

Measure Description	BUILDINGS	Cost	Rebates	Cost After Rebates	Savings	Operational Savings	Total Savings
3 PUBLIC WORKS BOILERS	✓	\$155,070	\$0	\$155,070	\$13,852	\$0	\$13,852
4 TAN BUILDING BOILER	✓	\$17,940	\$0	\$17,940	\$1,160	\$0	\$1,160
5 CEMENT BUILDING	✓	\$20,080	\$0	\$20,080	\$1,943	\$0	\$1,943
9 HARTFORD FIRE BOILER	✓	\$97,380	\$0	\$97,380	\$6,792	\$0	\$6,792
15	*	\$0	\$0	\$0	\$0	\$0	\$0
Ctrl-I = In, Ctrl-O = Out x = Capital Plan Supported		\$290,470	\$0	\$290,470	\$23,747	\$0	\$23,747

Gross Project Cost	\$ 290,470
Rebates	\$ -
Energy Savings 1 St Year	\$ 23,747
Operational Savings	\$ -

Annual M&V & Service Cost	\$ -
Construction Interest	\$ -

Net Project Cost	\$ 290,470
Total Payments 15 Yrs	\$ 515,517
Total Payments 20 Yrs	\$ 429,795

Total 15 Year Savings	\$ 475,500
15 Yr Net Cash Flow	\$ (40,017)
20 Yr Savings	\$ 707,140
20 Yr Cash Flow	\$ 277,345

Simple Payback 12.23

Hartford Fire Station and Public Works Boiler upgrade projects

Scope of Work:

Oil to Gas boilers, hot air furnace upgrades (Hartford Fire, Public Works Garage, Tan Building, and Cement Building):

PUBLIC WORKS BUILDING AND TAN AND CEMENT OUT BUILDINGS

- Design, engineer natural gas fired boilers and hot air furnaces.
- Demolition and removal of existing boilers.
- Furnish and Install new concrete or steel C channel bases for new boilers. And furnaces.
- Build new boiler room for new boilers (Public works)
- Design new hot water piping for new boiler system (replacing two (2) boilers two (2) boiler rooms with one boiler room with redundant boilers.
- Electrical power wiring, lighting, and controls.
- Furnish & Install new vales, piping, hangers, insulation (pipe), and associated equipment for complete hot water boiler system.
- Furnish and install new expansion tanks, air separator and new circulating pumps for the new heating system.
- Furnish and install new gas piping and gas regulators to gas company meter locations on outside of building.
- Furnish and install new combustion intake for the new boilers.
- Furnish and install new piping to connect new boilers, storage tanks, expansion tanks and circulating pumps.
- Insulate all new piping, feed water piping and new breeching
- Hydro test new piping and clean and flush new equipment and piping.
- Proper pressure testing and cleaning/flushing of the new piping and new equipment will be performed.
- Controls for boiler(s) will be provide with the selected manufactures boilers and part of the boiler assembly and interfaced to the existing Siemens system.
- Factory startup of all new equipment.
- The new work and equipment shall comply with all federal, state and local codes and regulations and with the latest edition of applicable standards, codes and specifications.
- One year warranty on new systems and a four year comprehensive service agreement on new system.
- Clean all areas daily, and final cleaning before approval.
- Provide any local and state permits.

HARTFORD FIRE STATION GAS BOILER AND HEATING SYSTEM.

- Remove and demolish the existing steam radiators and exposed piping at Hartford Fire Station.
- Build new boiler room. (Power wiring, ventilation, breeching, and doors etc.
- Install new cabinet unit heaters in living space at Hartford Fire Station.
- New gas piping to new natural outside gas meter locations.
- Install new unit heaters for truck bays at Hartford Fire Station.
- Provide connections and boiler room expansion for new addition at Hartford Station.
- Connect the hot water piping to new unit ventilators, unit heaters, cabinet heaters, existing air handling units, and fin tube radiation if applicable.
- Provide electrical power and control wiring for all new unit heaters, cabinet unit heaters, and fan coils.
- Clean the area after installation.
- Balance the system, install check valve if necessary to balance the hot water flow in the system.
- Start up and commissioning of the new equipment.
- Provide any local and state permits.
- One year warranty and four year comprehensive equipment on new system.