



STAFF REPORT

DATE: September 18, 2023

TO: Ty Lasher, City Manager

FROM: Ted Henry, Assistant City Manager/ Director of Finance

SUBJECT: HVAC Replacement Plan for City Hall

Introduction:

The purpose of this staff report is to present a proposal for the replacement of HVAC (Heating, Ventilation, and Air Conditioning) units at Bel Aire City Hall. The current HVAC system, consisting of 11 air handlers and 11 condenser units, was installed when the building was constructed in 2004. These units have extended their useful life and have required significant maintenance, incurring substantial costs for the City.

Current Situation:

The existing HVAC units have been in service for over two decades, and their performance has deteriorated significantly in recent years. Maintenance records indicate that we have spent a total of \$13,380 on repairs since 2021. These costs are projected to increase as the units continue to age, and the reliability of the system becomes a concern.

Proposed Replacement Plan:

To address the ongoing maintenance issues and improve energy efficiency, we propose a phased replacement plan for the HVAC units at Bel Aire City Hall. The plan is as follows:

Initial Replacement:

We recommend replacing the four worst-performing HVAC units, focusing on the same area of the building to **minimize disruption to staff** operations. The selection of these units will be based on their current condition, repair history, and energy efficiency. This initial replacement will provide immediate relief and improve comfort conditions for staff.

Thermostat Upgrades: As part of Phase 1, we suggest replacing all existing thermostats with user-friendly programmable models. This will not only enhance comfort but also allow for more efficient temperature control and energy savings.

Installation of Mini-Split Units: In Phase 1, we recommend adding two mini units. One will be installed in the downstairs conference room and former upstairs conference room, enhancing the comfort of this frequently used space, and overall experience to our guests.

Future Phases:

After the initial replacement, we will assess the condition of the remaining HVAC units and plan for future replacements. Our goal is to replace the entire HVAC system in a phased manner over the next few years to ensure reliable and energy-efficient operation. Furthermore, we have learned valuable lessons from our past experiences regarding workmanship quality and system performance. The phasing plan will provide us with an opportunity to conduct a more comprehensive assessment of these factors.

Staff Relocation:

During the installation of the new HVAC units, it will be necessary for staff to temporarily relocate to

alternative office spaces within the building or to a nearby location. We will work closely with affected departments to ensure a smooth transition and minimize disruption to daily operations. A detailed relocation plan will be developed in coordination with department heads.

Budgetary Considerations:

The CIP budget for the initial replacement of the HVAC units is estimated at \$150,000.

Bids Received:

Company	Total
Dan's Heating & Cooling (TRANE - S9V2 best performance)	\$63,747
Central Mechanical Wichita (RUUD – better performance)	\$62,280
Dan's Heating & Cooling (TRANE – better performance)	\$54,847
Fahnestock (GOODMAN – basic performance)	\$38,320

Basic Performance: This category of furnace has single-stage gas valves and single-speed blowers which make it louder as they go through their heating cycles. Their temperature fluctuates and you get some unheated air at the start and end of their cycles.

Better Performance: This second category of furnace is equipped with two-stage gas valves that have multi-speed and variable-speed blowers. The blowers usually run at a lower capacity which makes them quieter than the basic performance furnaces. They also give a better temperature balance.

Best Performance: The final category of furnace has variable-capacity gas valves, also known as modulating heat. They use variable-speed blowers and are the quietest of all three types of furnace. They are able to raise and lower the amount of heat they produce in small increments. They work much like a car that you have put on cruise control, thus giving your house a very constant heat.

Recommendation:

The replacement of the aging HVAC units at Bel Aire City Hall is a necessary step to improve energy efficiency, reduce ongoing maintenance costs, and maintain a comfortable working environment for staff. Staff recommends accepting the bid of \$63,747 from Dan's Heating and Cooling. However, we are comfortable (no pun intended) accepting any of the top three bids.

The City of Bel Aires' procurement policy emphasizes the pursuit of optimal value in every city purchase. This includes a comprehensive evaluation of factors such as price, quality, market availability, turnaround time, service quality, and durability. This multifaceted approach aims to ensure the efficient operation of city facilities while maintaining responsible financial stewardship.

In the context of upgrading our current HVAC system, our staff has carefully considered these criteria. It is our collective belief that simply opting for the lowest-cost bid may not necessarily result in the best value, given our historical experiences. Over the past two decades, we have encountered various challenges related to low-cost equipment and subpar installation, which have proven costly in the long run.

We acknowledge the higher upfront cost to a more efficient HVAC system. However, this decision will eventually lead to utility cost savings in the long run. Additionally, our commitment to addressing noise issues and enhancing comfort played a role in our decision, and opting for high-quality systems will mitigate the challenges we currently face.

