

WEST BASIN MUNICIPAL WATER DISTRICT

OCTOBER 6, 2004 - Water Resources
Little, Kwan

OCTOBER 25, 2004 - Board Meeting

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ACTION CALENDAR

BREWER DESALTER EXTRACTION WELL AND BARRIER MONITORING WELLSUMMARY:

Staff has undertaken a project that will result in the construction of two new Wells for the District. A background description of these new Wells is as follows:

Brewer Desalter Extraction Well

The Brewer Desalter Project was originally constructed in the early 1990's to remove salt from brackish groundwater in the Torrance area. Two Wells, both constructed over 40 years ago, have been used to extract this brackish water. One of these Wells has failed and the other has essentially reached the end of its useful life. A single new Well is now being proposed adjacent to one of the existing extraction Wells within the Brewer Desalter Facility to replace the two old Wells. New piping, pump, and electrical work are also required as part of the construction of the new Brewer Desalter Well.

West Coast Basin Seawater Barrier Monitoring Well

The purpose of this new monitoring Well is to track the quality of groundwater, it is a three-six month travel time period, pursuant to DHS requirements, as it moves from the West Coast Seawater Barrier towards the potable water production Wells.

Wells Design & Construction

In January 2004, the Board awarded a professional services contract to Daniel Boyle Engineering to perform professional engineering services required for the design of both the Brewer Desalter and the Barrier Monitoring Wells. The design was completed at the end of August.

Requests for Bid

The Project was advertised at the beginning of September requesting bids for construction services. Staff solicited bids from contractors to construct the Brewer Desalter Extraction Well (referred to as "Schedule A") and the West Coast Barrier Monitoring Well (Referred to as "Schedule B"). Staff also solicited bids to include costs for using alternative materials for each of these wells. These alternates are as follows:

Alternate A: requires substituting 304L stainless steel well casing material with higher-quality 316L stainless steel material for the Brewer Desalter Well Project. 316L stainless steel material is expected to extend the life of the Well casing by approximately 25%.

Alternate B: requires substituting PVC Well casing material with 304L stainless steel material for the Barrier Well Project. Using 304 stainless steel in lieu of PVC reduces the potential for the casing material having an influence on water quality samples. A stainless steel casing will also last longer than a PVC casing.

The bid form also included a "Schedule C", which was an optional credit to the District if both projects were awarded to the same contractor.

Bid Results

A mandatory pre-bid meeting was held on September 10, 2004, to allow potential bidders an opportunity to ask questions regarding the proposed projects. The following Contractors attended the mandatory pre-bid meeting:

- WDC Exploration & Wells;
- Minco Construction;
- Bakersfield Well & Pump; and
- Layne Christensen Co.

Two qualified bids were received on September 30, 2004 from the following contractors: Bakersfield Well & Pump and Minco Construction. Each firm submitted bids for the Brewer Desalter Extraction Well and the Barrier Monitoring Well, as well as the alternates, Alternate A and Alternate B.

	Bakersfield Well & Pump	Minco Construction
Brewer Desalter Well (Schedule A)	\$756,574	\$1,612,150
Brewer 316 St. Steel Casing (Alternative A)	\$117,254	\$75,000
Barrier Monitoring Well (Schedule B)	\$229,072	\$448,300
St. Steel Monitoring Well (Alternative B)	\$34,302	\$50,000
Both Wells as One Contract (Schedule C)	<\$0>	<\$10,000>

Bid Award Recommendation

Based on the analysis of the prices submitted for each Base Bid schedule, the apparent low-bidder was Bakersfield Well & Pump. Staff confirmed that their bid documents were properly executed, and that their contractors licenses were current and in good standing. Based on this analysis, Bakersfield Well & Pump was found to be the lowest responsive bidder. The base bid submitted by Bakersfield Well & Pump was 6.5% less than the engineer's estimate for the Brewer Desalter Well Project and 30.8% less than the engineer's estimate for the Barrier Monitoring Well Project.

Staff then analyzed the prices received for the alternative materials to determine if the additional costs for higher-quality construction materials could be justified. For the Brewer Desalter Well, there is a 32.6% premium for the contractor to install 316L stainless steel in lieu of 304L for the well casing. Based on the high-cost premium and the minimal years of

additional useful life the District would receive in constructing the Well with 316L, staff recommends that the Brewer Desalter Well be constructed using 304L (Schedule A).

For the Barrier Monitoring Well, there is a 15.0% premium for the contractor to install 304L stainless steel in lieu of PVC for the Well casing. There is a potential that water quality sample results could show volatile organic compounds (VOC's) present in the Barrier, when the source of the VOC's was actually the PVC well casing. For this reason, staff recommends installing 304L stainless steel (Alternate B) in lieu of PVC for the Barrier Monitoring Well Project.

Project Schedule and Execution

The contractor is required to complete the Brewer Desalter Well Project within 150 calendar days and the Barrier Monitoring Well within 120 calendar days. However, the Brewer Desalter and the Barrier Monitoring Well Projects are required to be substantially complete 30 days prior to the contract completion to address traffic impacts and water production requirements, respectively. During construction, staff will perform primary construction management duties, with Dan Boyle Engineering providing support on secondary tasks such as Well logging and electrical inspections. Staff is also developing a public outreach program for the potential traffic and noise impacts that will be encountered by local residents during the construction phase. The following is a tentative schedule for completion of the projects:

Brewer Desalter

- Issuance of Notice of Award - October 27, 2004
- Notice to Proceed - November 15, 2004
- Start of Construction - November 22, 2004
- Construction Completion - April 21, 2005

Barrier Monitoring Well

- Issuance of Notice of Award - October 27, 2004
- Public Outreach Program - November 8, 2004
- Notice to Proceed - December 29, 2005
- Start of Construction - January 3, 2005
- Construction Completion - April 27, 2005

FISCAL IMPACTS:

Funds for the Brewer Desalter Well Project are included in the Capital Improvements Program Budget, under the items "Minor Facilities Improvements" for fiscal year 2004-05. Funds for the Barrier Monitoring Well Project are included in the Capital Improvements Program Budget, under the item "WBWRP Phase IV Expansion" for fiscal year 2004-05.

ENVIRONMENTAL COMPLIANCE:

Environmental compliance specifics will be addressed with the Department of Health Services.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on October 6, 2004 and recommended for approval at the October 25, 2004 Board meeting.

RECOMMENDED MOTIONS:

That the Board authorizes the Co-Acting General Managers to execute a contract with Bakersfield Well & Pump to construct the Brewer Desalter Replacement (Schedule A) and the Barrier Monitoring Well (Schedule B) including costs for stainless steel materials on the Barrier Monitoring Well (Alternate B) for a total amount of \$1,019,948, plus 10% for unforeseen conditions for a total not-to-exceed amount of \$1,121,943.

EXHIBITS:

None.

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