

**TOWN OF PRESCOTT VALLEY  
REQUEST FOR COUNCIL ACTION**

**Date: August 13, 2015**

**SUBJECT:** Equipment Purchase - Sewer Line Rapid Assessment Tool (SL-RAT)

**SUBMITTING DEPARTMENT:** Utilities Department

**PREPARED FOR:** Neil Wadsworth, Director

**AGENDA LOCATION:** Comments/Communications , Consent , Work/Study ,  
New Business , Public Hearing , Second Reading

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**ATTACHMENTS:** a) Construction Product Marketing, LLC (CPM) - Cost Proposal  
b) InfoSense, Inc. - Sole Source Letter from Construction Product Marketing, LLC

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**SUMMARY BACKGROUND:** The Utilities Department is requesting Council approval to purchase a Sewer Line Rapid Assessment Tool (SL-RAT) to assist with evaluation of the Town's sanitary sewer collection system. This item has previously been budgeted in FY 2015-16.

Maintenance staff typically utilize video equipment to determine infrastructure conditions (40% of use) and conveyance /obstruction conditions (60% of use). Said work involves: 1) removal of manhole cover, 2) lowering a wheeled camera down the barrel and 3) inserting the camera in the segment of pipe that requires inspection. Once the camera is properly positioned, an operator directs the camera through the pipe to the next manhole. The time to complete an inspection varies but it typically takes approximately forty (40) minutes per segment. In addition, staff must take sanitary circumstances into account and its impact upon equipment and personnel.

The SL-RAT is a portable, onsite tool that provides sewer line obstruction assessment in less than three (3) minutes and the equipment does not come into contact with sewage. One piece is a radio frequency transmitter and the second piece is a radio frequency receiver. The manhole covers between a pipe segment are removed and the transmitter and receiver straddle their respective barrel. Both pieces incorporate a short antenna section that protrudes partially down each barrel and an operator activates the transmit code. The acoustic signature is analyzed by software and real time evaluation of a pipeline can determine if any blockage conditions are present, i.e. grease, roots, etc. The technology is relatively new (5 years) but over 100 units have been sold to 65 municipalities and testing by the Environmental Protection Agency (EPA) confirmed that the equipment works as advertised. In addition, Town and OMI staff tested a demo unit on November 18, 2014 on various pipe segments and the conditions noted were confirmed by the Town's video equipment.

The FY 2015-16 budget provides for purchase of an SL-RAT in an effort to obtain cost savings for obstruction assessment. The cost to check for obstructions with video equipment is approximately \$1.68 per foot compared to approximately \$0.14 per foot for the SL-RAT. The Town collection system consists of roughly 235 miles of pipe. Figure 1 and Figure 2 provide some detail of the equipment and typical setup.

Conventional video inspection of sewer pipes will always be required in order to examine actual conditions within a pipe. However, basic monitoring of the system for obstructions via the SL-RAT can provide similar data at a rate over 10 times quicker than the camera. [Note: Town Code 3-04-010 would normally require that this item be bid. However, in the event there is only one firm or company capable

of providing a particular piece of equipment, Town Code 3-04-020 allows it to be purchased without bidding. The attached letter explains that the SL-RAT is only provided by InfoSense, Inc.

**Figure 1 – Receiver Section of SL-RAT Placed In Manhole**



**Figure 2 – Typical Setup of SL-RAT Straddling Manholes to Test Pipe Segment**



**OPTION ANALYSIS:** The Council may vote to:

- 1.) Approve this purchase, **OR**
- 2.) Not approve this purchase, **AND/OR**
- 3.) Direct staff to pursue other options

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**ACTION OPTION:** Motion to approve the purchase of a SL-RAT and associated accessories based on the cost proposal in the amount of \$28,825.00 as outlined in the Fiscal Analysis, **OR** Motion not to approve this purchase. **VOTE**

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**RECOMMENDATION:** Town staff recommends purchase approval of the SL-RAT via the services of Construction Product Marketing, LLC (CPM).

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**FISCAL ANALYSIS:** The Fiscal Analyses is noted per Table 1 below:

**Table 1**

Enterprise Sewer

Sewer Line Rapid Assessment Tool (SL-RAT)	
HTE Code(s): 501-7010-700-7410	
Finance Proj. # (TBD)	
FISCAL YR 2015/2016	Approved Budget: \$35,000.00
	Expended & Encumbered: \$0.00
	CPM - Cost Proposal <u><u>-\$28,825.00</u></u> < (this action)
	Balance: \$6,175.00
FISCAL YR 2015/2016	

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**REVIEWED BY:**

Management Services Director \_\_\_\_\_

Town Clerk \_\_\_\_\_

Town Attorney \_\_\_\_\_

Town Manager \_\_\_\_\_

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**COUNCIL ACTION:**

Approved    Denied    Tabled/Deferred    Assigned to \_\_\_\_\_