

AGENDA



Thursday, March 25, 2010

**Purchasing Office
RECOMMENDATION FOR COUNCIL ACTION****Item No. 43**

Subject: Authorize award, negotiation, and execution of a 12-month requirements service contract with VIEUX & ASSOCIATES, INC., Norman, OK, for real-time radar-based rainfall data processing services and real-time predicted hydrologic and hydraulic modeling services in an estimated amount not to exceed \$190,944, with six 12-month extension options in amounts not to exceed \$169,944 for the first extension option, \$169,944 for the second extension option, \$177,692 for the third extension option, \$185,827 for the fourth extension option, \$194,366 for the fifth extension option, and \$203,337 for the sixth extension option, for a total estimated contract amount not to exceed \$1,292,054.

Amount and Source of Funding: Funding in the amount of \$45,600 is available in the Fiscal Year 2009-2010 Operating Budget of the Watershed Protection Department. Funding in the amount of \$15,448 is available in the Fiscal Year 2009-2010 Capital Budget of the Watershed Protection Department. Funding in the amount of \$2,600 is available in the Fiscal Year 2009-2010 Operating Budget of the Austin Water Utility. Funding for the remaining eight months of the original contract period and the extension options is contingent upon available funding in future budgets.

Fiscal Note: A fiscal note is attached.

For More Information: Mick Osborne, Specialist Sr. Buyer /974 2995

Purchasing Language: Single Source.

MBE/WBE: This contract will be awarded in compliance with Chapter 2-9C of the City Code (Minority Owned and Women Owned Business Enterprise Procurement Program). No subcontracting opportunities were identified; therefore, no goals were established for this solicitation.

Boards and Commission Action: Recommended by the Water & Wastewater Commission.

In a continuing effort to improve the City's response capabilities to flood emergencies, the Watershed Protection Department (WPD) requires a new contract with Vieux and Associates, Inc. to replace the current contract which expires June 2, 2010. The Vieux contract provides rainfall data processing, flood threat determinations, and predicted hydrologic and hydraulic modeling. This information is used by the City's Flood Early Warning System to provide critical flood hazard information to first responders.

This requested contract represents a continuation of the existing services being provided, which include:

- Adjust the National Weather Service Doppler radar data to display rainfall data on a per square kilometer basis in Travis County every 15 minutes;
- A flood threat detection system that allows for immediate viewing of high flood threat areas based on the amount of rainfall that has occurred during a specific storm event;
- Predicted precipitation in the Austin Travis County area that allows for one-hour predictions of storm intensity, direction, and anticipated accumulation;

- Automated warning alarms to City staff based on forecasted conditions; and
- Predictive hydrologic and hydraulic models for some watersheds.

The requested contract will also include the following new services:

- Rainfall data averaging to support the WPD's High Hazard Dam program and the Environmental Monitoring program;
- Real-time web hosting of predictive hydrologic and hydraulic models for additional City watersheds;
- Data archival service integrated into the City's current weather information database; and
- Flexibility in data processing to allow the City more control in validating and creating models.

Radar rainfall data is also used by Austin Water Utility to analyze the wastewater collection system in two ways.

- Information to target areas in the pipe system for repair or replacement. The information will be determined by an examination of the relationship between high flows that occur in wet weather and rain intensity, where infiltration and inflow leakage into the pipe system is excessive,
- Information to determine peak flows for designing new pipe and pumping stations. Analysis of the model will determine load versus capacity relationships throughout the collection system. The model is calibrated using both flow data and radar rainfall data, and will accurately represent how the system responds to rainfall events of various sizes.

The existing contract with Vieux was awarded in December 2006 based on a competitive solicitation. This is a single source procurement since this product provides the City with a proprietary model that the City can modify to develop and calibrate data for various watersheds. Vieux is the only supplier that produces a product that has a hydrologic/hydraulic model that automatically ingests spatially distributed radar rainfall data.