

## SEMINOLE COUNTY GOVERNMENT AGENDA MEMORANDUM

**SUBJECT:** Work Orders #5 & #6 for the Agreement between Seminole County and the University of South Florida for Work on the Seminole County Watershed Atlas Project

**DEPARTMENT:** Public Works **DIVISION:** Road Operations & Stormwater

**AUTHORIZED BY:** W. Gary Johnson **CONTACT:** Mark E. Elomerfelt **EXT.** 5710  
W. Gary Johnson, PE, Director Mark E. Elomerfelt, PE

**Agenda Date** 4-22-03 **Regular** ☐ **Consent** ☒ **Work Session** ☐ **Briefing** ☐  
**Public Hearing – 1:30** ☐ **Public Hearing – 7:00** ☐

### MOTION/RECOMMENDATION:

Approve and authorize Chairman to execute Work Orders #5 & #6 for the Agreement between Seminole County and the University of South Florida for work on the Seminole County Watershed Atlas Project.

### BACKGROUND:

The Seminole County Watershed Atlas is available online at [www.seminole.wateratlas.org](http://www.seminole.wateratlas.org) and is regarded as the pre-eminent water resource web site in the state. It has earned praise from citizens, businesses (real estate, engineering firms, etc.), environmental groups (Friends of Lake Jesup, Friends of Wekiva) and regulatory agencies (FDEP, SJRWMD, EPA, etc.) alike. Work Order #5 in the amount of \$85,000.00, includes the required annual maintenance, updates, upgrades, the completion of additional lake assessments, and the completion of additional oral histories. These tasks are needed for the Atlas to continue to function properly, as well as to improve its efficiency and usefulness. Partial funding for this work order comes from cost shares provided by the 7 cities (\$35,000). Work Order #6, in the amount of \$62,400.00, provides for technology services, including the post-processing of GPS/GIS stormwater inventory data collected by Stormwater Interns, using the protocol developed by USF. The stormwater inventory update is a required regulatory condition in the federal NPDES Stormwater Permit.

Reviewed by:	<u>gh</u>
Co Atty:	<u>gh</u>
DFS:	<u>                    </u>
Other:	<u>                    </u>
DCM:	<u>                    </u>
CM:	<u>                    </u>
File No. <u>CPWS02</u>	

**WORK ORDER FOR  
AGREEMENT FOR WORK ON THE SEMINOLE COUNTY  
WATERSHED ATLAS PROJECT**

**WORK ORDER NO.:** 5

**PURCHASE ORDER NO.:** \_\_\_\_\_ (For billing purposes only, to be assigned by COUNTY after execution.)

**PROJECT:** Watershed Atlas Project

**COUNTY:** SEMINOLE COUNTY, A POLITICAL SUBDIVISION  
OF THE STATE OF FLORIDA

**CONTRACTOR:** UNIVERSITY OF SOUTH FLORIDA

Execution of the Work Order by COUNTY shall serve as authorization for the CONTRACTOR to provide for the above project, professional services as set out in the Scope of Services attached as Exhibit "A", to that certain Agreement of \_\_\_\_\_ 20. between the COUNTY and the CONTRACTOR and further delineated in the specifications conditions and requirements stated in the following listed documents which are attached hereto and made a part hereof

**ATTACHMENTS:**

drawings/plans/specifications  
[X] scope of services  
special conditions

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The CONTRACTOR shall provide said services pursuant to this Work Order, its attachments and the above-referenced Agreement, which is incorporated herein by reference as if it had been set out in its entirety. Whenever the Work Order conflicts with said Agreement, the Agreement shall prevail

**TIME FOR COMPLETION:** The work authorized by this Work Order shall be commenced upon issuance of a Notice To Proceed by COUNTY. This Work Order shall terminate upon completion of the work authorized herein, or five (5) years from issuance of the Notice to Proceed, whichever comes first.

**METHOD OF COMPENSATION:**

(a) This Work Order is issued on a:

- ☒ fixed fee basis
- ☐ time basis method with a not-to-exceed amount
- ☐ time basis method with a limitation of funds amount

(b) If the compensation is based on a "Fixed Basis", then the CONTRACTOR shall perform all work required by this Work Order for the sum of EIGHTY FIVE THOUSAND DOLLARS NO/100 (\$85,000.00) In no event shall the CONTRACTOR be paid more than the Fixed Fee Amount.

Payment to the CONTRACTOR shall be made by the COUNTY in strict accordance with the payment terms of the above-referenced Agreement

It is expressly understood by the CONTRACTOR that this Work Order, until executed by the COUNTY, does not authorize the performance of any services by the CONTRACTOR and that the COUNTY, prior to its execution of the Work Order, reserves the right to authorize a party other than the CONTRACTOR to perform the services called for under this Work Order if it is determined that to do so is in the best interest of the COUNTY.

(CORPORATE SEAL) Date: \_\_\_\_\_

ATTEST:

BOARD OF COUNTY COMMISSIONERS  
SEMINOLE COUNTY, FLORIDA

\_\_\_\_\_  
MARYANNE MORSE  
Clerk to the Board of  
County Commissioners of Date: \_\_\_\_\_  
Seminole County, Florida.

By: \_\_\_\_\_  
\_\_\_\_\_, Chairman

For use and reliance  
of Seminole County only.  
Approved as to form and  
legal sufficiency.

As authorized for execution by  
the Board of County Commis-  
sioners at their \_\_\_\_\_,  
\_\_\_\_\_, regular meeting.

\_\_\_\_\_  
County Attorney

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# **SEMINOLE COUNTY WATERSHED ATLAS PROJECT**

## **Work Order #5**

### **Exhibit A**

### **Scope of Work**

#### **INTRODUCTION**

The primary focus of this project is to maintain and upgrade the Seminole County Watershed Atlas and add new data sources from Lake Assessments and the Oral History Program.

#### **TASK 1: DATA UPDATES**

Wherever possible, the Watershed Atlas application is designed to update water quality, hydrology, and other data using automated database tools. So long as each data provider continues to support the automated data update protocols developed for the Atlas, the University will ensure that these tools continue to provide updated data for the duration of this contract. Many data providers do not have the ability to configure their data management systems in such a way as to allow automated data updates. Therefore, it is always necessary to manually update/import some of the data included on the Atlas. The University will work with Seminole County staff and data providers to update data for non-automated data sources once per month, quarterly or annually, depending upon the data provider. On a quarterly basis, the Watershed Atlas GIS sample site dataset, hydrography GIS dataset, and the Atlas database will be updated to include new sampling locations added to the sampling programs of existing data providers to allow new data to be accessible via the web interface. Reference layer GIS datasets, such as watershed boundaries and roads, will also be updated on a quarterly basis when necessary as a result of updated data provided by the GIS data source.

Cost: \$17,571

#### **TASK 2: WEBSITE AND SERVER MANAGEMENT**

The University will function as web manager for the Atlas. The University will provide password protected access to web usage statistics, including number of users, number of web page requests, and other standard web statistic metrics. In addition, the University will provide a Quarterly Web Usage Report which will include common website usage statistics as well as statistics related to number of data records or sample locations added, number of email requests received, and number of photos or documents entered. The University will maintain all software and hardware necessary to ensure that the web interface is online and accessible to the public. Software licenses to be maintained as part of this task includes: Microsoft SQL 2000 or higher, GreenPoint Webcharts 3D or another graphing software package, and a web statistics software package. The University will also provide hardware necessary to complete this task. Hardware requirements necessary to ensure that the Atlas will be available to all users with reasonable access times and minimal downtime have been planned according to projected demands. However, these demands may change do to increased or decreased user demand and will be evaluated on a yearly basis. Currently, this task is accomplished by serving the Atlas web interface from servers located at the University. However, if necessary, the University reserves the right to serve the Atlas from servers not located at the University.

Cost: \$8,777

### TASK 3: APPLICATION MAINTENANCE AND UPGRADES

The Atlas is an application that has been developed over several years as part of separate contracts and grants with multiple local governments and agencies. The web interface and database applications have been programmed to use available server software such as ESRI ArcIMS 4 for mapping components, Active Server Pages for Microsoft Internet Information Server (IIS) 5 for web components, and Microsoft SQL Server 2000 as the database platform. As with all software, these server applications are expected to improve each year, for example Microsoft IIS 5 replaced IIS 4 and Microsoft SQL Server 2000 replaced SQL Server 7. During 2001, all Atlas websites were upgraded to utilize these technologies and were also upgraded to include additional functionality. The University will provide these upgrades to the County on a yearly basis. If the County maintains the Website and Server Management task of its maintenance Contract the University will also install and configure these upgrades.

Cost: \$19,404

### TASK 4: LAKE ASSESSMENTS

The University will provide GIS support to Seminole County's lake assessment program. The University will post-process data from the County's lake assessment program. As a part of these assessments, the University will: (1) incorporate all data collected into the W-RAD; (2) produce Geographic Information System (GIS) maps and attribute layers (including bathymetry) from assessment data; and (3) provide quarterly reports on lakes in the management program from the W-RAD for County Staff upon request. The County will be responsible for all field work. In addition, the University will coordinate interviews with county residents to document historical conditions through resident photographs and narratives.

Cost: \$39,248

## PROJECT DELIVERABLES

- o Maintenance of established automated data update tools and manual updates to non-automated data sources for a period of one year.
- o Maintenance of software and hardware necessary to host the Atlas with reasonable access time and minimal downtime for a period of one year. Web site usage statistics will be provided online.
- o Provide Atlas application upgrades for a period of one year.
- o Assessment and assessment products on lakes that can be scheduled during the summer semester with a goal of completing 10 lakes
- o Candidate Identification Database and publication of Oral History Interviews and historical photographs on priority water bodies with a goal of completing historical documentation on 10 water resources

The University will provide the web address (URL) [www.Seminole.wateratlas.org](http://www.Seminole.wateratlas.org) for use while the University hosts the Atlas

TOTAL PROJECT COST: \$85,000



**WORK ORDER FOR  
AGREEMENT FOR WORK ON THE SEMINOLE COUNTY  
WATERSHED ATLAS PROJECT**

**WORK ORDER NO.:** 6

**PURCHASE ORDER NO.:** \_\_\_\_\_ (For billing purposes only, to be assigned by COUNTY after execution.)

**PROJECT:** Watershed Atlas Project

**COUNTY:** SEMINOLE COUNTY, A POLITICAL SUBDIVISION  
OF THE STATE OF FLORIDA

**CONTRACTOR:** UNIVERSITY OF SOUTH FLORIDA

Execution of the Work Order by COUNTY shall serve as authorization for the CONTRACTOR to provide for the above project, professional services as set out in the Scope of Services attached as Exhibit "A", to that certain Agreement of \_\_\_\_\_ 20. between the COUNTY and the CONTRACTOR and further delineated in the specifications conditions and requirements stated in the following listed documents which are attached hereto and made a part hereof.

**ATTACHMENTS:**

drawings/plans/specifications  
☒ scope of services  
☐ special conditions

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The CONTRACTOR shall provide said services pursuant to this Work Order, its attachments and the above-referenced Agreement, which is incorporated herein by reference as if it had been set out in its entirety. Whenever the Work Order conflicts with said Agreement, the Agreement shall prevail.

**FOR COMPLETION:** The work authorized by this Work Order shall be commenced upon issuance of a Notice To Proceed by COUNTY. This Work Order shall terminate upon completion of the work authorized herein, or five (5) years from the issuance of the Notice to Proceed, whichever comes first

**METHOD OF COMPENSATION:**

This Work Order is issued on a:

- ☒ fixed fee basis
- ☐ time basis method with a not-to-exceed amount
- ☐ time basis method with a limitation of funds amount

If the compensation is based on a "Fixed Fee Basis", then the CONTRACTOR shall perform all work required by this Work Order for the sum of SIXTY TWO THOUSAND FOUR HUNDRED DOLLARS NO/100 (\$62,400.00). In no event shall the CONTRACTOR be paid more than the Fixed Fee Amount

Payment to the CONTRACTOR shall be made by the COUNTY in strict accordance with the payment terms of the above-referenced Agreement

It is expressly understood by the CONTRACTOR that this Work Order, until executed by the COUNTY, does not authorize the performance of any services by the CONTRACTOR and that the COUNTY, prior to its execution of the Work Order, reserves the right to authorize a party other than the CONTRACTOR to perform the services called for under this Work Order if it is determined that to do so is in the best interest of the COUNTY.

IN WITNESS WHEREOF, the parties hereto have made and  
executed this Work Order on this \_\_ day of \_\_\_\_\_, 20\_\_,  
for the purposes stated herein

ATTEST:

UNIVERSITY OF SOUTH FLORIDA

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

(CORPORATE SEAL) Date: \_\_\_\_\_

ATTEST:

BOARD OF COUNTY COMMISSIONERS  
SEMINOLE COUNTY, FLORIDA

\_\_\_\_\_  
MARYANNE MORSE  
Clerk to the Board of  
County Commissioners of Date: \_\_\_\_\_  
Seminole County, Florida.

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

, Chairman

For use and reliance  
of Seminole County only.  
Approved as to form and  
legal sufficiency.

As authorized for execution by  
the Board of County Commis-  
sioners at their \_\_\_\_\_,  
\_\_\_\_, regular meeting.

\_\_\_\_\_  
County Attorney

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**Seminole County Watershed Atlas Project  
Work Order #6  
Exhibit A  
Scope of Work**

The Florida Center for Community Design and Research at the University of South Florida will assist the Seminole County Public Works Department in collecting and post-processing stormwater related infrastructure data. This project will use the protocol document developed by The Florida Center with the assistance of Seminole County staff, and will continue to improve the protocol with appropriate updates. The resources required to perform these updates will be assisted by a project that is currently underway with Hillsborough County to update the GIS portion of their protocol document. Consultants hired by Seminole County will perform the majority of the field data collection effort. After the completion of the data collection effort, USF staff will post-process and finalize the stormwater data with input from Seminole County staff.

**Task 1 Review of Protocol and Project Preparation**

Florida Center Staff will work with Seminole County staff to review the data dictionary that is utilized in both the GPS and GIS portions of the stormwater inventory. The Florida Center will perform any necessary revisions to the protocol, including an update to the existing protocol document, if necessary. Small scale maps will also be generated for each of the sections of each basin where stormwater inventory data will be collected.

*Cost: \$7,400.00*

**Task 2 GIS Post Processing of Seminole County and Consultant Field Data**

Seminole County will manage all consultant field data collection efforts to complete a catalog for stormwater assets. The Florida Center will, upon receiving shapefiles from Seminole County staff, post-process the files as outlined in the updated Seminole County Stormwater Inventory Protocol Document outlined in Task 1. The cost estimate for this task is based on the assumption that the data collected will be provided in a comparable format to the data provided in the 2002 stormwater inventory project. The estimate is also based on the assumption that the stormwater assets collected through this effort will be approximately double in number to the 2002 project.

Stormwater field data will be collected in the Howell Creek, Little Econ, Yankee Lake, Jessup and Monroe basins. It is estimated that the amount of structures collected in all of these basins combined will approximately double the number of structures collected through the previous inventory effort. If time allows, updates for new developments in previously inventoried basins (Little Wekiva, Big Wekiva, and Soldiers Creek) will be collected and post processed as well.

*Cost: \$33,000.00*

**Task 3 Data Layer Queries**

Florida Center staff will perform all data layer queries to assign geographic attributes to the assets. Some of the items assigned in these queries include; watershed id, closest road, subdivision or closest subdivision, and TRS. Initial QA/QC will be performed by Florida Center Staff, and then provided to the County for a final revision. After receiving comments from Seminole County staff, the Florida Center will make any necessary corrections to the new data set.

*Cost: \$14,000.00*

**Task 4 QC Data with Seminole County Staff and Creation of Final Layer**

The Florida Center will combine the new data set with the existing Seminole County Stormwater GIS Layer. A final layer will be provided to Seminole County at the completion of this task.

*Cost: \$8,000.00*

**Total Cost: \$62,400.00**

*FP*

**Project Deliverables**

*Deliverable 1* – Addendum or update to existing protocol for Stormwater GPS and GIS work.

*Deliverable 2* – Completion of no less than the appropriate stormwater GIS layers for the collected field data.

*Deliverable 3* – Final layer that contains new stormwater data and the existing Seminole County Stormwater inventory data.

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