



BID PACKAGE

PART IV

SPECIFICATIONS

**DMH Project#FY19-001
Boiler Cleaning, Annual Service, &
Maintenance of Boilers at Power Plant
and Learoyd Buildings
Taunton State Hospital
60 Hodges Ave.
Taunton, MA 02780**

**THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF HUMAN SERVICES
DEPARTMENT OF MENTAL HEALTH**

S P E C I F I C A T I O N S

FOR

**BOILER CLEANING & ANNUAL SERVICE & MAINTENANCE OF BOILERS
AT POWER PLANT AND LEAROYD BUILDINGS**

AT THE

**TAUNTON STATE HOSPITAL
60 HODGES AVENUE
TAUNTON, MASSACHUSETTS 02780**

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Project # FY19-001
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**OFFICE OF FACILITIES MANAGEMENT
DEPARTMENT OF MENTAL HEALTH
167 LYMAN STREET
WESTBOROUGH, MA 01581**

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DATE: MAY 23, 2018

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PLANT AND LEAROYD BUILDINGS
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**SECTION I
BOILER CLEANING & ANNUAL SERVICE & MAINTENANCE
AT POWER PLANT AND LEAROYD BUILDINGS
TAUNTON STATE HOSPITAL**

1-01 GENERAL REQUIREMENTS

1. Attention is directed to the printed form of proposal and Part III of the Bid Package entitled "General Conditions" which are hereby made a part of this Section of the Specifications.
2. Equality of material or articles other than those named or described in this Section will be in accordance with the provision of Part III - General Conditions Section 2 .

1-02 SCOPE OF WORK

1. The scope of work, without limiting the generality thereof, consists of furnishing all labor, materials, tools, equipment, appurtenances, devices and transportation required to clean boilers and provide annual service, maintenance, and inspection of subject boilers at the Taunton State Hospital, Taunton, Massachusetts.
2. The scope of work shall include, but not necessarily be limited to the following:

A. BOILER CLEANINGS FOR THE POWER PLANT

Taunton State Hospital requires contractor to annually open, clean and close the water and fire sides of the four (4) Cleaver-Brooks Fire Tube Boilers in the Power Plant. Work to be scheduled with the Power Plant –Chief Engineer/or Facility Manager and performed as each boiler becomes available. A minimum of two boilers must be available for operation at all times. Boiler cleaning shall take place when the heating season comes to a close, normally during the months of July and August unless inspectional requirements demand otherwise. At this facility there are three (3) 200/500 HP - 3 pass fire tube and one (1) 200 HP 3 pass fire tube Cleaver-Brooks dual fuel boilers located in the Power Plant. All boilers are required to be open for inspection including all appurtenances by the State Boiler Inspector from the Department of Public Safety. The area around the boilers will be left free of debris, gasket material, and dirt/grime from the cleaning

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Boilers upon completion of cleaning, must meet the standards of the Engineering Department at Taunton State Hospital and the Department of Public Safety Boiler Inspector. Any deficiencies' found of the breaching, tubes, appurtenances, etc. will be noted and a proposal for repair will be submitted for approval of funds and authorization in the form of a change order before any extra/additional work can be authorized. After the boilers have been inspected, it shall be closed using a new appropriate gaskets and material supplied by the OEM. All boilers shall be tuned using an electronic stack efficiency tester. A printed copy of the results shall be supplied for all boilers. Please note, testing cannot be performed during the summer months due to low demand, so it will be acceptable to return during December/January to complete and report the results of the tuning.

BOILER CLEANING AND ANNUAL SERVICE REQUIREMENTS:

- a. Clean and adjust burner.
- b. Assure positive ignition, adjust and clean as required.
- c. Determine response to flame safeguard system for monitoring and safety shut down.
- d. Perform combustion analysis (with stack gas analyzer with written report) and adjust fuel/air ratio for optimum efficiency. (Perform in December/January).
- e. Check fuel supply (dual fuel gas/oil) which is affected by pumps, strainers, gauges and regulators.
- f. Check reliability of low water cut-off, pump control and the operating and limit controls in accordance with the manufacturer's recommendations.
- g. Check gaskets on fuel lines, replace the fireside and waterside gaskets, and make suggestions for any corrective action required.
- h. Check and suggest necessary parts for inventory.
- i. Inspect and assure proper operation of related equipment such as boiler feed tank, pumps, etc.
- j. Open and clean firesides and watersides for annual inspection.
- k. Perform any other additional testing as required by the Dept. of Public Safety Boiler Inspector.
- l. Close firesides and watersides and test fire after inspection by Dept. of Public Safety.

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B. BOILER CLEANING FOR THE LEAROYD BUILDING

Taunton State Hospital requires Contractor to seasonally open, clean and close the Weil-McLean cast iron sectional boiler in the basement of Learoyd Building for State Inspection. Work may be scheduled between July and September 15th with the approval of Taunton State Hospital Chief Engineer- or Facility Manager. The boiler in this building is only required for heating, there is a separate system for providing domestic hot water. A cast iron sectional Weil-McLean Boiler is gas fired only and located in the basement of the Learoyd Building.

BOILER CLEANING AND ANNUAL SERVICE REQUIREMENTS:

- a. Clean and adjust burner.
- b. Assure positive ignition, adjust and clean as required.
- c. Determine response to flame safeguard system for monitoring and safety shut down.
- d. Perform combustion analysis (with stack gas analyzer with written report) and adjust fuel/air ratio for optimum efficiency. (Perform in December/January).
- e. Check fuel supply (natural gas) which is affected by regulators.
- f. Check reliability of low water cut-off, pump control and the operating and limit controls in accordance with the manufacturer's recommendations.
- g. Check gaskets on fuel lines, replace the fireside and waterside gaskets, and make suggestions for any corrective action required.
- h. Check and suggest necessary parts for inventory.
- i. Inspect and assure proper operation of related equipment such as boiler feed tank, pumps, etc.
- j. Open and clean firesides and watersides for annual inspection.
- k. Perform any other additional testing as required by the Dept. of Public Safety Boiler Inspector.
- l. Close firesides and watersides and test fire after inspection by Dept. of Public Safety.

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1-03 QUALIFICATIONS OF BIDDER

The successful bidder must be able to demonstrate and present documentation that he has performed the type of work specified herein for a period of not less than five (5) years. Bidders shall be required to be currently engaged in the business of mechanical contracting and be licensed under applicable sections of the General Laws of the Commonwealth of Massachusetts. Any Sub-Contractors to be used on this project must be approved by the DMH-Project Engineer and the Chief Power Plant Engineer.

1-04 PERMITS AND FEES

The Contractor shall secure and pay for all permits, inspections and licenses necessary for the accomplishment of the work specified under this contract. Contractor **MUST** pull permits from the Department of Public Safety Boiler Inspector for Annual Inspections of Boilers.

1-05 SEQUENCE OF WORK

The Contractor shall, prior to commencement of any work, consult with the Chief Power Plant Engineer or Facility Manager and establish a sequence of work which will least affect the normal operation of the Taunton State Hospital Power Plant. The Contractor must also obtain the Chief Engineers written approval authorizing him to schedule and proceed with work specified herein.

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1-06 INSPECTION AND TESTING

The Contractor shall notify the Chief Engineer or Facility Manager -- Mark Anderson at – 508-977-3122 at Taunton State Hospital when entire scope of work is complete. Taunton State Hospital-Facilities Engineering will allow two boilers to be shut down in the Power Plant for rehabilitation while the other boilers handle the campus heating and hot water demand.

1-07 TERMINATION

1. The Department of Mental Health reserves the right to make inspections and tests as and when deemed advisable, to ascertain that the requirements of this contract are being fulfilled. Should it be found that the requirements of these specifications are not being satisfactorily maintained, the Department may immediately demand that the Contractor, at his expense, place boilers in condition to meet this requirement. The contract may be cancelled by the Department at any time, for non-compliance or bad performance by the Contractor.
2. The Department of Mental Health reserves the right to terminate any contract as detailed in Section 10.0 – Termination of the Contract Part III - General Conditions.

1-08 BID PROCEDURE

1. Bidders are required to submit bids via the COMMBUYS website on the enclosed proposal forms in **Part 1 of the bid documents** and also **(Include Bid Breakdown for the 3 Year Period - Page 1-6 of these specifications which are in Part IV)**
2. The Commonwealth reserves the right to award the contract on the Base Bid or the Base Bid (plus) alternates in accordance with the requirements of Chapter 579 of the Acts of 1980. General Award of Contract shall be in accordance with M.G.L. chapters 30 and 149 as applicable.

****** END OF SECTION ******

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TAUNTION STATE HOSPITAL

Breakdown of Bid-Price for Three Years 2018 - 2021

Boilers	Year 1 Cost 7/1/18-6/30/19	Year 2 Cost 7/1/19-6/30/20	Year 3 Cost 7/1/20-6/30/21
Power Plant three (3) 500 HP Cleaver- Brooks (Duel Fuel, Fire Tube Boilers)			
Power Plant one (1) 200 HP Cleaver- Brooks (Duel Fuel, Fire Tube Boiler)			
Learoyd Building one (1) Weil-McLean Boiler (Duel Fuel, Fire Tube Boiler)			
ANNUAL TOTALS	\$	\$	\$
		GRAND TOTAL (3 YEARS)	\$

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**THIS TABLE MUST BE SUBMITTED ALONG WITH FORM
FOR GENERAL BID**