



# Santa Clara Valley Water District

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**File No.:** 17-0396

**Agenda Date:** 8/22/2017

**Item No.:** 5.1.

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## BOARD AGENDA MEMORANDUM

### **SUBJECT:**

Amendment No. 4 to Agreement No. A3626A with CDM Smith for Design and Engineering Support Services During Construction for a Not-to-Exceed Fee of \$5,190,156, Resulting in a Total Not-to-Exceed Fee of \$29,285,877 for the Rinconada Water Treatment Plant Reliability Improvement Project, Project No. 93294057, Contract No. C0601 (Los Gatos) (District 7).

### **RECOMMENDATION:**

Approve Amendment No. 4 to Agreement No. A3626A with CDM Smith (Consultant) for a not-to-exceed fee of \$5,190,156 for engineering support services during construction, resulting in a total not-to-exceed (NTE) fee of \$29,285,877, and extend the Agreement term.

### **SUMMARY:**

The Consultant agreement scope for engineering support services during construction for the five-year construction of the Rinconada Water Treatment Plant Reliability Improvement Project (Project) was divided into two time periods. This would allow for staff evaluation of the Consultants' services in the first time period, prior to approval of additional scope and fees for the second time period of construction. Project consultants and the contractor are currently nearing completion of work that aligns with the first period of the Consultant agreement. Approval of staff's recommendation will provide for continued engineering support services by the design firm as Engineer of Record through the remaining phases of Project construction.

### ***Project Background***

Built in 1968 and located in Los Gatos, the Rinconada Water Treatment Plant (RWTP) is one of three district conventional water treatment plants. The RWTP has the capacity to provide up to 80 million gallons of treated water per day (MGD) to the west side of the district's service area, which includes a population of about one million people. There is no backup facility for this supply. Thus, the plant's operating reliability is critical to meeting the daily water demands of its customers.

The objectives of the RWTP Reliability Improvement Project (Project) include:

1. Improve overall plant reliability by increasing the plant capacity to 100 MGD;

2. Use the latest technology for day-to-day operations; and
3. Implement treatment process improvements that enable the plant to produce water quality that complies with current and anticipated updated state-issued water quality regulations, and is aesthetically pleasing.

### ***Engineering Support During Construction***

CDM Smith is the Engineer of Record for the Project's design, which was initiated in 2013 for a not-to-exceed (NTE) fee of \$15,686,000. The Project's Final Plans and Specifications were completed on time and within this NTE fee.

On May 26, 2015, prior to the start of Project construction, the Board approved Amendment No. 2 to Agreement No. A 3626A, to add engineering support services during construction to the subject Agreement. The approved NTE fee for Amendment No. 2 was \$8,409,721. Staff informed the Board that the scope and fee for this Amendment covered an initial period of 28 months. This would allow staff to evaluate the Consultant's services after two years of construction to determine if the Agreement should be amended to extend through the completion of Project construction. It would also allow staff to more accurately determine the level of effort and cost of engineering support services for the remaining years of construction.

In 2015, staff's estimated total cost for Consultant engineering support services was \$13.6 million.

The Consultant has completed the predefined scope of service for the first Agreement period within the approved NTE fee.

### ***Prior Board Actions***

On January 22, 2013, the Board approved Agreement A3626A for Project design services between CDM Smith and the District, with a NTE fee of \$15,686,000. The scope of the Agreement included completion of the Project design and provision of technical support during the advertisement and bidding period.

On December 23, 2014, the CEO approved Amendment No. 1 to the subject Agreement. This amendment extended the term of the original Agreement from December 31, 2014, to August 31, 2015. The time extension was necessary due to delays in the advertisement and award of the Project. The NTE fee of the Agreement was not changed.

On May 26, 2015, the Board approved Amendment No. 2 to the subject Agreement. This amendment extended the term of the Agreement from August 31, 2015, to September 22, 2017, and added engineering support services during the first period of construction to its scope. The NTE fee of the Agreement was increased by \$8,409,721 from \$15,686,000 to \$24,095,721.

On October 13, 2015, the CEO approved Amendment No. 3 to the subject Agreement. This amendment provided for partial release of retention funds withheld by the District during the Project's design phase, consistent with the Agreement terms. The NTE fee of the Agreement was not

changed.

### ***RWTP Reliability Improvement Project Construction Status***

In the January 6-12, 2017 CEO Bulletin, staff informed the Board that the District's contractor, Balfour Beatty Infrastructure, Inc., was behind schedule to complete the second of five phases of Project construction. Originally scheduled for completion in December 2016, Phase 2 construction completion is currently expected in January 2018. Nevertheless, significant progress has been achieved on the construction site and is listed as follows:

- Ninety (90) percent completion of all concrete structures, including the Wash Water Recovery Facility; the Ozone Contactor; the Flocculation and Sedimentation Basins; the Raw Water Metering Facility; and the Electrical Equipment Pad.
- Major electrical and yard piping work is almost complete.
- The Project team is developing the Start-Up and Commissioning Plan for Phase 2.

Upon successful completion of Phase 2 construction, the Contractor will start demolition of the four existing clarifiers.

### ***Amendment No. 4 to Consultant Agreement***

Approving staff's recommendation to amend the Consultant Agreement will allow CDM Smith, as the Engineer of Record, to continue providing engineering support services for the remainder of the Project construction. Amendment No. 4 would increase the NTE fee by \$5,190,156, resulting in a total NTE fee for engineering support during construction to \$13,599,877, and a total Agreement NTE of \$29,285,877. This Amendment would also extend the Agreement term from September 22, 2017 to September 30, 2021.

A portion of the Consultant's scope of work for engineering support during construction, identified in the optional Supplemental Services task, has been shifted to the construction management consultant agreement for the duration of the Project construction. Based on lessons learned from past District facility start-ups and commissioning, staff believes it is more appropriate and beneficial to the District to assign such optional tasks to the construction management consultant. These Supplemental Services tasks include development of Standard Operating Procedures and Operations and Maintenance Manuals; and integration of as-built drawings with Geographic Information System (GIS) technology.

A summary of the tasks and fees for the original Agreement and changes in subsequent amendments is presented in Table 1.

**Table 1. Summary of Board-Approved and Staff-Recommended Scope and Fee-Related Amendments to Date for CDM Smith**

Task	Description	Not-to-Exceed Fees
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		Original Agreement	Amendment No. 2*	Amendment No. 4*	Revised Total
1	Project	\$757,959			\$757,959
2	Data	\$962,856			\$962,856
3	Basic	\$714,685			\$714,685
4	Envir	\$228,620			\$228,620
5	Design	\$11,172,172			\$11,172,172
6	Cons	\$236,629			\$236,629
7	Bid/A	\$241,274			\$241,274
8	Publi	\$105,805			\$105,805
9	Design	\$1,266,000			\$1,266,000
	<b>Subtotal</b>	<b>\$15,686,000</b>			<b>\$15,686,000</b>
10	Project	\$524,511	\$605,532		\$1,130,043
11	Subn	\$2,645,049	\$401,528		\$3,046,578
12	Requ	\$1,778,858	\$1,142,845		\$2,921,703
13	Char	\$575,563	\$287,779		\$863,342
14	Sche	\$42,500	\$10,602		\$53,102
15	Engin	\$1,886,676	\$1,993,440		\$3,880,116
16	Train	\$146,364	\$146,364		\$292,728
17	Syste	\$248,737	\$248,737		\$497,474
18	Supp Cons	\$561,463	\$353,329		\$914,792
<b>TOTAL</b>		<b>\$15,686,000</b>	<b>\$8,409,721</b>	<b>\$5,190,156</b>	<b>\$29,285,877</b>

\*Amendment Nos. 1 and 3 were administrative and did not increase Agreement scope/fees.

### FINANCIAL IMPACT:

The NTE fee for Amendment No. 4 to Agreement A3626A with CDM Smith, Inc. is \$5,190,156, resulting in a total NTE fee of \$29,285,877. There are sufficient funds in the Project's FY2017-18 Board-approved budget to encumber the planned FY18 expenditures for this Agreement. Planned encumbrances in future fiscal years will be budgeted on an annual basis. This Amendment is included in the total Project cost estimate of \$291 million in the FY18-22 Capital Improvement Program.

### CEQA:

An Environmental Impact Report (EIR) for the RWTP Reliability Improvement Project was prepared in accordance with the California Environmental Quality Act (CEQA). On January 27, 2015, the Board certified the EIR, and adopted the Mitigation Monitoring and Reporting Program, Findings of Fact,

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and Statement of Overriding Considerations. The Board's approval of the recommended Consultant Agreement Amendment would not result in changes in Project description or associated environmental impacts, and thus no further CEQA analysis would be required.

**ATTACHMENTS:**

Attachment 1: Amendment No. 4

**UNCLASSIFIED MANAGER:**

Christopher Hakes, 408-630-3796