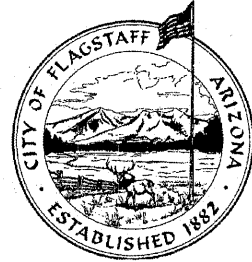


**CITY OF FLAGSTAFF
STAFF SUMMARY REPORT**

To: The Honorable Mayor and Council
From: Patrick Brown, Buyer
Management Services, Purchasing Division
Date: May 20, 2008
Meeting Date: June 3, 2008

Title: Award of Bid for a Landfill GPS System

Recommended Action:

Accept the bid of Allen Instruments & Supplies of Phoenix, Arizona for the purchase of a Landfill GPS System in the amount of \$49,426.93 plus applicable freight and taxes.

ACTION SUMMARY:

Accept the bid of Allen Instruments & Supplies Phoenix, Arizona for the purchase of a Landfill Global Positioning System (GPS). Staff conducted formal public advertising and solicited three suppliers of this system, and received only one response from Allen Instruments & Supplies.

DISCUSSION:**Background/History:**

Landfill Staff have historically used traditional survey methods in order to properly set grade stakes when establishing the parameters of the daily work locations for landfill operations. Landfill cells are laid out on a long term basis using a sequencing plan determined by daily volume estimates. It is important for landfill staff to conduct weekly, monthly, and quarterly grade checks to ensure compliance with operation plans. The GPS will provide more timely accurate information.

Key Considerations:

The current survey instruments require two operators, (a gunner and rodman) in order to measure and place stakes, however GPS technology makes it possible to allow for the use of only one operator. The operator manages the survey on a real-time basis from a rover unit, while a nearby base station continually corrects the horizontal and vertical accuracy of the rover. Traditional methods of survey grade work require the gunner to be set up on a known point (control point) somewhere within the landfill footprint. The setup time for a traditional survey is much longer (typically 20 minutes) compared to that of the GPS rover (typically 25 to 30 seconds). The base station allows for correction factors to be applied to the rover such that the

accuracy is within 10 mm in the horizontal (x,y) axis and 20 mm in the vertical (z) axis. It has been an industry standard for landfills throughout the United States to utilize GPS technology for accurate and timely data related to the control of such factors as growth rates, compaction, grade work, and boundary locations. In an effort to remain competitive with the industry, the GPS unit is a necessary tool for Landfill Staff to utilize.

Community Benefits and Considerations:

The GPS is an efficient tool that allows Landfill Staff to accurately calculate growth rates, closure dates, and other vital data necessary for proper planning for the future. The GPS base station will serve other important functions as the future progresses. It is an industry standard for new solid waste compaction machinery to have GPS technology attached to the unit in order to monitor compaction rates on a real time basis. Landfill Staff has budgeted for the purchase of a new solid waste compaction during fiscal year 2012.

Community Involvement:

N/A

Financial Implications:

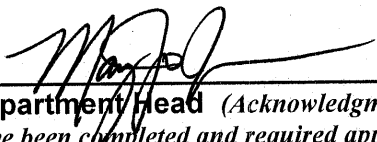
The GPS is budgeted in Environmental Services-Cinder Lake Landfill, Operating Capital, GPS Backpack and Base Station. The budgeted amount for this system is \$50,000.

Options and Alternatives:

1. Request staff to re-bid this item

Attachments/Exhibits:

None



Department Head *(Acknowledgment that all reviews have been completed and required approvals initialed below.)*

INITIALS	RESPONSIBILITY	DATE	INITIALS	RESPONSIBILITY	DATE
_____	BIDS/PURCHASES	_____	_____	FINANCE/BUDGET	_____
_____	GRANTS	_____	_____	CONTRACTS	_____
_____	LEGAL	_____	_____	IGAS	_____
_____	FIRE DEPARTMENT	_____	<i>BJ</i>	<i>PUBLIC WORKS</i>	_____
DATE OF COUNCIL APPROVAL: _____					