

**PASCO COUNTY ENGINEERING SERVICES DEPARTMENT  
TASK ORDER NO. SMO09-002**

**PASCO COUNTY LONG TERM STORMWATER MONITORING PROGRAM  
WATER QUALITY MONITORING FOR THE PERIOD  
JANUARY 1, 2009, TO DECEMBER 31, 2009**

The Engineering Services Department Task Order No. SMO09-002 between Pasco County, Florida, by and through its Board of County Commissioners (COUNTY) and Ardaman & Associates, Inc., (CONSULTANT), pursuant to the Professional Services Agreement (AGREEMENT) entered into between the parties on July 22, 2008, which is incorporated herein.

1. **SCOPE OF SERVICES**

The scope of services to be rendered by the CONSULTANT to continue the County's Long Term Monitoring Program for one additional year from January 1, 2009, to December 31, 2009, is described in EXHIBIT "A" of this task order.

2. **TIME FOR COMPLETION**

The time for completion of these services is Three Hundred and Sixty-Five (365) days beginning on January 1, 2009, previous approval by the Board of County Commissioners.

3. **COMPENSATION AND METHOD OF PAYMENT**

The CONSULTANT will be compensated and paid for these services in accordance with Article 8 - Compensation and the prices listed in Exhibit "B" of the AGREEMENT. The maximum compensation amount under this Task Order is Nineteen Thousand Three Hundred Eleven and 92/100 Dollars (\$19,311.92).

4. **ACCEPTANCE**

By signature hereon, the parties each accept the provisions of Task Order No. SMO09-002 and authorize the CONSULTANT to proceed at the direction of the COUNTY'S representative in accordance with the Scope of Services.

**IN WITNESS WHEREOF**, the parties hereto have executed the foregoing agreement on this

\_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

(SEAL)

BOARD OF COUNTY COMMISSIONERS  
OF PASCO COUNTY, FLORIDA

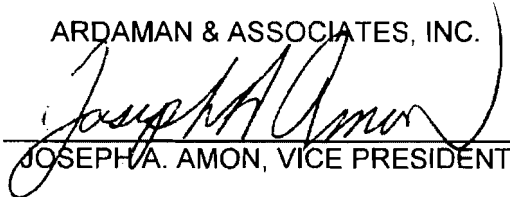
ATTEST:

BY: \_\_\_\_\_  
JED PITTMAN, CLERK

BY: \_\_\_\_\_  
THEODORE J. SCHRADER, CHAIRMAN

WITNESSES:

\_\_\_\_\_  
  
\_\_\_\_\_

ARDAMAN & ASSOCIATES, INC.  
BY:   
JOSEPH A. AMON, VICE PRESIDENT



Ardaman & Associates, Inc.

Geotechnical, Environmental and  
Materials Consultants

# EXHIBIT "A"

September 18, 2008  
Proposal No. 08-p239  
Revised

Pasco County Development Services Branch  
Pasco County Government Center  
7530 Little Road, Suite 230  
New Port Richey, Florida 34654

Attention: Mr. Mauricio Guerrero

Subject: **Proposal to Provide Environmental Engineering Services  
Pasco County's Long Term Stormwater Monitoring Program  
Task Order No. EDO05-020**

Dear Mr. Guerrero

As per your request, **Ardaman & Associates, Inc.** is pleased to submit this revised proposal to provide environmental engineering services for the referenced project, which will include the performance of trend monitoring at various locations in Pasco County, Florida. Included in this proposal is an outline of the project information provided to us, the proposed scope of services, our schedule and project costs.

## **Project Information**

**Ardaman & Associates** has performed quarterly trend monitoring and annual sediment sampling at numerous locations across Pasco County. The objective of trend monitoring program was to determine the rate of progress towards the overall goal of reducing pollution to the maximum extent practicable (MEP). The trend monitoring sites were generally at the downstream end of the watershed in which management strategies have been implemented. The sites will monitor improvements to ambient waters, and will provide baseline data for Pasco County streams, rivers and lakes.

We were requested to provide this proposal to continue the trend monitoring program for the six rivers previously tested. These rivers include: the Anclote River at Seven Spring Boulevard; the Pithlachascotee River at Little Road; the Hillsborough River at County Line; Cypress Creek at State Road 54; the Bear Creek at U.S. Highway 19; and the New River at Creek Road, west of Morris Bride Road.

## Proposed Scope of Work

The objective of **Trend Monitoring Program** is to determine the rate of progress towards the overall goal of reducing pollution to the maximum extent practicable (MEP). The trend monitoring sites were proposed to be at the downstream end of the watershed in which management strategies have been implemented. The sites will monitor improvements to ambient waters, and will provide baseline data for Pasco County streams, rivers and lakes. Each trend monitoring site was selected based on the following selection criteria:

- a) The site is in a basin that is capable of reflecting changes due to management programs implemented by Pasco County and its co-applicants;
- b) The site can monitor the effects of management programs in the basin through a single outflow, or outfall; and
- c) The basin is listed in the Part 1 permit application as an area of special value or of concern.

Utilizing the selection criteria above, six trend monitoring sites were selected for quarterly sampling events. These sites include:

- Site No. 6 – Anclote River at Seven Spring Boulevard
- Site No. 7 – Pithlachascotee River at Little Road
- Site No. 8 – Hillsborough River at County Line
- Site No. 9 – Cypress Creek at State Road 54
- Site No. 10 – Bear Creek at U.S. Highway 19
- Site No. 22 – New River at Creek Road, west of Morris Bridge Road

We propose to collect surface water samples from each of the six sample locations once a quarter for a period of one year. The collected surface water samples will once again be analyzed for the following parameters:

BOD <sub>5</sub>	Phosphorous Series
Fecal and Total Coliform	Sulfates
Total Dissolved Solids (TDS)	Chlorides
Total Suspended Solids (TSS)	Color
Total Organic Carbon (TOC)	Alkalinity
Nitrogen Series	



PH, conductivity, temperature, dissolved oxygen (DO), and turbidity measurements will be taken in the field.

The field sampling for this proposed project will be performed in general accordance with our Comprehensive Quality Assurance Plan (No. 900305), which is on file with the Florida Department of Environmental Protection (FDEP). Following the completion of the field sampling and laboratory analysis, a written report will be prepared summarizing the field sampling activities, including maps identifying the sampling locations. Our report will also summarize the results of the laboratory analyses.

A written report will be prepared following the completion of each of the sampling events. This report will summarize the field testing and laboratory results. The report will also provide an evaluation of the trends of the pollutants and recommendations for improving the monitoring program. Since an evaluation of each sample location will be performed in order to improve the monitoring program, we will utilize a Technician V level field representative to collect the surface water samples and to document the conditions of the sample locations.

### **Proposed Schedule**

We understand that the first sampling event will occur within the first quarter of 2009, while the final sampling event will occur in the fourth quarter of 2009. Assuming normal weather conditions, we estimate one day would be required to perform the field activities of the trend monitoring during each event. Laboratory analysis will require an additional two to three weeks. Our written report will be submitted within two weeks following the completion of the field and laboratory activities.

### **Proposed Project Cost**

**Ardaman & Associates** will perform the scope of work outlined above for the Long-Term Stormwater Monitoring Program for an estimated fee of **\$19,311.92**. A cost breakdown for the field sampling, laboratory analysis, and report is attached for each year of the monitoring program, and also shows the costs for each sampling event (quarter).



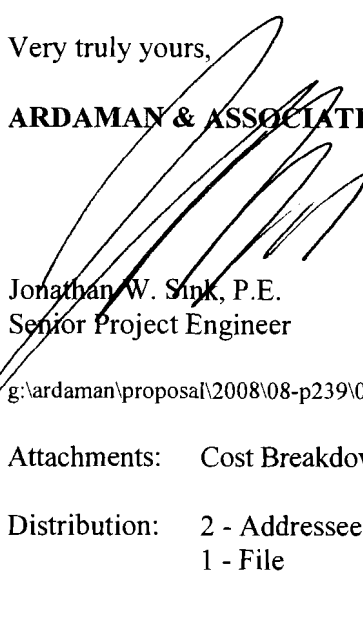
## Agreement

Our services will be performed as outlined above and under our current agreement with **Pasco County**. We understand that authorization to proceed with the Long-Term Stormwater Monitoring Program will be provided through the issuance of a purchase order.

We appreciate the opportunity to offer our services to your project and look forward to working with you in the future. Should you have any questions in regard to this proposal, please do not hesitate to contact this office.

Very truly yours,

**ARDAMAN & ASSOCIATES, INC.**




Jonathan W. Sink, P.E.  
Senior Project Engineer

g:\ardaman\proposal\2008\08-p239\08-p239-rev-02.doc

Attachments: Cost Breakdowns

Distribution: 2 - Addressee  
1 - File



William R. Goodson, P.E.  
Senior Project Engineer



## **ATTACHMENTS**

Client: Pasco County  
 Project: Proposed Long-Term - YEAR 1  
 Location: Pasco County, Florida  
 Proposal: 08-p239

TASK 1 - First Quarter Trend Monitoring and Reporting  
 TASK 2 - Second Quarter Trend Monitoring and Reporting  
 TASK 3 - Third Quarter Trend Monitoring and Reporting  
 TASK 4 - Fourth Quarter Trend Monitoring and Reporting

Date: 9/18/08

Prepared By: JWS  
 Reviewed By:

RATE	ITEMS	TOTALS		TASK 1		TASK 2		TASK 3		TASK 4	
		UNIT	\$	UNITS	\$	UNITS	\$	UNITS	\$	UNITS	\$
<b>ENGINEERING SERVICES</b>											
\$169.42	Principal Engineer	1	169.42		0.00		0.00		0.00	1	169.42
\$114.38	Senior Project Engineer, P.E.	11	1,258.18	1	114.38	1	114.38	1	114.38	8	915.04
\$106.75	Project Engineer/Geologist/Senior Indoor Air Quality Scientist	32	3,416.00	8	854.00	8	854.00	8	854.00	8	854.00
\$90.25	Staff Engineer/Geologist	0	0.00		0.00		0.00		0.00		0.00
\$79.18	Construction Technician V	40	3,167.20	10	791.80	10	791.80	10	791.80	10	791.80
\$50.19	CADD Operator	8	401.52	2	100.38	2	100.38	2	100.38	2	100.38
\$50.95	Secretarial	8	407.60	2	101.90	2	101.90	2	101.90	2	101.90
<b>TOTAL HOURS</b>		100		23		23		23		31	
<b>TOTAL LABOR DOLLARS</b>			\$8,819.92		1962.46		1962.46		1962.46		2932.54
<b>SAMPLING EQUIPMENT &amp; SUPPLIES</b>											
\$50.00	Sediment Sampling Supplies (day)	0	0.00		0.00		0.00		0.00		0.00
\$50.00	Water Sampling Supplies (day)	4	200.00	1	50.00	1	50.00	1	50.00	1	50.00
\$50.00	Decontamination (event)	4	200.00	1	50.00	1	50.00	1	50.00	1	50.00
\$35.00	Turbidity Meter (day)	4	140.00	1	35.00	1	35.00	1	35.00	1	35.00
\$35.00	pH, Conductivity, Temperature Meter (day)	4	140.00	1	35.00	1	35.00	1	35.00	1	35.00
\$35.00	Dissolved Oxygen Meter (day)	4	140.00	1	35.00	1	35.00	1	35.00	1	35.00
\$25.00	Disposable Teflon Bailer (each)	24	600.00	6	150.00	6	150.00	6	150.00	6	150.00
<b>TOTAL EQUIPMENT COSTS</b>			\$1,420.00		355.00		355.00		355.00		355.00
<b>LABORATORY ANALYSIS</b>											
<b>TREND MONITORING</b>											
\$0.00	Temperature	24	0.00	6	0.00	6	0.00	6	0.00	6	0.00
\$0.00	Turbidity	24	0.00	6	0.00	6	0.00	6	0.00	6	0.00
\$0.00	Conductivity	24	0.00	6	0.00	6	0.00	6	0.00	6	0.00
\$0.00	pH	24	0.00	6	0.00	6	0.00	6	0.00	6	0.00
\$0.00	Dissolved Oxygen	24	0.00	6	0.00	6	0.00	6	0.00	6	0.00
\$30.00	Biological Series - BOD	24	720.00	6	180.00	6	180.00	6	180.00	6	180.00
\$30.00	Biological Series - Fecal Coliform	24	720.00	6	180.00	6	180.00	6	180.00	6	180.00
\$30.00	Biological Series - Total Coliform	24	720.00	6	180.00	6	180.00	6	180.00	6	180.00
\$36.00	Nitrogen Series - Nitrate-Nitrite	24	864.00	6	216.00	6	216.00	6	216.00	6	216.00
\$24.00	Nitrogen Series - Total Kjeldahl Nitrogen	24	576.00	6	144.00	6	144.00	6	144.00	6	144.00
\$42.00	Nitrogen Series - Total Nitrogen	24	1,008.00	6	252.00	6	252.00	6	252.00	6	252.00
\$18.00	Phosphorus Series - Ortho-Phosphorus	24	432.00	6	108.00	6	108.00	6	108.00	6	108.00
\$18.00	Phosphorus Series - Total Phosphorus	24	432.00	6	108.00	6	108.00	6	108.00	6	108.00
\$24.00	Total Dissolved Solids (TDS)	24	576.00	6	144.00	6	144.00	6	144.00	6	144.00
\$24.00	Total Suspended Solids (TSS)	24	576.00	6	144.00	6	144.00	6	144.00	6	144.00
\$30.00	Total Organic Carbon (TOC)	24	720.00	6	180.00	6	180.00	6	180.00	6	180.00
\$18.00	Total Alkalinity	24	432.00	6	108.00	6	108.00	6	108.00	6	108.00
\$18.00	Chlorides	24	432.00	6	108.00	6	108.00	6	108.00	6	108.00
\$18.00	Color	24	432.00	6	108.00	6	108.00	6	108.00	6	108.00
\$18.00	Sulfates	24	432.00	6	108.00	6	108.00	6	108.00	6	108.00
<b>TOTAL LABORATORY COSTS</b>			\$9,072.00		2268.00		2268.00		2268.00		2268.00
<b>PROJECT COSTS</b>			\$19,311.92		\$4,585.46		\$4,585.46		\$4,585.46		\$5,555.54