



COUNTY OF NEVADA
COMMUNITY DEVELOPMENT AGENCY
DEPARTMENT OF PUBLIC WORKS
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NEVADA COUNTY SANITATION DISTRICT NO. 1
BOARD OF DIRECTORS
Board Agenda Memo

MEETING DATE: Sept 26, 2023

TO: Board of Directors

FROM: **Heba El-Guindy, Director of Public Works**

SUBJECT: Resolution authorizing Nevada County Sanitation District to enter into a financing and Service Agreement with Xylem Water Solutions Inc. to procure 25 Submersible Pumps and Associated Controls and Hardware/Software for Sewer Lift Stations in Lake Wildwood and Lake of the Pines and amend the Sanitation District No. 1 Fiscal Year 2023/24 Budget (4/5 Affirmative Vote required)

RECOMMENDATION: Approve the attached Resolution.

FUNDING: Budget Amendment Included with Resolution. There is sufficient fund balance in lake Wildwood and Lake of the Pines for this full agreement and there is no impact to the General Fund.

BACKGROUND: The Sewer Pump (Lift Stations) in the Nevada County Sanitation District No. 1 (NCSD) are fast approaching their end of service life and are a high priority improvement project for the District. The NCSD Lift Station Upgrade Project will be the first phase in addressing this need which will increase the reliability and control of this critical infrastructure.

Phase 1 will allow the replacement of the pumps, mechanical infrastructure (pipes, valves and supports), control system and alarm and notification hard and software in 10 of NCSD's 34 lift stations which have a primary and a backup pump at each location. It will also provide for 5 spare pumps that are used to allow service to continue while troubleshooting or repair efforts are being made in the event of a pump failure or malfunction.

Lake of the Pines will receive 5 lift station upgrades, and Lake Wildwood would receive 5 lift station upgrades.

Xylem Water Solutions Inc., is the current supplier for the Districts Flygt Submersible pumps (over 65 pumps total) and this vendor was selected for this project for the following reasons:

1. Xylem Water Solutions Inc. is the current supplier of the Districts Flygt Submersible pumps (over 65 pumps). Remaining with this supplier will allow for uniformity for pump maintenance activities, repair, and compatibility with existing infrastructure (pump guide rails and bases etc.)

2. Xylem Water Solutions Inc. has a pump control package (Flygt Concertor Pump) that is both affordable and includes the latest pump technology to upgrade our pump lift stations. There is no other pump supplier that offers a submersible pump with an integrated control system. There is no other equivalent product on the market.

3. The pump model is interchangeable to any pump horsepower range between 0-10 hp making it more versatile allowing the same pump and style to be utilized at over 20 locations district wide and fewer stock replacement or standby pumps would be required.

4. Xylem Water Solutions Inc. has a financing, maintenance and warrantee plan that would provide value to the district that would exceed any current available options.

5. Xylem Water Solutions Inc. offers in house financing for the Flygt Concertor pump package. The term for this option is 10 years. This option would include all pumps, pressure transducers, power supply controllers, gateways I/O expansion cards, HMI, control panels and transformers, and a 1-year warrantee against defects. As part of this long-term financing package Xylem Water Solutions Inc., is also offering to include all planned and unplanned maintenance of each unit, and a warrantee that both extend for the life of the financing agreement (10 yrs.).

6. At the end of the financing period, all in service pumps and equipment, as well as the standby pumps, would become property of the district.

7. Cost Savings: If NCSD were to purchase the pumps outright and perform the maintenance ourselves with in house labor the annual cost for maintaining 25 pumps would be roughly \$300.00 per year for labor and \$1,000 per year for rebuild kits per pump. With an initial purchase cost of \$66,465.00 plus the labor and materials costs for 10 years, the life cost per unit would be \$79,465.00 ($\$79,465 \times 25 = \$1,986,625$). This does not include any failures, breaks or malfunctions that could take place after the first-year warrantee that would require out of pocket costs to repair.

When compared to the unit cost of the long-term financing plan of \$55,248.68 ($\$1,381,217 / 25 = \$55,248.68$), we would save over \$24,000 per unit over the 10-year life span. When looking at the total package of 25 units, it would equate to over \$600,000 saved by the district over the same time span.

The District is proposing to move ahead with this project and seeks approval to enter into the 10-year financing contract with Xylem Water Solutions Inc. The contract is for materials and startup services only. NCSD will be performing all of the labor for the installation with District Staff as a further method of controlling costs for the project.

Item Initiated by: Brad Torres, Wastewater Operations Manager
Approved by: Heba El-Guindy, Director of Public Works

Submittal Date: April 27, 2023
Revision Date: September 18, 2023