

# **City Of New London**

Department of Finance-Purchasing Agent 13 Masonic Street • New London, CT 06320 • Phone (860) 447-5215 • Fax (860) 447-5297

# **Request for Proposals**

ADDENDU	M # 2
Proposal No.: <u>2025-01 CONL</u>	
Addendum No.: 2	Date Issued: August 21, 2024
New London Board of Education Boiler Rep	acement (2)
Opening Date and Time: August 27, 2024 @ 2:00	P.M. September 4, 2024 @ 2:00 P.M.
Bidders Notes: This addendum is issued to provide	e all potential bidders with answers to questions submitted.
All other terms and conditions remain the same.	
This Addendum cover page must be signed and ret	urned with your bid.
Authorized Signature of Bidder	Company Name

## **Return Bid To:**

Joshua Montague, Accounting Purchasing Agent City of New London 13 Masonic Street New London, CT 06320

Bids cannot be accepted after the Bid Opening Date and Time indicated abo

# **2025-01 CONL**

## **ADDENDUM 2**

# New London Board of Education Boiler Replacement (2)

**RE:** 2025-01 CONL

**FROM:** Joshua Montague, Accounting Purchasing Agent

**TO:** Prospective bidders

This Addendum shall be part of the Contract Documents and modifies the original bidding documents. This Addendum is to be acknowledged by the bidders on the Bid Form. Failure to do so may subject the bidder to disqualification.

### Changes to prior Addenda:

No change to addendum 1.

### Q&<u>A:</u>

- 1. Do we need Owners Protective and Liability insurance or that is just for Engineers?
  - A1. Owners Protective will not be required for this project.
- 2. Please provide an estimated amount of existing glycol and new glycol needed for system at Jennings.
  - A2. The estimated amount is 3000-3500 gallons.
- 3. Are existing expansion tanks to be disconnected and abandoned in place.
  - A3. No, they are not to be replaced.
- 4. Are both air separators to replaced?
  - A4. No, they are not to be replaced.
- 5. The existing water heater at Jennings is non-condensing and aging. It would not be able to be tied back into new Centrotherm breeching.?? Please provide a directive for water heater.
  - A5. I have attached spec sheets to this addendum on the existing hot water boiler and new boiler to be installed at Jennings. Both attachments are labeled appropriately.
- 6. The specified boilers have a lead time that will most likely put the project start past the completion date. Please advise.

  A6. The project start/end date will be established with the selected contractor and will be dependent upon equipment lead times
- 7. We only went to one site on the walk-through date where there were (2) boilers in one mechanical room that we were shown. 490 Jefferson Ave. There was no verbal notice of a second meeting. So are we doing both bids. What is the scope for 50 Mercer St? (Page 42 line #1)
  - A7. This statement is not accurate. All contractors were asked for final questions at 490 Jefferson before heading to 50 Mercer Street. No one had additional questions and everyone was told to follow Jordan to 50 Mercer Street.
  - Anyone that did not visit 50 Mercer Street is <u>required</u> to visit the site on <u>WEDNESDAY</u>, <u>AUGUST 28</u>, <u>2024 at 10:00 A.M.</u> Meet at 50 Mercer Street. If you did not visit 50 Mercer Street for the first visit and you do not attend this second visit, you will not be allowed to submit a proposal.
  - Anyone that did visit both sites during the first visit may attend this second visit, but it is not required. It is only required for anyone that did not attend the first time. Meet at 50 Mercer Street. If you would like to re-visit 490 Jefferson, that can be arranged after visiting 50 Mercer.
  - The selected contractor will be replacing two boilers- one at 490 Jefferson Ave. and one at 50 Mercer St. This contract will only be awarded to one contractor to replace both boilers. This project will not be awarded to multiple contractors.
- 8. When will the questions be answered by? Not noted in the Documents (Page 44 line # 5) A8. Via this addendum dated 8/21/2024.

## 2025-01 CONL

- 9. Page 46 .. Line Viii Remove associated boiler pumps, flues, air separator, gas trains, expansion tanks, and any other necessary equipment and properly dispose off-site
  - A9. The air separators and expansion tanks are not going to be replaced.
    - 9a. Clarification on Boiler pumps (not the base pumps, correct?)
    - A. This is correct. The "primary" or "boiler" pumps will be replaced with the boilers. The "secondary" or "base" or "building" pumps will not be replaced.
    - 9b. Have any specs on the air separator?

A. No

Have any specs on the expansion tank?

A. No

10. Page 46 .. Line Xiii can use existing flue as chase for new flue, if needed (can we use an alternative side discharge directly out the side of the boiler room for 490 Jefferson)

A10. My thought process for using the existing building penetrations is to not have to patch a huge hole in the exterior wall. If we had to open the hole a little to accommodate the new flues, that would be much better. I would say no; the existing flue path must be used.

11. Page 47 .. Line XVii Completion date is this a solid date as to the damages are \$ 1000.00 a day. Due to lead time on equipment and pumps may be hard to complete by such a date.

A11. The contract start/end date will be established once lead times are known. Time is of the essence for this project, but the City and Board of Education understand lead times will dictate installation.

12. Page 47 .. Line B, iii Are permits required for this job or not?

A12. Yes

13. Are there and engineered drawings for this job?

A13. No

14. Is it welded pipe or all Victaulic piping behind the insulation on the larger piping?

A14. It is all Victaulic to the best of my knowledge.

15. Are we allowed to keep a dumpster on site?

A15. Yes

16. Are we allowed to use the bathrooms on site during the project?

A16. No.

17. What are we doing about combustion air just using the air from the room with the existing fresh air fan?

A17. Nothing is being done. We are using the existing combustion air fans.

18. The expansion tanks is there an issue with them is that why you're asking to change them?

A18. There is not. We will not be replacing them.

19. The same questions about the air separator, why are you looking to have it changed is it an issue?

A19. We are not changing them.

20. If required can another visit be arranged to review this job?

A20. Please see response to question 7.

21. The RFP states the walk-thru on both buildings on 8-13-24 was Mandatory. If a contractor only walked (1) building, are they excluded for bidding the boilers in the building they did not attend the walk-thru of?

A21. This RFP is for the same contractor to replace the boilers in both schools. This contract will not be awarded to multiple contractors.

## **2025-01 CONL**

- 22. Are both boiler projects to be bid as a single project or are each boiler project being awarded separately? *A22. Both boilers should be bid as one project.*
- 23. Are BMS controls of any kind to be excluded from our proposals?

  A23. Yes, BMC controls are being taken care of in-house. The Lochinvar rep is going to include the communication card with

the boilers but that is all. Board of Education will be taking care of setting them up on the controls systemsf.

- 24. Goodwin Elementary Is the heating expansion tank to be abandoned at the ceiling and a new one to be installed on the floor?
  - A24. At Jennings, the expansion tanks will not be replaced, we are reusing the existing expansion tank.
    - 24a. Is the intent to replace the "summer" domestic boiler and reconnect it to the storage tank in the neighboring room?
    - A. Yes
    - 24b. Is part of the scope to remove the abandoned storage tank in the boiler room?
    - A. Yes
    - 24c. It was mentioned that there is glycol in the heating system and a report was to be distributed regarding the system capacity. This would need to be known to budget for replacing the glycol. Please provide.
    - A. The estimated capacity is approximately 3,500 gallons.
- 25. Science and Technology Are the (2) expansion tanks in the upper level to be abandoned in place and (2) new to be installed in the boiler room?
  - A25. No, the existing expansion tanks are not to be removed, and new ones are not to be installed. We are keeping the existing.
    - 25a. Is there a specific plan for the boiler venting as it pertains to the existing Metal-Fab?
    - A. Yes, all of the existing Metal-Fab venting is to be removed, and all new venting is to run in its place. In addition, the existing flue exhaust fan is to be removed and disposed of.
    - 25b. Is the intent to remove it in its entirety or reconnect the new boilers to the existing?
    - A. All of the existing Metal-Fab venting is to be removed, and all new venting is to run in its place.

### **General Items:**

- Opening date and time will now be SEPTEMBER 4, 2024 @ 2:00 P.M.
   Bid opening to take place at 13 Masonic Street, New London, CT 06320
   Do not mail or deliver proposals to the Board of Education or it will not be considered. Proposals are to be mailed or delivered to 13 Masonic Street, New London, CT 06320.
- Anyone that did not attend the visit at 50 Mercer Street is REQUIRED to visit 50 Mercer Street on WEDNESDAY, AUGUST 28, 2024 at 10:00 A.M. Meet at 50 Mercer Street
  - Anyone else interested in visiting may do so. However, it is not required if you visited both 490 Jefferson Ave. and 50 Mercer St.

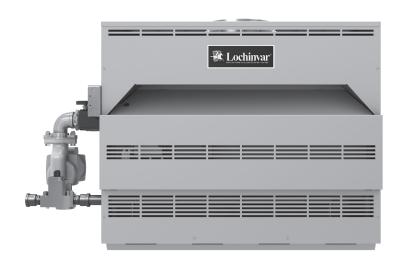
# **COMMERCIAL WATER HEATERS**

The Copper-fin Atmospheric water heater features a simple design to deliver trouble free installation, long lasting durability and prevention from lime scale buildup.

### STANDARD FEATURES

- Copper Finned Tube Heat Exchanger The heart of the Copper-Fin water heater is its copper finned tube heat exchanger. The gasketless copper tube heat exchanger design reduces the risk of leaks or system failures that are common with conventional water heaters.
- **Built-In Draft Hood** With our built-in draft hood, the Copper-Fin water heater installs easily in applications where overhead space is limited and headroom restrictions exist.
- Loch-Heat™ Ceramic Tile Our incredibly durable, Loch-Heat ceramic tile will not crack or split and provides the benefit of an overall water heater weight reduction of 25% over other refractory material.
- A Better Idea The Better Idea system combines the Copper-Fin water heater with a separate round jacketed storage tank to provide a high performance water heating system.
- **Serviceability** The water heater's design allows for easy access to all major components for servicing. The heat exchanger is designed to slide out the front of the water heater for faster maintenance.
- **ASME Temperature & Pressure Relief Valve** Factory installed.
- 3-year limited Heat Exchanger Warranty, 1-year parts warranty See warranty for details.

# **COPPER-FIN**° GAS FIRED WATER HEATERS



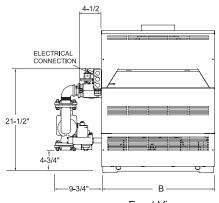


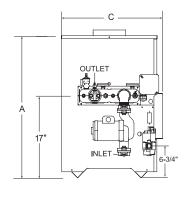


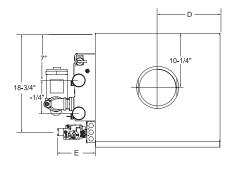












Front View Side View

Top View

	Copper-Fir	n Water Hea	iter	Dimensions & Specifications										
Model Number	Input MBH	GPH @ 100°F Rise	A	В	c	D	E	Vent Size	Gas Conn.	Ship. Weight				
CWN090PM*	90,000	87	29-1/2"	15-1/2"	21-1/2"	7-3/4"	6-1/4"	5″	1/2"	175				
CWN135PM*	135,000	131	29-1/2"	19-1/2"	21-1/2"	9-3/4"	6-1/4"	6"	1/2"	195				
CWN180PM*	180,000	175	29-1/2"	23-1/2"	21-1/2"	11-3/4"	7-1/4"	7"	3/4"	220				
CWN199PM*	199,000	193	29-1/2"	26-1/2"	21-1/2"	13-1/4"	7-1/4"	7"	3/4"	230				
CWN201PM	201,000	193	29-1/2"	26-1/2"	21-1/2"	13-1/4"	7-1/4"	7"	3/4"	230				
CWN225PM	225,000	218	29-1/2"	26-1/2"	21-1/2"	13-1/4"	7-1/4"	7"	3/4"	235				
CWN270PM	270,000	262	29-1/2"	29-1/2"	21-1/2"	14-3/4"	7-1/4"	8"	3/4"	240				
CWN315PM	315,000	305	29-1/2"	32-1/2"	21-1/2"	16-1/4"	6-1/4"	8"	3/4"	250				
CWN360PM	360,000	349	29-1/2"	35-1/2"	21-1/2"	17-3/4"	8-1/4"	9"	1″	270				
CWN399PM	399,000	387	29-1/2"	44-1/2"	22"	22-1/4"	5-1/2"	10"	1″	340				
CWN500PM	500,000	485	34-1/2"	52-1/2"	22"	26-1/4"	9-1/2"	10"	1″	365				

Change 'N' to 'L' to denote L.P. gas models

No deration for L.P. models. Water Connections are 2" NPT on 6-1/4" centers.

### **Standard Features**

Built-In Draft Diverter Stainless Steel Burners ASME Copper Finned Tube Heat Exchanger

160 psi Working Pressure

Gasketless Heat Exchanger Design

All Bronze Circulating Pump

Pump Delay/Freeze Protection

Remote Tank Thermostat

Glass-Lined Water Surfaces

Loch-Heat Ceramic Tile Combustion Chamber

ASME Temperature & Pressure Relief Valve

Terminal Strip Automatic Reset High Limit

Manual Reset High Limit

Self Diagnostic Indicator Lights

24 Volt Control System

CSA Design Certified for Alcove Installation CSA Design Certified for Installation on Combustible Floors 3 Year Limited Warranty on Heat Exchanger

# FOR EASE IN ORDERING BY MODEL NUMBER 315 PM

This model is a 315,000 Btu/hr, natural gas Copper-Fin water heater.

## **Optional Equipment**

Adjustable High Limit w/ Manual Reset Contacts on any Failure (CW 315-500) Contacts for Air Louvers (CW 315-500) Cupro-Nickel Heat Exchanger Flow Switch

Low Water Cut-Off Stack Frame

PVC Venting Kit (CW 90-135)

## **Firing Controls**

F1 - Standing Pilot (Standard CW 90-270) F9 - Intermittent Spark Ignition (Standard CW 315-500) F7 - California Code

(CW 225-500)



Lochinvar, LLC oo Maddox Simpson Parkway Lebanon, Tennessee 37090 P: 615.889.8900 / F: 615.547.1000 f 💆 in 🖸 Lochinvar.com



Performance data is based on manufacturer test results

<sup>\*</sup>Canada Only

# CONDENSING COMMERCIAL GAS WATER HEATERS



4 MODELS FROM 150,000 TO 285,000 BTU/HR

96% THERMAL EFFICIENCY

5:1 TURNDOWN RATIO

CONDENSING STAINLESS STEEL HEAT EXCHANGER







# AN INNOVATION IN COMMERCIAL WATER HEATING







# A BETTER WAY TO ACHIEVE 96% THERMAL EFFICIENCY

ARMOR is a fully condensing commercial gas water heater. Available in three models with inputs ranging from 150,000 to 285,000 Btu/hr, the ARMOR achieves 96% thermal efficiency.

# SEPARATE TANK FOR FLEXIBILITY, LOWER REPLACEMENT COSTS

With standard tank-type water heaters, your choices are limited when it comes to matching input with storage capacity to meet "peak demand" delivery requirements. With ARMOR, you can match one or more water heaters with one or more storage tanks in a wide variety of sizes. Lochinvar Lock-Temp® tanks are available from our 80-gallon vertical to the 5000-gallon vertical or horizontal model. Another advantage of the ARMOR "dual component" system is lower replacement costs. Standard tank-type designs require replacement of the entire water heater. With ARMOR, you'll save time and money by only replacing individual components as needed, such as the pump or storage tank.



ARMOR features advanced Negative Regulation (Neg/Reg) sealed combustion technology, permitting fan speed to constantly adjust the volume of fuel and air entering the burner. This ensures that ARMOR can safely and reliably operate with supply gas pressure as low as 4 inches water column.

ARMOR is equipped with fully modulating combustion with 5:1 turndown. This means ARMOR can fire as low as 20% of maximum input when water heating demand is lowest, and increase the firing rate up to 100% as demand increases. The result is better overall efficiency and less cycling, compared to "on-off" tank-type units which can only fire at 100% input.

# STAINLESS STEEL CONDENSING HEAT EXCHANGER

The ARMOR's stainless steel heat exchanger is built to ASME Section IV requirements. Its design provides superior resistance to corrosion caused by condensation from low entering water temperatures. Non - Condensing commercial water heaters will fail early with low entering water temperatures; however, with the ARMOR the lower the supply water temperature the more efficiently it performs throughout the life of the heater.

# **DIRECT-VENTING UP TO 100 FEET**



Sidewall Vent Termination

ARMOR offers 7 venting options and tremendous flexibility for placement of units within the building, because it permits direct-vent air intake and exhaust runs up to 100 equivalent feet using either PVC, CPVC, Polypropylene or AL29-4C stainless steel vent pipe. Intake and exhaust runs can terminate horizontally through a sidewall or vertically through the roof.

\*Optional Concentric Vent Kit Sold Separately





-Lochinvar



# WATER HEATER CONTROL,

ARMOR features the latest generation of Lochinvar's all-in-one SMART SYSTEM operating control with an advanced multi-color LCD interface. SMART SYSTEM provides outstanding functionality, and can be integrated directly into a Building Management System via ModBus and other communication protocols. And now, the CON·X·US mobile communication platform allows SMART SYSTEM to go where no other water heater has gone before.†

CON·X·US provides the ability to monitor and manage Armor water heaters without ever stepping into the mechanical room. CON·X·US will send alerts via text or e-mail with notification of changes in system status, and anytime, from anywhere, a user can check system status and re-program water heater functions. Once downloaded, the free CON·X·US mobile application allows for remote access to all SMART SYSTEM functions using any internet-capable device.





† CON·X·US board sold separately. See back cover for a complete list of SMART SYSTEM features.

# **LONG-LASTING "LIFE CYCLE" EFFICIENCY**

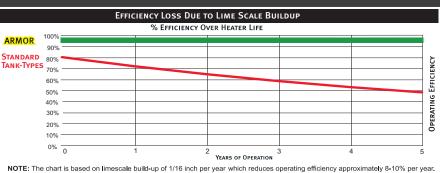
In a standard tank-type water heater, lime scale builds up over time on important heat transfer surfaces, insulating the water from the heat source. This decreases thermal efficiency and increases operating cost. Just 1/4" of lime scale can increase operating costs as much as 25%! This buildup in the bottom of the tank and around the flue tubes can cause tank-type heaters to fail in as little as 2-3 years.

ARMOR's "Better idea" concept eliminates the impact of lime scale, maintaining a high-rated thermal efficiency and low operating cost throughout its long life cycle.

The chart below illustrates how ARMOR is a better way, delivering true "life cycle efficiency" compared to standard tank-type units.



Traditional tank-type water heater flue tubes with nearly 6" of lime scale buildup



# 7 FLEXIBLE VENTING OPTIONS - Up to 100 feet of air intake and 100 feet of exhaust vent with PVC, CPVC, Polypropylene or Stainless Steel.

Direct Vent Sidewall

Direct Vent Vertical

Room Air Sidewall

Room Air Vertical

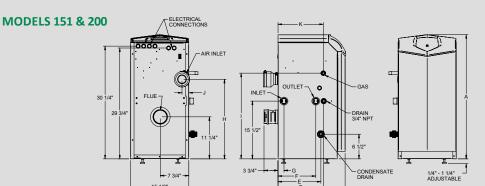
Vertical w/Sidewall Air

Concentric Direct Vent
Vertical\*

Vertical w/Sidewall Air

Concentric Direct Vent
Vertical\*

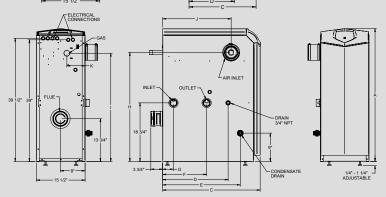
### ARMOR WATER HEATER DIMENSIONS AND SPECIFICATIONS



# **Model Number Guide** 151

Armor Water Heater, Natural Gas, 150,000 Btu/hr Input, Pump Mount

### **MODELS 286**



ARMOR WATER HEATER
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#### **DIMENSIONS & SPECIFICATIONS**

Model	Btu/hr	GPH @											Gas	Water	Air	Vent	Shipping
Number	Input	100° Rise	Α	C	D	E	F	G	Н	1	J	K	Conn.	Conn.	Inlet	Size	Wt. (lbs.)
AWN151PM*	150,000	175	33-1/4"	18"	12-1/4"	11-1/2"	10"	1-1/2"	21-1/4"	23"	1-3/4"	12"	1/2"	1-1/4"	3″	3″	176
AWN200PM*	199,000	232	33-1/4"	22-1/4"	16-1/2"	15-3/4"	14-1/4"	5-1/4"	21-1/4"	23"	1-3/4"	16-1/4"	1/2"	1-1/4"	3″	3″	195
AWN201PM †	201,000	234	33-1/4"	22-1/4"	16-1/2"	15-3/4"	14-1/4"	5-1/4"	21-1/4"	23"	1-3/4"	16-1/4"	1/2"	1-1/4"	3″	3″	195
AWN286PM †	285,000	332	42-1/2"	19-3/4"	12-3/4"	13-1/2"	6"	2"	34"	31"	11-3/4"	4-1/4"	3/4"	2"	4"	4"	237
* Canada Only † AHRI Certified Models				lels													

### STANDARD FEATURES

- > † 96% Thermal Efficiency (AHRI Certified)
- > Modulating Burner with 5:1 Turndown Direct-Spark Ignition Low NOx Operation **Sealed Combustion**

Low Gas Pressure Operation

> Vertical & Horizontal Direct-Vent

PVC, CPVC, Polypropylene or Stainless Steel up to 100 Feet PVC/CPVC Sidewall Vent Termination

> Stainless Steel Heat Exchanger

All Welded Construction, Gasketless Design 160 psi Working Pressure ASME Construction (AW 286) Natural to L.P. Conversion Kit Stainless Steel Circulating Pump On/Off Switch Flow Switch ASME Temperature & Pressure Relief Valve (AW286)

Adjustable Leveling Legs Tank Sensor Adjustable High Limit w/ Manual Reset

Automatic Reset High Limit

Condensate Trap

Zero Clearances to Combustible Material

5 Year Limited Warranty (See Warranty for Details)

1 Year Parts Warranty (See Warranty for Details)

### **SMART SYSTEM FEATURES**

> SMART SYSTEM Digital Operating Control Multi Color Graphic LCD Display

> Built in Cascading Sequencer for up to 8 Water Heaters

Multiple Size Water Heater Cascade Lead Lag

Efficiency Optimization

Front-End Loading Capability with CopperFin II

> Building Management System Integration 0-10 VDC Input to Control Modulation or Set point

0-10 VDC Modulation Rate Output

0-10 VDC Input to Enable/Disable call for heat

Access to BMS Settings Through Graphic LCD Display Low Water Flow Safety Control & Indication

Inlet & Outlet Temperature Sensors & Readout

Flue Temperature Sensor

Water Heater Pump Control

Pump Delay with Freeze Protection

Pump Exercise

Night Setback

**Building Recirculation Loop Pump Control** Night Setback of Building Recirculation Loop Time Clock

> Maintenance Reminder

Ability to program installer name and number into the product as service contact

> High Voltage Terminal Strip

120V/1PH/60Hz

Water Heater Pump Control Contacts **Building Recirculation Pump Control Contacts**  > Low Voltage Terminal Strip

24 VAC Auxiliary Device Relay **Auxiliary Proving Switch Contacts** Flow Switch Contacts Alarm on Any Failure Contacts **Runtime Contacts Tank Sensor Contacts** 

Cascade Contacts

0-10 VDC BMS External Control Contacts 0-10 VDC Water Heater Rate Output Contacts

### FIRING CONTROL SYSTEMS

M9 Standard Construction

### OPTIONAL EQUIPMENT

CON·X·US Remote Connectivity Audible Alarm Condensate Neutralization Kit Concentric Vent Kit (3" & 4" PVC/CPVC only) ModBus or BACnet MSTP Communications BMS Gateway to LonWorks or BACnet IP SMART SYSTEM PC Software Room Air Kits Stack Frame

For technical information call 800-722-2101. Lochinvar, LLC reserves the right to make product changes or improvements without prior notice.



300 Maddox Simpson Parkway Lebanon, Tennessee 37090 P: 615.889.8900 / F: 615.547.1000 f in 🖭 Lochinvar.com











