Systems Department  
900 S.E. Ogden Lane  
Port St. Lucie, Florida 34983

Attention: Mr. Pierre Vignier, Plant Superintendent

Subject: Proposal for Hydrogeologic Services for Well F6 Investigation and Rehabilitation  
City of Port St. Lucie, St. Lucie County, Florida

Dear Mr. Vignier:

As requested, Ardaman & Associates, Inc. (Ardaman) is pleased to present the following proposal to perform hydrogeologic services for the Well F6 Investigation and Rehabilitation. Due to changes in water quality over time for well F6 and the increase in RO plant feed pressures when the well is in operation, the City of Port St. Lucie has decided to rehabilitate the well in an effort to improve its water quality.

#### **GENERAL**

The City of Port St. Lucie has noticed a change in chloride concentration in water quality samples collected from well F6. When the well was first constructed in 2002, the chloride concentration was about 900 mg/L. In November 2011 the chloride concentration in well F6 was 2,177 mg/L.

The chloride concentration has risen about 142% in well F6 from 2002 to 2011. The City desires rehabilitation of well F6 in order to improve the water quality, if possible. An investigation into the changing water quality for well F6 is required to determine the quality and quantity of ground water from specific zones within the open borehole and what zones can be sealed off in order to produce ground water of acceptable quantity and quality.

Ardaman shall provide professional hydrogeological services necessary for reviewing the available data on well F6 and making recommendations for rehabilitation for the well. If the City elects to proceed with one or more of the recommendations, Ardaman shall design the rehabilitation specifications for a water well contractor and provide rehabilitation observation for the selected rehabilitation.

#### **SCOPE OF SERVICES**

Ardaman shall provide the following scope of services:

##### **A. Review of Existing F6 Data**

Ardaman shall request of the City a summary of the water quality analysis data for well F6. These data along with the water quality data collected at the time of well construction shall be evaluated. The lithologic logs shall be reviewed in conjunction with the geophysical logs to determine potential causes for the noted water quality increases. In addition, Ardaman shall review

8008 S. Orange Avenue 32809, Post Office Box 593003, Orlando, Florida 32859-3003 Phone (407) 855-3860 FAX (407) 859-8121

Louisiana: Alexandria, Baton Rouge, Monroe, New Orleans, Shreveport

Florida: Bartow, Cocoa, Fort Myers, Miami, Orlando, Port St. Lucie, Sarasota, Tallahassee, Tampa, West Palm Beach

wellfield operation to determine whether the distribution of pumpage in the wellfield and drawdown contributed to the changes in water quality.

**B. Well Testing and Rehabilitation Options**

Ardaman shall devise well testing and rehabilitation options for well F6 after the initial data evaluation has been completed. These testing options may include packer testing, interval sampling, or additional geophysical logging. Possible rehabilitation options may include back plugging the well, or interval sealing a portion of the well.

**C. Meeting**

Ardaman shall meet with the City to discuss the initial findings of the data evaluation, and the testing and rehabilitation options. The City has already indicated that the Contractor under current contract will be performing any testing and rehabilitation work. The City may wish to have the Contractor present at this meeting to discuss possible testing and rehabilitation options.

**D. Quote Evaluation**

Ardaman shall request a quote from the Contractor for the scope of work submitted to the Contractor. Ardaman shall evaluate the quote and make a recommendation to the City whether to proceed or request alternate quotes from other approved Contractors.

**E. Project Administration**

Ardaman shall provide project and contract administration for the testing and rehabilitation observation portion of the project including the review of submittals and invoices.

**F. Testing Observation**

It is anticipated that some additional testing may be required prior to making recommendations to alter well F6 in any way. Ardaman has allowed for 60 hours of testing observation time into the proposal. If additional time is required or requested by the City, Ardaman shall request a change in scope and budget prior to proceeding with the additional services.

**G. Rehabilitation Observation**

It is anticipated that some rehabilitation services shall be provided by the Contractor to alter the open hole interval of well F6. Ardaman has allowed for 60 hours of rehabilitation observation time into the proposal. If additional time is required or requested by the City, Ardaman shall request a change in scope and budget prior to proceeding with the additional services.

**H. Letter Summary Report**

Ardaman shall prepare a summary report detailing the initial data evaluation, the additional testing performed, any rehabilitation methods employed, and the resulting changes to the water quality of well F6.

## COMPENSATION

The proposed not-to-exceed compensation for the professional hydrogeological services for Well F6 investigation and rehabilitation described herein in accordance with the Scope of Services is \$32,026. The man-hour and fee breakdown schedule is provided as Table 1. The City shall pay Ardaman for services rendered in accordance with the rate schedule attached hereto as Attachment A.

## SCHEDULE

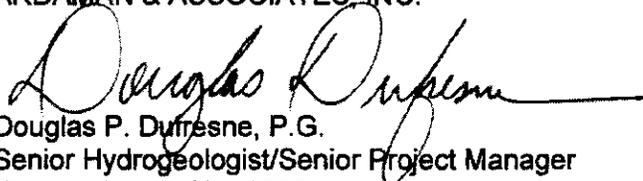
It is anticipated that the work described in the scope of services will be accomplished within 45 days except for delay beyond the reasonable control of Ardaman and the scheduling of the Contractor.

The rehabilitation of the well shall be dependent upon the allowed contract time for the project and the availability of the water well drilling Contractor to commence the project. We are prepared to proceed immediately upon receipt of the signed contract/purchase order.

We appreciate the opportunity to submit this proposal and look forward to working with you on this important project. If you have questions or need additional information, please do not hesitate to contact us.

If this proposal meets with your approval, please have the appropriate person prepare the applicable work order form and issue a purchase order.

Very truly yours,  
ARDAMAN & ASSOCIATES, INC.



Douglas P. Dufresne, P.G.  
Senior Hydrogeologist/Senior Project Manager  
Florida License No. 1527

DPD:dpd  
Enclosures

**TABLE 1  
CITY OF PORT ST LUCIE  
WELL F6 INVESTIGATION AND REHABILITATION  
MAN-HOUR & FEE BREAKDOWN**

Project Phase / Description	Senior Project Manager/ Senior Scientist P.G.		Project Hydrogeologist III		Hydrogeologist III		Senior Word Processor		Totals	
	\$146 per hour	Hours	\$115.50 per hour	Hours	\$94 per hour	Hours	\$48 per hour	Hours	Hours	Estimated Cost
<b>A. F6 Evaluation</b>										
Review of water quality, lithology, video logs, 1 geophysical logs	6	\$876	8	\$924	8	\$752			22	\$ 2,552.00
Devise well testing and rehabilitation options	12	\$1,752	16	\$1,848			4	\$192	32	\$ 3,792.00
Meet with City to discuss findings and options	8	\$1,168							8	\$ 1,168.00
Obtain Contractor quote and evaluate	4	\$584	4	\$462			2	\$96	10	\$ 1,142.00
<b>Sub-Totals:</b>	<b>30</b>	<b>\$4,380</b>	<b>28</b>	<b>\$3,234</b>	<b>8</b>	<b>\$752</b>	<b>6</b>	<b>\$288</b>	<b>72</b>	<b>\$ 8,654.00</b>
<b>B. Testing and Rehabilitation Observation</b>										
Project Administration w/ Pre-construction Meeting	20	\$2,920	4	\$462	4	\$376	4	\$192	32	\$ 3,950.00
Testing Observation	4	\$584	8	\$924	60	\$5,640			72	\$ 7,148.00
Rehabilitation Observation	4	\$584	4	\$462	60	\$5,640			68	\$ 6,686.00
Letter Summary Report	8	\$1,168	8	\$924	16	\$1,504	4	\$192	36	\$ 3,788.00
Other Direct Costs										
<b>Sub-Totals:</b>	<b>36</b>	<b>\$5,256</b>	<b>24</b>	<b>\$2,772</b>	<b>140</b>	<b>\$13,160</b>	<b>8</b>	<b>\$384</b>	<b>208</b>	<b>\$ 23,372.00</b>
<b>GRAND TOTAL ALL TASKS AND SUBS</b>	<b>66</b>	<b>\$9,636</b>	<b>52</b>	<b>\$6,006</b>	<b>148</b>	<b>\$13,912</b>	<b>14</b>	<b>\$672</b>	<b>280</b>	<b>\$ 32,026.00</b>