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CT SI-390692 / CT SM1-2010, AA/EOE, CT SBE

Ledyard Senior Center
12 Van Tassel Dr
Gales Ferry, CT 06335
Attn: Shawn Ruszcyk

10-20-2022

Re: Boiler & Domestic Water Heater Replacement

The following is a Design-Build scope of work to replace existing heating boiler and indirect domestic water heater with (2) high-efficient condensing boilers and (1) indirect domestic water heater.

Design Intent:

Our calculated heat loss for the building is 130 MBH and domestic hot water load of 75 MBH. We are proposing (2) boilers each sized for 66% of the combined design heat loss and domestic hot water load ($205 \text{ MBH} \times .66 = 135 \text{ MBH}$). (2) Lochinvar condensing boilers model KHB155 with an output capacity of 143 MBH shall be installed. The Lochinvar KHB 155 boiler has a turn-down ratio of 10:1 and thermal efficiency of 95%. The built-in boiler controls shall rest boiler water temperature based on outside air temperature and the space heating has an adjustable outdoor air temperature lockout setpoint. Boiler shall be furnished with Con-X-US which is a mobile application that provides boiler control and alarms from anywhere, owner internet connection is required. We will replace (3) building zone pumps with (3) new pumps with ECM motors. The boilers shall be vented with Centrotherm venting material and routed thru roof. (1) TurboMax T45 indirect domestic water heater with a shall provide 91 GPH continuously based on 40°F inlet/140°F outlet water temperatures.

Scope of Work:

- Demo and remove existing Boiler and (2) indirect water heaters
- Furnish and install (2) Lochinvar KHB 155 condensing boilers with ECM boiler pumps, condensate neutralization kits, and Con-X-US
- Furnish and install (3) building zone pumps with ECM motors
- Furnish and install expansion tank and air/dirt separator on heating loop
- Furnish and install HWS & R pipe, valves, and fittings from boilers to existing piping
- Furnish and install pipe insulation on new HWS&R piping.
- Furnish and install gas pipe, valves and fittings to boilers
- Furnish and install boiler flue up thru roof
- Furnish and install combustion air ducting to boilers
- Furnish and install condensate pipe from boilers to existing floor drain
- Extend existing electrical power to new boilers and pumps.
- Replace existing pressure reducing valve and backflow preventor.
- Start and test boilers
- Prevailing wages are included

Total Price\$ 75,000.00- plus tax

*Pricing good for 30 days due to changing material costs

Exclusions: CT Sales Taxes, permit fees, Asbestos abatement, electrical panel upgrades, plumbing, fire alarm, sprinkler, PE stamped drawings, temporary boiler, temporary domestic hot water heater, chemical water treatment.

Thank you,
Shawn Hixson
Mechanical Engineer