

**COUNCIL ACTION FORM**

**SUBJECT: AWARD OF CONTRACT FOR A MIXING SYSTEM IN BLOOMINGTON ROAD ELEVATED TANK**

**BACKGROUND:**

The Bloomington Road Elevated Tank (BRET) is a two-million-gallon steel tank which was constructed in 1989. In 2009, a second elevated tank began operation in the same distribution pressure zone as BRET. With the new tank in operation, the Water Plant can now temporarily take BRET out of operation for maintenance. In 2010, BRET will be repainted.

Prior to painting the tank, a mixing system will be installed. In order to maintain good water quality, each elevated tank must have adequate mixing occur in the tank. If mixing does not take place, water inside the tank may stratify. This means that water at the bottom of the tank moves in and out of the tank freely while a layer of "old" water becomes stagnant above it. If this stratification takes place, the "old" water layer can degrade in water quality and taste.

In 2008, Water Plant staff conducted tests to determine if there was significant water stratification in BRET. Although water is safe throughout the tank, there was evidence that some stratification was taking place. Therefore, staff feels it is prudent to install a mixing system while the tank is out of service.

On December 10, 2009, bids were opened for this project. A summary of the bids is as follows:

Solar Bee, Inc.	\$24,321.40
CB&I, Inc.	\$53,000.00
Engineer's Estimate	\$60,000.00

Staff members have closely reviewed both proposals. Each provide for very different mixing systems. The specifications were written for a "passive" system, meaning it operates with no moving parts. The CB&I system meets this requirement.

The bid documents also said other systems would be considered as long as detailed information was provided on all exceptions to the contract specifications. Also, enough information was required to fully evaluate an alternate bid. The Solar Bee system provided some information, but not to the extent required by the specifications. In particular, they did not specifically state what exceptions they were taking. They left it up to staff to discern what the differences were. In addition, some basic information for

the Solar Bee system was not provided such as the assembly requirements and required tank penetrations for electrical conduit. Finally, page six of their standard equipment specifications is missing. For these reasons, staff considers Solar Bee non-responsive.

Aside from Solar Bee not meeting all bidding requirements, there are other aspects about their mixing system which staff considers less desirable. The CB&I system is permanently fixed in the tank and is relatively maintenance free. The Solar Bee mixer, however, operates with an electrical motor and floats inside the tank. The equipment must be installed through a roof hatch and then assembled inside the tank. When maintenance is required, the tank may have to be drained for service technicians to perform their work. Or, professional services would be required to make the repairs as it floats in the water.

Though the up-front capital cost of the Solar Bee mixing system is significantly less than CB&I, staff feels the benefits of a low-maintenance, passive system over time will outweigh the initial cost savings. Entering tanks to conduct maintenance presents a potential hazard to Water Plant personnel. Additionally, an electrical connection must be made from the top of the tank down to the partially submerged mixer. The formation of ice is less likely with a mixing system, but there would be a chance the electrical cord or the mixer itself could get caught up in ice and damaged.

It is important to note that because this is a contract relating to a public utilities improvement, the City is not required to award to the lowest bidder and may instead award the contract as is deemed in the best interest of the City.

The current CIP includes \$475,000 for the overall BRET maintenance project. Of this amount, \$75,000 was allotted for the mixing system. Upon approval by City Council, the mixing system installation will begin in February and be completed by March 31, 2010.

**ALTERNATIVES:**

1. Award the contract to CB&I, Inc. of Bolingbrook, Illinois in the amount of \$53,000, based on the finding that the bid of Solar Bee, Inc. was non-responsive and/or not in the best interest of the City.
2. Award the contract to Solar Bee, Inc. of Dickinson, North Dakota in the amount of \$24,321.40.
3. Reject all bids and do not award a contract at this time.

**MANAGER'S RECOMMENDED ACTION:**

The Bloomington Road Elevated Tank will be taken out of service for maintenance in 2010. At this time, Water Plant staff feels it is prudent to install a water mixing system to help maintain water quality.

Two bids were received for the project. Solar Bee offers the lowest-cost mixing system, but their bid did not provide the required submittal information. Also, staff feels that over time, the CB&I system will make up the initial added cost in reliability as well as ease and safety of maintenance.

Therefore, it is the recommendation of the City Manager that the City Council adopt Alternative No. 1, thereby determining that Solar Bee, Inc. was non-responsive and/or not in the best interest of the City, and approving award of contract to CB&I, Inc. in the amount of \$53,000.