

DATE: February 26, 2025 **March 7, 2025 (Update)**
TO: Mayor and City Council
FROM: Assistant City Manager
SUBJECT: HVAC Equipment Replacement: E Center



RECOMMENDED ACTION

Approve the purchase of six (6) replacement HVAC units for the E Center from JC Lane at a cost of \$230,900 (plus bonds) and authorize the mayor to sign the contract for installation.

BUDGET IMPACT

The replacement of these six (6) natural gas heat pump units that serve the gym and mixed-use portion of the facility are set to be replaced this year as a part of the 2025 – 2029 Capital Improvement Budget at an estimated cost of \$250,000.

DISCUSSION

There are six (6) natural gas heat pumps that provide HVAC heating and cooling to the greater part of the main building at the E Center. These have exhausted the better part of their useful lives and need replacement. Rather than replacing one at a time and disrupting operations, closing travel lanes, and multiple mobilizations of cranes staff is recommending replacement en masse.

Our facilities staff, led by Tim Schick, has been tracking the aging equipment at the high-demand facility for the last several years, noting the need to program their replacement. One of the units is now in need of replacement with the others very close to the end. The E Center is a 16-hour facility, open (7) days a week with more heating and cooling demand than some single-use facilities. Unit run times are as follows:

Unit 1: 50,910 hrs

Unit 3: 44,609 hrs

Unit 4: 50,298 hrs

Unit 5: 50,319 hrs

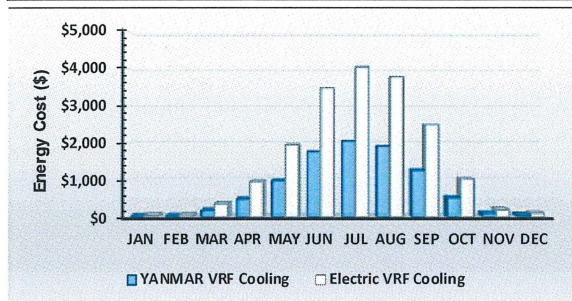
Unit 6: 30,105 hrs

Unit 7: 51,910 hrs

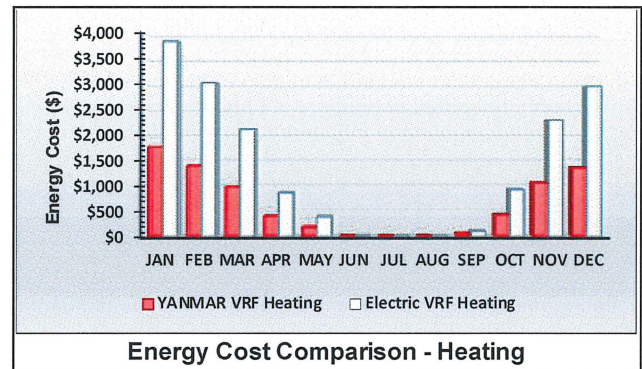
We have seen the benefits of the natural gas heat-pump technology over the life of the units and want to replace in-kind. Some of the numbers from inception below.

Installation Cost: \$201,672 (2018)
Annual Energy Savings: \$108,486 (2019 – 2024; over an electric only equivalent)

Estimated Annual Energy Savings:	
\$18,081	
Estimated Annual Natural Gas Consumption:	
30,381 Therms	



Energy Cost Comparison - Cooling



Energy Cost Comparison - Heating

Proposed replacement price for six (6) Yanmar outdoor units:

1. JCLane ¹ :	\$ 230,900
2. United Maintenance Inc. (Elec.).....	\$ 297,010 *
3. United Maintenance Inc. (Gas).....	\$ No Bid
Payment & Performance Bonds:	\$ Cost
New Technology Credit (MGAG):	(\$ 42,000)
Net Cost (Low Bid NG)	\$ 188,900 + bonds

YanMar is offering the same 50,000 hour or (10) ten-year warranty and JC Lane will provide a (12) twelve-month warranty on installation. We will also be keeping one of the units with fewer hours and issues in storage for parts. Legal counsel has provided review of the proposed contract.

Councilman Page asked if staff could secure two additional bids from Yanmar-certified/qualified contractors. Staff has responses at the end of the document and recommendation will be finalized before presentation.

¹ – JC Lane is an authorized, certified installer for YanMar NGHP systems.

* Electric Option (Requires \$15k of system upgrades included)



Two of the Yanmar Units in 2019.

Attachment

Draft Contract

Middle Georgia Heating & Air, Dublin, GA

Weaver Heating & Air, Cartersville, GA

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¹ – JC Lane is an authorized, certified installer for YanMar NGHP systems.

* Electric Option (Requires \$15k of system upgrades included)

Troy Besseche

From: Tim Schick
Sent: Thursday, March 6, 2025 2:56 PM
To: Troy Besseche
Subject: FW: Yanmar Unit Replacement

See email below. Meeting Middel GA Mechanical tomorrow morning at the E Center.

Tim

From: Jessie Weaver <jweaver@weaverheatingandairinc.com>
Sent: Wednesday, March 5, 2025 10:36 AM
To: Tim Schick <TSchick@cityofsugarhill.com>
Subject: Yanmar Unit Replacement

Tim,

Thank you for the opportunity, but unfortunately Sugar Hill is too far outside of our service area. As I mentioned earlier, I do not want to over promise and under deliver.

Jessie Weaver
General Manager
Weaver Heating & Air, Inc.
(770) 387-1570