## June 27, 2018

## PROJECT MANUAL

## Town of Belmont Boiler Maintenance and Repair at Various Locations

Bid No. 2019-06

## Patrice Garvin, Town Administrator 455 Concord Avenue Belmont, MA 02478

OWNER
Town of Belmont
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CONSULTANT N/A

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## **INVITATION TO BID**

The Town of Belmont, Massachusetts, the Awarding Authority, invites sealed bids for the project: **Boiler Maintenance and Repair at Various Locations.** 

Nature and scope of work: Provide all labor, materials, and equipment to perform maintenance and repair of various boilers at six Town buildings and seven School buildings.

Bidding procedures shall be in accordance with M.G.L. c. 149, §44A-44J, as most recently amended.

The estimated annual project value is: \$50,000.00.

Plans and specifications will be available from 8:00 AM to 4:00 PM, Monday through Thursday and 8:00 a.m. to 1:00 p.m. Fridays, at the Facilities Department, Ground Floor, Homer Administration Building, 19 Moore Street, Belmont, MA 02478, beginning **Thursday, June 28, 2018**. Plans and specifications are also available in electronic format from Cindy Papa, Facilities Department Administrative Coordinator at <a href="mailto:cpapa@belmont-mailto:cpa

The contract documents may be examined at the Facilities Department, Ground Floor, Homer Administration Building, 19 Moore Street, Belmont, MA 02478.

Sealed bids will be received at the Facilities Department, 1<sup>st</sup> Floor, Homer Administration Building, 19 Moore Street, Belmont, MA 02478 until **Thursday, July 19, 2018 at 1:00 p.m.** at which time all bids will be publicly opened and read aloud.

All bids shall be accompanied by a bid deposit in the form of a certified, cashier's or treasurer's check issued by a responsible bank or trust company made payable to the Town of Belmont or a bid bond, in an amount not less than five percent (5%) of the value of the bid.

The successful bidder will be required to furnish a Labor and Material (Payment) Bond in the amount of fifty percent (50%) of the contract sum. Bonds shall be obtained from a surety licensed to do business in the Commonwealth of Massachusetts and the form shall be satisfactory to the Town of Belmont. Bidders must submit documentation with their bid that indicates the bidder's ability to obtain an insurance bond. Documentation may be in the form of a letter from a surety company indicating that the bidder can obtain a bond, if awarded a contract by the Belmont Facilities Department.

The Town of Belmont reserves the right to reject any or all general bids if it is in the public interest to do so.

No less than the minimum wage rates as set forth in the schedule contained in the Contract Documents must be paid on this project.

Town of Belmont Boiler Maintenance and Repair at Various Locations Invitation to Bid - 1

## A pre-bid conference for all bidders will be held as follows:

Date: Wednesday July 11, 2018

Time: 10:00 a.m.

Place: Conference Room #2, Town Hall Ground Floor

455 Concord Avenue, Belmont, MA 02478

Stephen Dorrance Director of Facilities

# TOWN OF BELMONT BOILER MAINTENANCE AND REPAIR AT VARIOUS LOCATIONS TECHNICAL SPECIFICATIONS

#### Section 1

#### 1.01 Owner

The Town of Belmont.

#### 1.02 Awarding Authority

The Town of Belmont, Massachusetts, acting through its Town Administrator and Facilities Department.

## 1.03 Scope of Work

The Town of Belmont, Massachusetts, the Awarding Authority, invites sealed bids for the project: **Boiler Maintenance and Repair at Various Locations**.

Nature and scope of work: provide all labor, materials and equipment to provide preventative maintenance, unscheduled service, at six Town buildings and seven School buildings.

Bidding procedures shall be in accordance with M.G.L. c. 149, §44A-44J, as most recently amended, and all other applicable laws.

The estimated annual contract value is: \$50,000.00.

#### 1.04 Bid Preparation

Bidder's Responsibilities

A. Each bidder must include a proposed schedule to implement the annual boiler maintenance and inspection by September 17, 2018 with their proposal and identify the firm's management employee that is responsible for execution of the plan. Meetings will be held at the Belmont Facility Office at least monthly to review the results of the scheduled maintenance program and review the plan. The Contractor will update information into Appendix B and provide the updated form at each meeting.

Each bidder by making their bid represents that s/he has read and understands the bid documents.

#### B. Addenda

Any addenda issued shall be considered as covered in the Bid Form, and on the execution of the contract, they will become a part of the contract. Failure of any bidder to receive such an addenda shall not relieve any such bidder from any obligation contained in such addenda.

#### C. Bid Submission

Specifications and bidding documents will be available beginning **Thursday**, **June 28**, **2018** from 8:00 a.m. to 4:00 p.m., Monday to Thursday, and 8:00 a.m. to 1:00 p.m. Friday, at the Facilities Department, Ground Floor, Homer Administration Building, 19 Moore Street, Belmont, MA 02478. Plans and specifications are also available in electronic format from Cindy Papa, Facilities Department Administrative Coordinator at <a href="mailto:cpapa@belmont-ma.gov">cpapa@belmont-ma.gov</a>.

Sealed bids will be received at the Facilities Department, Ground Floor, Homer Administration Building, 19 Moore Street, Belmont, MA until **Thursday, July 18, 2018 at 1:00 p.m.** at which time all bids will be publicly opened and read aloud.

All bids of \$50,000 or greater shall be accompanied by a bid deposit in the form of a certified, cashier's or treasurer's check issued by a responsible bank or trust company made payable to the Town of Belmont or a bid bond, in an amount not less than five percent (5%) of the value of the bid.

A pre-bid conference for all bidders will be held as follows:

Date: Wednesday July 11, 2018

Time: 10:00 a.m.

Place: Conference Room #2, Town Hall Ground Floor,

455 Concord Avenue, Belmont MA 02152

Questions and requests for additional information can be directed to:

Cindy Papa Facilities Department 19 Moore Street Belmont, MA 02152 (617) 993-2640 cpapa@belmont-ma.gov

Any information exchanged by telephone shall be non-binding. The deadline for submission of questions in writing (including email inquiries) shall be five (5) calendar days before bids are due.

It is the Town of Belmont's intention to make a single award as a result of this bid. Therefore, interested bidders must provide costs for all sections of the Bid Form a bid to be considered complete.

#### 1.05 Bidder's Qualifications

The Awarding Authority shall have the right to take such steps as it deems necessary to determine the ability of the bidder to perform the work and the bidder shall furnish to the Awarding Authority all such information and data for this purpose as the Awarding Authority may request. The right is reserved to reject any bid where an investigation of the evidence or information submitted by such bidder does not satisfy the Awarding Authority that the bidder can provide faithful performance of the work under the terms of the contract documents, or where such bidder is unable to produce a satisfactory current financial statement.

#### 1.06 Rejection of Bids

The Awarding Authority reserves the right to reject any or all bids if it be in the public interest to do so.

#### 1.07 Subcontracting

The Contractor to whom an award is made will be expected to perform all the work covered in this contract with mechanics or other personnel who are regular employees of the contractor. Subcontracting of any portion of the work specified will only be allowed on the basis of expressed written permission from the Town. The Town reserves the right to request of the Contractor any information deemed necessary in determining the competency of a proposed subcontractor.

#### 1.08 Contract Execution

The successful bidder agrees that, if s/he is selected as general contractor, s/he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the Awarding Authority, execute a contract in accordance with the terms of this bid and furnish a performance bond and also a labor and materials payment bond, each in the amount of 100% of the contract value, and each of a surety company qualified to do business under the laws of the Commonwealth and satisfactory to the Awarding Authority and each in the sum of 100% of the contract price, the premiums for which are to be paid by the general contractor and are included in the contract price.

#### 1.09 Terms of Contract

The contract will be in effect from the date of notice to proceed, anticipated to be on or before July 26, 2018, until the end of the Town's fiscal year, June 30, 2019. This contract has two (2) one year options to renew. Renewals will be at the sole discretion of the Town, under the same terms and conditions and an allowance for negotiated wage rate increases.

#### 1.10 Billing

All billing shall be based upon hourly rate of time on site and shall include all Contractor expenses. Material invoices for calculating the mark-up will be required. Annual maintenance will be billed upon completion of approval for operation. All Contractor expenses in addition to labor and materials, including but not limited to travel time, service fee, fuel charge, etc. must be included in the base hourly rate. Invoices for both scheduled maintenance and unscheduled work under this contract shall sent to the Belmont Facilities Department.

Belmont Facilities contact is:

Director of Facilities, or designee Facilities Department 19 Moore Street Belmont, MA 02478 (617) 993-2640

Note: specific information regarding School contacts will be provided at the time of contract execution.

#### 1.11 Additional Work

In addition to the specific work items enumerated in the specification, the Owner will be entitled to require additional unanticipated related work to be done by the Contractor, on a time and material basis at current contract rates. Estimates for additional work must be turned around with 48 hours (or whatever is reasonable) to limit down time of equipment to be serviced.

Additional work must be scheduled with an appointment.

#### 1.12 Materials

The Town of Belmont reserves the right to purchase equipment and materials to be used under this contract. The contractor is responsible to procure materials in the most efficient and most cost-effective method available for the Owner. This will likely include procuring planned maintenance material by building, using delivery services or other lower cost options instead of mechanics picking up materials, and having agreements with suppliers on material delivery.

Materials in Provider Possession

The Contractor" agrees that all materials, unless those specifically exempted by written agreement, will be in the contractor's possession before any work begins. This also specifically means that a general contractor must require subcontractors to have all the

necessary materials/supplies in their possession before they begin any work. The contractor is explicitly responsible for all aspects of the subcontractor's performance.

#### Continuous Work On-Site

The Contractor agrees that once they arrive onsite and begin work, they will work continuously with the requisite number of staff to complete the work. This means the crew, or any part thereof, will not leave the site for work at other sites. The contractor agrees to work five days per week through completion unless an interruption in the schedule is caused by an act of god.

#### Penalties

If a delay is caused because materials, as noted in this section 1.12, were not in the contractors and subcontractor's possession as required, the Contractor agrees to pay a \$2500 per day fine for all days of work stoppage or delay. The Town of Belmont will solely determine if a delay has been caused.

## 1.13 Prevailing Wage Rates

Although a portion of this contract is considered scheduled maintenance, the majority of the contract value has traditionally been unscheduled service, therefore prevailing wage requirements shall apply to all work. Attention is drawn to Appendix C - Division of Labor and Industry Wage Rates. Bidders are encouraged to consider appropriate use of Apprentice classification workers for portions of scheduled maintenance.

#### 1.14 M.B.E. Requirements

There are no Minority Business Enterprise Requirements for this bid.

#### 1.15 Bid Form

Bidders shall refer to the Equipment Description matrix included with this bid to develop pricing. Bidders shall complete the attached Bid Form by filling in all blank spaces to provide the following:

- Total of Annual Maintenance Fees for each building.
- Refer to Appendix B –Boiler List, for a list of all identified boiler equipment per building. Bidders should refer to manufacturer's specifications for additional information.
- Hourly Rates for unscheduled service. An estimate of two hundred (200) hours of unscheduled service is used for the purposes of bid evaluation and is not a guarantee of unscheduled service to be performed.
- Materials markup percentage. An estimate of \$10,000.00 for materials related to unscheduled service is used for the purposes of bid evaluation and is not a guarantee of materials to be used in unscheduled service. For example, if a bidder charges a 10% markup on materials, this line should be filed out as follows:

Materials markup \_\_\_\_10\_% x \$10,000.00 =

\$ 11,000.00

#### Section 2

#### 2.01 Temporary Facilities

Heat, light, power, water and toilet facilities will be available to the contractor to the extent that such facilities exist in the buildings. All equipment such as extension cords, drop lights, etc. shall be furnished by the Contractor. In the event that facilities are abused by the Contractor, the Owner, at his own discretion may cancel such use and the Contractor shall be required to provide them at his own expense.

#### 2.02 Use of Sites and Buildings

The site and building shall be used, and the work shall be executed, in a manner which does not interfere with the Owner's continued, unrestricted use of the properties. Any necessary staging shall be executed in a manner which will permit the uninterrupted passage of pedestrians and motor vehicles into and around the buildings or adjacent areas.

### 2.03 Storage of Materials

- A. Material stored on site shall be executed in a manner which will protect it form theft, vandalism, and any other damage to the same extent as it were stored on the Contractor's own premises.
- B. The Owner shall in no way make payment for material until it is incorporated into the work and inspected by the Owner.
- C. The Owner shall in no way assume responsibility for theft, vandalism, loss or damage to any material stored on the site until it is incorporated and inspected as specified in subparagraph B above.

#### Section 3

#### 3.01 General

It is the intent of this specification to prevent failures of the Town of Belmont heating systems by performing scheduled preventative maintenance. It is also the intent of this specification to ensure that systems function optimally and operate in an energy-efficient manner. It is therefore recommended that all bidders have demonstrated familiarity and experience with energy efficiency practices, including but not limited to utility incentive programs, selection of high efficiency equipment, energy-efficient installation procedures and energy-efficient operation and maintenance practices.

In addition, any preventative maintenance or service on any equipment must be completed in accordance to the manufacturer's Operations and Maintenance recommendations. The Town has copies of most O&M manuals of newer equipment and information for older equipment can be obtained directly from the manufacturers or online.

Most of the work under this contract is anticipated to be completed during normal business hours, from 7:00 a.m. until 5:00 p.m., Monday through Friday. The contractor shall have sufficient staff to be able to respond to service request for equipment failures within two (2) hours, whether under normal business hours or outside normal business hours. With the response to this proposal, the contractor will submit the process that the Owner will follow to request service for equipment failures, both during normal working hours and outside normal working hours, and how the contractor will respond to the request.

A. Each and every service or maintenance call shall result in a detailed written report of the work done, signed by an authorized Town of Belmont representative then submitted to the appropriate Town Department. The report shall include the condition of the equipment and most importantly, recommendations for any major work which should be performed in the foreseeable future. Such recommendations shall include a description of the work to be performed and an estimated cost, so that the owner may evaluate the recommendations. Any estimates that exceed \$1,000 must be proposed in writing and performed after expressed, written authorization by the Town. The Town reserves the right to competitively bid any such work.

The aforementioned report shall also include a description of all parts used and labor hours expended. A copy of the report shall be sent to the Town representative or Director of Facilities by email within 24 hours (one business day) of the work. A copy of the service slip must also accompany invoices for both scheduled maintenance and unscheduled service.

Daily service sheets must be signed on the day the work is performed - copy to the appropriate Facilities Department. The service slip shall note the time of arrival and departure of the service technician, not just the number of hours on site. It shall be incumbent upon the service technician to have a representative of the Town, School or Library sign the service slip to verify such information.

Contractor shall provide 24-hour notice on all preventative maintenance calls.

- B. <u>Energy-Efficient Equipment Purchases, Programs, and Processes</u>. When applicable, the Contractor must provide the Owner with the following proposals prior to performing work that requires the purchase of materials or equipment:
  - (1) Price proposal for equipment that is Massachusetts State Building Code compliant as well as meeting U.S. EPA's Energy Star program (or equivalent) and Massachusetts Stretch Code requirements.
  - (2) Price proposal for equipment that meets the appropriate utility's (NGrid Gas) incentive levels for high-efficiency equipment when available. This proposal must also include the dollar amount of the rebate or other incentive available.
  - (3) Any motors powering new equipment or any motors replaced under this contract must be NEMA premium types as approved by the Massachusetts Motor Up Program.

- (4) Consideration should be taken with regard to right-sizing of replacement equipment to meet current space use, function and demand load versus 'replacement-in-kind'.
- (5) Wherever possible provide recommendation of equipment upgrades for fuel switching to lessor carbon containing fuel alternatives in order to achieve the energy reduction goals under the Green Communities Program
- (6) If bypassing, overriding, disabling or altering the original operation of equipment, components, set points or programming the designated Town representative must be informed as to the cause, expected duration of the altered operation, and proposed solutions. The intent is to ensure that efficient operation of building systems are not diminished.

Contractor must receive expressed written approval of the Town's selected option prior to performing the work.

C. The bid form is designed to be completely filled in with prices for each segment as appropriate, according to the type(s) of system(s) at each building. The total bid price should be the sum of all regularly scheduled maintenance for all buildings work, plus estimated regular labor rates multiplied by 200 hours, plus materials markup multiplied by \$10,000.

#### 3.02 Preventative Maintenance (PM) Specifications

All equipment under this contract will receive two operating inspections annually as well as seasonal startups and shutdowns for all central heating systems. Heating shutdowns must be completed prior to May 15<sup>th</sup> of each contract year. Heating startups must be completed prior to October 1<sup>th</sup>.

#### **Hot Water Boilers**

**Annual Maintenance** 

- 1. Check indicating lights and alarms.
- 2. Check operating and limit controls.
- 3. Check and test safety interlock controls. Inspect and test relief valves and piping.
- 4. Check operation of water level controls.
- 5. Check for leaks, noise, vibration, unusual conditions, etc.
- 6. Check operation and lubricate all motors and bearings. Check belts and pulleys, replace if needed.
- 7. Check the flame scanner assembly.
- 8. Inspect burner operation. Do a visual inspection of the pilot flame, main burner flame throughout the firing range, free movement of linkages and general burner operation.

- 9. Perform combustion test prior to and after completing preventive maintenance tasks, maximizing reliability & efficiency. Leave record of tests at each site.
- 10. Inspect refractory and baffles.
- 11. Review boiler blowdown practices.
- 12. Check all combustion air supply inlets to the boiler room and burner.
- 13. Check all filter elements. Clean or replace as needed.
- 14. Check the fuel system.
- 15. Clean low water cutoff(s). Remove the head assembly or probes and inspect and clean out any sediment or contamination in the column or piping.
- 16. Clean fireside surfaces by brush or use a powerful vacuum cleaner to remove soot. After the cleaning process and if boiler is to be left open for inspection.
- 17. Clean and inspect breeching and stack and remove any soot build up.
- 18. Clean waterside surfaces. Remove all handhole and manway plates,

inspection plugs from water column tees, and crosses and float assemblies from water columns. Thoroughly wash all waterside surfaces, level controls. Leave open for inspection.

- 19. Check fluid levels on all hydraulic valves.
- 20. Check gauge glass for possible replacement.
- 21. Lubricate, inspect and test boiler feed pumps. Strainers should be checked and cleaned. Feed pump elements wear and must be replaced.
- 22. Condensate receivers shall be emptied and washed out.
- 23. Check chemical feed systems and piping.
- 24. Tighten all electrical terminals.
- 25. Check deaerator or boiler feed systems.
- 26. Check linkages. Tighten and replace if necessary.
- 27. Check operation and accuracy of integration with building automation system.

#### For condensing boilers:

- 1. Follow OEM instructions on cleaning and maintenance.
- 2. Clean and inspect heat exchanger.
- 3. Clean and inspect condensate drains, traps and piping.
- 4. Test condensate exiting neutralizer, replace if necessary.
- 5. Check venting and fresh air inlet.

#### 3.03 Additional Requirements

#### A. Additional Work

In addition to the specific items enumerated in the Specification, the Owner will be entitled to require additional unanticipated related work to be done by the Contractor, on a time and material not too exceed basis, at current contract rates. Should the Owner and Contractor not agree on the proposed cost, the Owner has the right to seek additional proposals.

#### B. CORI Law

The contractor agrees that it will comply with the requirements of Massachusetts General Law Chapter 71, section 38R, as amended by Chapter 385 of the Acts of 2002 effective February 25, 2003, known as the Criminal Offender Records Information (CORI) law. A CORI review will be performed by the Facilities Department Coordinator on all employees of the contractor assigned to work in the Belmont Public Schools and the Beech Street Senior Center. The contractor further agrees to have every employee assigned to the Belmont Public Schools and the Beech Street Senior Center provide the information required and sign a CORI Request Form to allow the Facilities Department to conduct the CORI review. Any employee of the contractor who refuses to provide the information and sign the CORI Request Form will not be allowed to work for the contractor in the Town of Belmont.