

CITY OF APPLETON 2020 BUDGET CAPITAL IMPROVEMENTS PROGRAM

PROJECT REQUEST

IDENTIFICATION

Project Title: Heating, Ventilating, and Air Conditioning Systems

PROJECT DESCRIPTION

Justification:

Upgrades are performed for three reasons: the current equipment is failing and can no longer be repaired; the equipment is not energy efficient and it makes good financial sense to replace to reduce operational costs; or there is a change in operational requirements in the space it serves.

Fire Stations: (2020) Replace forced air furnaces and condensing units in Fire Station 3 & 5. (2021) Replace furnaces and condensing units at Fire Station #2. (2022) Replace air handling units and boilers at Fire Station #1. (2023) Replace boiler at Fire Station 4. (2024) Replace furnaces and condensing units at Fire Station #6.

PRFMD Facility: (2022) Replace garage exhaust fans and make-up air units.

Library: (2024) Replace air handler units and install additional VAV boxes and controls.

Municipal Services Building: (2020) Replace garage HVAC phase 1 - this phase includes replacing the exhaust fans and make up air units and replace gas sensors in garage areas. (2021) Replace garage HVAC phase 2 - this phase includes replacing the infrared heaters and roof top units in the garage area. (2023) Upgrade HVAC in CEA Shop, Storage Garage and Yard Waste areas.

Park Pavilions: (2020) Replace the forced air furnaces at Pierce Pavilion, AMP Pavilion, and Sheig Center.

Wastewater Plant: (2020) Replace HVAC system at D-Building design services for re-piping T-building. (2021) Construction for re-piping T-Building and design services for V-Building HVAC upgrades; (2022) V-Building HVAC Upgrades. (2023) L-Building HVAC upgrades. (2024) K-Building HVAC Upgrades.

Water Plant : (2021) HVAC upgrades to include but not limited to - removal and replacement of the Kathabar unit with a new unit designed for the current function of the membrane room. (2023) Aerco boilers and condensing units replacements and Kathabar design. (2024) Replace the Kathabar dehumidification system.

Discussion of operating cost impact:

It is expected that the improvements will reduce energy consumption and increase comfort due to more efficient operations. However, the actual energy cost impact will depend on variations in electric and gas rates and equipment once installed.

DEPARTMENT COST SUMMARY

DEPARTMENT PHASE		2020	2021	2022	2023	2024	Total
PRFM	Fire Stations	80,000	40,000	100,000	40,000	75,000	\$ 335,000
	PRFMD Facility			275,000	-	-	\$ 275,000
	Library					500,000	
	Municipal Services	475,000	475,000	-	300,000	-	\$ 1,250,000
	Park Pavilions	80,000	-	-	-	-	\$ 80,000
Facilities Capital Projects Fund		635,000	515,000	375,000	340,000	575,000	\$ 2,440,000
PRFM	Wastewater Plant	500,000	275,000	650,000	500,000	400,000	\$ 2,325,000
	WW Utility Capital Projects	500,000	275,000	650,000	500,000	400,000	\$ 2,325,000
PRFM	Water Plant	-	100,000	-	100,000	500,000	\$ 700,000
	Water Utility Capital Projects	-	100,000	-	100,000	500,000	\$ 700,000
Total - HVAC Upgrades		\$ 1,135,000	\$ 890,000	\$ 1,025,000	\$ 940,000	\$ 1,475,000	\$ 5,465,000

COST ANALYSIS

Estimated Cash Flows

Components	2020	2021	2022	2023	2024	Total
Planning	200,000	90,000	75,000	35,000	50,000	\$ 450,000
Land Acquisition	-	-	-	-	-	\$ -
Construction	935,000	800,000	950,000	905,000	1,425,000	\$ 5,015,000
Other	-	-	-	-	-	\$ -
Total	\$ 1,135,000	\$ 890,000	\$ 1,025,000	\$ 940,000	\$ 1,475,000	\$ 5,465,000
Operating Cost Impact	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -