



DATE: April 2, 2024

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT: Adopt a Resolution Authorizing the City Manager to Purchase Two 135 hp Variable Frequency Drive (VFD) Systems from Intec Solutions, Inc., for Use at the Valle Vista Lift Station, CIP Project No. 07739, in an Amount Not-to-Exceed \$152,000

RECOMMENDATION

That the Council adopts a resolution (Attachment II) authorizing the City Manager to procure two 135 horsepower (hp) Variable Frequency Drive (VFD) Systems and replacement services from Intec Solutions, Inc., (Intec) in an amount not-to-exceed (NTE) \$152,000.

SUMMARY

The Valle Vista Lift Station pumps wastewater to the Water Resource Recovery Facility (WRRF) (formerly the Water Pollution Control Facility) using four pumps, driven by four motor controls/starters. Two of these motor starters are 135 hp VFDs, which are obsolete and in need of replacement in order to avoid interruption of services. The City issued a Request for Quotations and, upon evaluating all responses, staff recommend procuring two 135 hp VFDs and replacement services from Intec for an amount NTE \$152,000. Council has appropriated funds for this purchase as part of the Adopted FY24 Capital Improvement Program (CIP Project No. 07339).

BACKGROUND

The City's Utilities Division operates and maintains all water and wastewater collection system facilities, including a network of lift stations that pump wastewater to the WRRF for treatment. Approximately half of all the sewage that flows into the WRRF passes through the Valle Vista Lift Station. This station is served by four pumps, with four motor starters, and is responsible for pumping, on average, 5 million gallons of sewage daily. VFD motor controls/starters are critical to continuous operation of the City's sewer system.

The current Robicon VFDs were originally installed during the station's last retrofit in 1998 and have lasted beyond their expected useful life. However, they are now obsolete and are

no longer supported by their manufacturer. As such, staff proposed a new capital improvement project to proactively replace these aging VFDs, ensure continuous operations, and help minimize risk of overflows.

DISCUSSION

On February 9, 2024, the City issued a Request for Quotations (RFQ #24-029) to replace the two 135 hp VFDs at the Valle Vista Lift Station and received quotes from two potential vendors. After evaluating both quotes for cost-effectiveness as well as experience with similar projects, staff recommends accepting the quote from Intec.

Intec quoted the City a total cost of approximately \$138,000. The proposed scope of work includes replacing the current Robicon motor controls with ABB motor controls. The Utilities Division began standardizing using ABB motor controls at lift stations in 2021 because they are low maintenance and are supported locally. By standardizing ABB motor controls for sewer lift stations and water pump stations, staff are able to make repairs quickly and keep spare parts in stock.

ECONOMIC IMPACT

The VFD Replacement Project will greatly reduce the risk of emergency outages or overflow at the Valle Vista Lift Station, which would significantly impact local businesses and residents.

FISCAL IMPACT

The cost to replace two 135 hp VFDs, as quoted by Intec Solutions Inc., is approximately \$138,000 including labor, materials, and taxes. Staff requests authorization to procure two replacement 135 VFDs in an amount not-to-exceed \$152,000, which includes a 10% contingency. Sufficient funds are available in CIP Project No. 07739, which were appropriated upon adoption of the FY 2024 Adopted Capital Improvement Program Budget in the amount of \$250,000, within Sewer Replacement Fund 611.

STRATEGIC ROADMAP

This agenda item is a routine operational item and does not relate to any of the six priorities outlined in the Council's Strategic Roadmap.

SUSTAINABILITY FEATURES

This purchase is essential to ensuring that the Valle Vista Lift Station can continue to pump sewage to the WRRF for treatment and disposal. By replacing these VFDs, the City will also minimize risk of overflow, which represents a significant potential impact to the environment.

PUBLIC CONTACT

No public contact is required to procure this equipment.

NEXT STEPS

If Council approves staff's recommendation, staff will work with the City Manager to execute the procurement and replacement of two 135 hp VFDs from Intec Solutions, Inc.

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Recommended by: Alex Ameri, Director of Public Works

Approved by:



Kelly McAdoo, City Manager