

# City of Auburn, Maine

*"Maine's City of Opportunity"*

## Financial Services



October 15, 2013

Dear Bidder:

The City of Auburn is accepting written proposals for the Hasty Community Center for a **Steam Boiler Replacement Project**, located at 48 Pettingill Park Road, Auburn, ME. The City reserves the right to accept or reject any or all proposals in whole or in part and to waive any informality the City may determine necessary. The City also reserves to itself the exclusive right to accept any proposals when it is deemed by the City to be in its best interest. The City of Auburn is governed by Title 1 M.R.S.A. § 401-410, otherwise known as the Freedom of Information Act, which considers bid specifications as public documents. In awarding any proposal, the City may consider, but not be limited to, any of the following factors: Bidder qualifications, price, experience, financial standing with the City, warranties, references, bonding, delivery date, and service of Bidder. Vendors/Contractors shall be current on all amounts due to the City of Auburn prior to the City entering into any contract agreement. All proposals must include FOB to Auburn, Maine unless otherwise specified.

A **mandatory** pre-bid meeting to review the work site is scheduled for Thursday, October 24, 2013 at 9:00 a.m. at the Hasty Community Center, 48 Pettingill Park Road, Auburn, ME. Please contact Derek Boulanger at [dboulanger@auburnmaine.gov](mailto:dboulanger@auburnmaine.gov) to confirm participation. Proposals will not receive consideration unless submitted in accordance with the following instructions to bidders. Please mark sealed envelopes plainly: **"Hasty Community Center Steam Boiler Replacement Project – Bid #2014-017."**

Questions regarding this Request for Proposals should be directed to Derek Boulanger, Facilities Manager/Purchasing Agent, at (207) 333-6601, ext. 1135.

Please submit your proposal to the City of Auburn by **2:00 p.m. Thursday, October 31, 2013.** Proposals will be opened at 2:00 p.m. Proposals must be delivered to **Derek Boulanger, Facilities Manager/Purchasing Agent, 60 Court Street, Auburn, ME 04210** on or before the date and time appointed. No proposals will be accepted after the time and date listed above.

Sincerely,

Derek Boulanger  
Facilities Manager/  
Purchasing Agent

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## CONDITIONS AND INSTRUCTIONS TO BIDDERS

1. Bidders shall use the enclosed bid form for quotations. Whenever, in bid forms, an article is defined by using a trade name or catalog number, the term "or approved equal", if not inserted, shall be implied.
2. Submit a separate unit price for each item unless otherwise specified in the bid request. Award will be made on a basis of each item, or as a group, whichever is in the best interest of the City. Prices stated are to be "delivered to destination".
3. Bid proposals must be completed in full, in ink, and must be signed by firm official. Bid proposal **must be notarized** prior to bid being sealed and will be disqualified if not notarized. Bids may be withdrawn prior to the time set for the official opening.
4. Bids will be opened publicly. Bidders or representatives may be present at bid opening.
5. Awards will be made to the lowest responsible bidder, considering the quality of the materials, date of delivery, cost which meets specification and is in the best interest to the City of Auburn.
6. All transportation charges, including expense for freight, transfer express, mail, etc. shall be prepaid and be at the expense of the vendor unless otherwise specified in the bid.
7. The terms and cash discounts shall be specified. Time, in connection with discount offered, will be computed from date of delivery at destination after final inspection and acceptance or from date of correct invoice, whichever is later.
8. The City is exempt from payment of Federal Excise Taxes on the articles not for resale, Federal Transportation Tax on all shipments and Maine Sales Tax and Use Taxes. Please quote less these taxes. Upon application, exemption certificate will be furnished with the Purchase Order when required.
9. Time of delivery shall be stated. If time is of the essence, the earliest date may be a factor in the bid award.
10. No contract may be assigned without the written consent of the Finance Director or her designate. The contract shall not be considered valid until a purchase order has been issued to the successful bidder.
11. Please state **"Hasty Community Center Steam Boiler Replacement Project – Bid #2014-017"**, on submitted sealed envelope.
12. The City of Auburn reserves the right to waive any formality and technicality in bids whichever is deemed best for the interest of the City of Auburn.

**GENERAL CONDITIONS**

**1. Equal Employment Opportunity**

The City of Auburn is an Equal Opportunity Employer and shall not discriminate against an applicant for employment, and employee or a citizen because of race, color, sex, marital status, physical and/or mental handicap, religion, age, ancestry or natural origin, unless based upon a bona-fide occupation qualification. Vendors and contractor or their agents doing business with the City shall not violate the above clause or the Civil Rights Acts of 1964. Violations by vendors shall be reviewed on a case-by-case basis and may mean an automatic breach of contract or service to the City of Auburn.

**2. Save Harmless**

The Bidder agrees to protect and save harmless the owner from all costs, expenses or damages that may arise out of alleged infringement of patents of materials used.

**3. Subcontracting**

The Bidder shall not subcontract any part of the work or materials or assign any monies due it without first obtaining the written consent of the municipality. Neither party shall assign or transfer its interest in the contract without the written consent of the other party.

**4. Warranty**

The Bidder warrants that all work will be of good quality and free from faults and defects, and in conformance with the specifications. All work not so conforming to these standards may be considered defective. The Bidder agrees to be responsible for the acts and omissions of all of its employees and all subcontractors, their agents and employees, and all other persons performing any of the work under a contract with the Bidder.

**PERFORMANCE SPECIFICATION**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Conditions and Instructions to Bidders
- B. General Conditions of the Contract

1.2 SITE INSPECTION AND TEMPORARY HEAT

- A. The mechanical contractor is required to make a pre-bid site visit in order to submit a bid on this project.
- B. The Mechanical Contractor is responsible to provide, install and test a temporary low pressure steam boiler to heat the building during construction. The boiler shall be a minimum heating input of 1,000,000 BTUH and be connected temporarily to the new 2 psig gas meter. During the switch-over from oil to the temporary gas boiler and then back to new gas boiler the heat can only be down for a maximum of 6 (six) hours.

1.3 SUMMARY

- A. This is a design-build mechanical project. The information provided in this specification is intended to communicate the preferences of the owner. It is the Mechanical Contractor’s responsibility to properly design, install, start/test, and warranty the replacement boiler system.
- B. The information provided in this section is intended to provide the minimum size, quantities and quality of material – it is the Mechanical Contractor’s responsibility to provide and install what the Mechanical Contractor believes to be the correct sizes and quantities.
- C. It is the Mechanical Contractor’s responsibility to design and install the systems per the following Codes and Standards:
  - 1. NFPA (National Fire Protection Association) Standards
  - 2. IECC 2009 (International Energy Conservation Code)
  - 3. American Gas Association (AGA)
  - 4. Applicable Town of Auburn Ordinances.
  - 5. Requirements of the State of Maine Gas Board Rules.
- D. The Mechanical contractor is responsible for all permit and application fees.

- E. The Mechanical Contractor is responsible to design and install a complete and operating heating system including, but not limited to:
  - 1. Removal and proper disposal of the existing oil boiler and burner, breechings and smoke pipe.
  - 2. Removal of the oil piping in the mechanical room that connects to existing boiler.
  - 3. Removal and proper disposal of all electrical power and control wiring that is not being reused.
  - 4. Removal of existing housekeeping pad under the boiler.
  - 5. Installation of a new gas-fired low pressure steam boiler.
  - 6. Installation of a new gas-fired hot water heater.
  - 7. Installation of chimney lining and boiler breeching.
  - 8. Installation of a vent for the new hot water heater.
  - 9. Installation of chimney condensate piping and neutralizer.
  - 10. Installation of new housekeeping pad for new boiler and new hot water heater.
  - 11. New natural gas piping from existing gas meter to the new burner and new hot water heater – 2 psig.
  - 12. Installation of new combustion air fan and repair of relief vent.
  - 13. All required electrical and power wiring to new hot water heater, new burner and combustion/heat relief fan.
  - 14. All required controls and control wiring to burners, combustion/heat fan, spill switches, low water cutoffs, condensate receiver pump and burners.
  
- F. Submit with your bid, a summary of your design including equipment manufacturers and existing equipment and material that you intend to reuse.

NOTE – OWNER HAS THE OPTION TO KEEP ANY OF THE REMOVED MATERIAL AND EQUIPMENT.

1.4 SUBMITTALS (if awarded contract)

- A. Submit shop drawings, manufacturers' data and certificates for equipment, materials and finish, and pertinent details for each system where specified.
  
- B. Review will be for type and quality. Quantities and the ability to perform the function intended shall be the responsibility of the Contractor.

PART 2 - PRODUCTS AND SYSTEMS

2.1 REMOVAL OF EXISTING SYSTEMS.

- A. Remove from job-site and properly dispose of all materials in the mechanical room that are not being reused.

- B. The Following is a list of the expected material that will be removed.
  - 1. One steam boiler/burner.
  - 2. Boiler breeching in mechanical room.
  - 3. Boiler smoke pipe.
  - 4. Existing boiler housekeeping pad
  - 5. Oil piping connected to the existing oil burner. Note – generator oil piping is to remain in use.
  - 6. Electrical power and control wiring.

**2.2 GAS-FIRED STEAM BOILER AND BURNER**

- A. New Boiler to be a HB Smith Model 28A-S-5 Pressurized Wet Base Boiler or equal Weil McLain boiler.
  - 1. 5 Section Boiler – 1,491 MBH IBR Capacity – Natural Gas.
  - 2. Cast Iron Wet Base.
  - 3. Insulated Metal Jacket.
  - 4. Front and rear flame observation ports.
  - 5. Steel angle floor rails.
  - 6. Manual reset hi-limit.
  - 7. Operating Control.
  - 8. ASME side outlet safety valve – 15 psi.
  - 9. Gauge glass with cocks and guard.
- B. Burner to be a Power Flame J50A-15 or equal Webster series JB burner.
  - 1. To be supplied with boiler as a package from the manufacturer.
  - 2. Low-High Burner operation.
- C. The new natural gas burner/boiler package shall comply with the Efficiency Maine Natural Gas Program, Measure Code G13, Natural gas-fired steam boiler >300 MBtu/h and ≤2,500 MBtu/h, Thermal Efficiency ≥79%.

**2.3 BOILER ACCESSORIES**

- A. Provide all the boiler accessories to make the boiler/burner Code Compliant including the requirements of the Maine State Gas Board.
- B. Provide a new dial type pressure gauge.
- C. The existing Pump Control – Low Water Control appears to be in good condition and can be cleaned and reused.

**2.4 DOMESTIC HOT WATER HEATER**

- A. New Domestic Hot Water Heater to be AO Smith Cyclone gas-fired hot water heater Model Number BTH 150 or approved equal that meets the following specification.
  - 1. 96 % thermal efficiency – 150,000 BTUH input.
  - 2. 100 gallon capacity tank.
  - 3. 247 GPH at a 70 deg. temperature rise.
  - 4. 3” PVC Sealed combustion – vent and combustion air.

**2.5 CHIMNEY LINING AND BREECHINGS**

- A. Provide Chimney Linings and Connections to the New Boiler. Lining to extend up through the existing masonry chimney. Remove brick “legs” on roof and top cap. Fabricate a flashing to cover chimney opening. New Chimney Lining must extend at least 36” above roof.
- B. Chimney Lining and Breaching material to be manufactured by Metal-Fab or Van Packer.
- C. Size chimney per manufacturer’s recommendations.
- D. All Lining, Connections, Fittings and Breeching to meet the following material specification. Metal Fab IPIC or Van Packer equivalent.
  - 1. 304 Stainless Steel inner lining.
  - 2. Aluminized Steel outer lining.
  - 3. 1” Ceramic insulation.
  - 4. Temperature rating 1,000 degrees continuous.
- E. Linings, Connections, Fittings and Breeching to include:
  - 1. Chimney Lining.
  - 2. Termination at roof.
  - 3. Tee at base of chimney with condensate connection.
  - 4. Horizontal breeching to boilers with condensate connection at low point.
  - 5. Barometric damper.
  - 6. Transition to boiler flue outlets.

**2.6 HOT WATER HEATER VENTING**

- A. Provide and install a 3” solid core PVC to the outside (possibly through the existing chimney space outside the new liner). Install per NFPA 54 Requirements and terminate the vent per manufacturer’s requirements.
- B. The combustion air does not need to be vented to the outdoors.

**2.7 CONDENSATE PIPING**

- A. Install condensate piping for the chimney at the base of chimney, and any low points in the breeching as recommended by the chimney manufacturer. Pipe condensate to nearest floor drain.
- B. Install a condensate neutralizer approved by or provided by the boiler manufacturer in the condensate line before the drain.

**2.8 STEAM AND CONDENSATE PIPING**

- A. Reuse of the existing piping is allowed.
- B. Any new steam piping to be Schedule 40 Black Iron. Any new condensate piping to be Schedule 80 Black iron.
- C. Insulate all steam piping, condensate receiver tank, and condensate piping within the mechanical room with 1-1/2" fiberglass insulation with ASJ. Fittings to be Zeston or approved equal.

**2.9 DOMESTIC HOT WATER PIPING AND MAKE-UP BOILER WATER**

- A. Connect the new domestic hot water heater to the existing domestic hot water system.
- B. Reconnect the boiler make-up water.
- C. Piping to be Type L Copper.
- D. Insulate new hot water piping with 1" fiberglass insulation with ASJ. Fittings to be Zeston or approved equal.
- E. All work to be done by a licensed plumber per the Uniform Plumbing Code.

**2.10 GAS PIPING**

- A. The existing gas meter is a 2 PSIG natural gas.
- B. Run Schedule 40 black iron from the existing meter to the new boiler and hot water heater.
- C. Provide drip leg and shutoff at all connections.
- D. Paint all the gas piping Yellow. – Clean, prime and final coat of Rustoleum Yellow. Mark piping every 20' with "2 psig Natural Gas" – Seton Manufacturing Company Labels or approved equal.
- E. The New Hot Water Heater will require a 2 psig to 7" w.c. regulator at the burner. A vent limiting regulator is acceptable.
- F. The contractor is to size the gas piping per NFPA 54 Standards and the requirement of the Uniform Plumbing Code.

**2.11 COMBUSTION AIR AND HEAT CONTROL FAN**

- A. Cap the existing combustion air intake on the bottom of the existing intake duct

- B. Add a Greenheck SE Propeller Supply Fan, or approved equal, in the intake configuration in order to pressurize the boiler room. Mount the fan on the existing combustion air ductwork.
  - 1. 1350 cfm at 0.125" esp.
  - 2. With backdraft damper.
  - 3. With OSHA Motor side guard.

#### 2.12 HOUSEKEEPING PADS

- A. Provide and install a new concrete housekeeping pad for the new boiler/burner and hot water heater.
- B. Pad to be a minimum of 3-1/2" thick and extend at least 3" in all directions from the boiler/burner and domestic hot water heater.

#### 2.13 POWER ELECTRICAL WIRING

- A. It is the Mechanical Contractors responsibility to provide all power wiring to the new Boiler, Hot Water Heater, Combustion/heat fan, boiler safety controls and line voltage thermostat. This work must be done by a licensed electrician.
- B. The Thermal Control Limit sensors above the boiler will need to be moved to the highest part of the room over the boilers. Run new wiring in EMT conduit.
- C. Installation to meet NFPA 70 National Electrical Code Standards.

#### 2.14 CONTROL AND CONTROL WIRING

- A. Provide control for the boilers and hot water heater.
- B. All exposed control wiring in the boiler room to be run in EMT Conduit.
- C. Use of the existing serviceable wiring and controls is acceptable.
- D. Add to the barometric damper a spill switch to stop burner operation if a down draft is detected. Tjerlund Products Safety interlock system or approved equal.
- E. Add a line voltage cooling thermostat (adjustable) to energize the new propeller intake fan on a call for mechanical room cooling.
- F. Energize the new propeller fan any time the new gas burner on the boiler is operating.

#### 2.15 MISCELLANEOUS WORK

- A. Repair the existing gravity relief shutter on the boiler room wall.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

- A. Perform work by qualified journeymen of their respective trades who are employed by a firm that can demonstrate successful experience with work similar in type, quality and extent to the work required by this project.
- B. Install mechanical equipment to facilitate maintenance and repair or replacement of equipment components. As much as practical, connect equipment for ease of disconnecting, with minimum of interference with other installations.
- C. Cutting and Patching: Protect the structure, furnishings, finishes, and adjacent materials not indicated or scheduled to be removed.
- D. Operation and Maintenance Data: Provide manufacturer's printed operating procedures to include start-up, break-in, routine and normal operation instruction; regulation control, stopping, shut-down, and emergency instructions; and summer and winter operation instructions. Provide copies of warranties.
- E. Provide owner with a one year warranty on all parts and labor. Provide the owner with the standard warranties from the boiler manufacturer.

**BID PROPOSAL FORM**  
**Due Thursday, October 31, 2013**

To: City of Auburn  
Derek Boulanger,  
Facilities Manager/Purchasing Agent  
60 Court Street  
Auburn, ME 04210

The undersigned individual/firm/business guarantees this price for Thirty days (30) from the bid due date. The undersigned submits this proposal without collusion with any other person, individual, firm, or agency. The undersigned ensures the authority to act on behalf of the corporation, partnership, or individual they represent; and has read and agreed to all of the terms, requests, or conditions written herein by the City of Auburn. By signing this bid form, the firm listed below hereby affirms that its bid meets the minimum specifications and standards as listed above.

Signature \_\_\_\_\_ Name (print)\_\_\_\_\_

Title \_\_\_\_\_ Company \_\_\_\_\_

Address \_\_\_\_\_

Telephone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

Email Address: \_\_\_\_\_

STATE OF MAINE  
\_\_\_\_\_, SS.

Date: \_\_\_\_\_

Personally appeared \_\_\_\_\_ and acknowledged the foregoing instrument to be his/her free act and deed in his/her capacity and the free act and deed of said company.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
Print Name

Commission Expires \_\_\_\_\_

**SCHEDULE OF VALUES**

**PROJECT NAME: Hasty Community Center Steam Boiler Replacement Project –  
Bid #2014-017**

**CONTRACTOR SCHEDULE OF VALUES**

<u>Item</u>	<u>Description</u>	<u>Value</u>
1.	General Conditions	\$ _____ . _____
2.	Bonds & Insurance	\$ _____ . _____
3.	Demolition	\$ _____ . _____
4.	Boiler & Accessories	\$ _____ . _____
5.	Natural Gas Piping	\$ _____ . _____
6.	Hydronic & Condensate Piping	\$ _____ . _____
7.	Insulation	\$ _____ . _____
8.	Domestic Hot Water	\$ _____ . _____
9.	Electrical & Fans	\$ _____ . _____
10.	Controls	\$ _____ . _____
11.	Chimney Lining	\$ _____ . _____
12.	Other (specify) _____	\$ _____ . _____
13.	Other (specify) _____	\$ _____ . _____
14.	Other (specify) _____	\$ _____ . _____
15.	TOTAL (Sum of Items 1 thru 14)	\$ _____ . _____

**TOTAL OF ALL LINE ITEMS IN SCHEDULE OF VALUES MUST EQUAL FINAL BASE BID.**

**THERE MUST BE AMOUNTS IN EACH OF THE SPECIFIED ITEMS ABOVE.**

**FAILURE TO PROPERLY COMPLETE THIS ATTACHEMENT WILL BE CONSIDERED A  
NON RESPONISVE PROPOSAL AND WILL BE REJECTED.**