



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: March 24, 2015

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Purchase Order For City Hall Well Repair

RECOMMENDATION:

That Council approve a maintenance and repair Purchase Order in the amount of \$102,164.56 to PCL Construction, Inc., for repairs made to the City Hall Well.

DISCUSSION:

The Ortega Groundwater Treatment Plant Project (Project) was completed in October 2013. The scope of work included replacing the column pipe, pump and motor at both the City Hall and Vera Cruz Wells. The Project was successfully completed, and the City began producing water from the City Hall and Vera Cruz Wells in January 2014.

On May 27, 2014, the pump and motor for the pump for the City Hall Well (Well) shut off while pumping water to the Ortega Groundwater Treatment Plant. After an initial assessment, staff contacted PCL Construction, Inc. (PCL), the general contractor, who installed the pump and motor, regarding a potential warranty issue.

PCL arranged to have the pump and motor pulled from the well on June 17, 2014. Only a portion of the supporting column pipe was retrieved. The remainder of the supporting column pipe and the pump and motor had fallen to the bottom of the well. Because the column pipe was broken, a more specialized technique was needed to retrieve the remaining equipment from the Well on September 16, 2014.

The pump and motor were sent to the manufacturer for evaluation. In a report dated October 29, 2014, the manufacturer determined, based on the wear pattern and the amount of sand found in the pump, the Well had been pumping sand for a period of time. When the pump finally filled with sand, it caused a torque event that broke the supporting column pipe. Forensic testing on the column pipe was conducted by a materials testing laboratory and documented in a report dated December 30, 2014. The report stated that the material used to manufacture the column pipe met the standards and that the mode of failure was flexural bending fatigue. This mode of failure was

consistent with the wear seen in the pump and the break in the middle of the column pipe. Based on this information, it was concluded that the failure of the column pipe, pump and motor was not a warranty issue; therefore, the City was responsible for the \$102,164.56 in costs related to removing the column pipe, pump, and motor from the Well.

With equipment mobilized onsite to perform the recovery work, staff had the contractor install a gravel pack and a new pump and motor in the Well at a higher elevation. Installation was completed on January 23, 2015, at a cost of \$56,316.07. The Well has been returned to service and has been reliably producing water, but the earlier sanding problem indicates that the Well is nearing the end of its useful life and needs to be scheduled for replacement.

FUNDING

There are sufficient appropriations in the Water Fund to cover the \$102,164.56 related to recovering the column pipe, motor, and pump from the Well.

The cost of the installation of a new pump and motor was covered under the Design For On-Call Engineering Services for Groundwater Well Development Projects contract, approved by Council on April 8, 2014.

PREPARED BY: Joshua Haggmark, Water Resources Manager/LS/mh

SUBMITTED BY: Rebecca J. Bjork, Public Works Director

APPROVED BY: City Administrator's Office