

# TENDER FOR THE REPLACEMENT OF BOILERS AND ASSOCIATED DUCTWORK, RADIATOR VALVES AND CONTROL SYSTEMS AT THE LIPHOOK MILLENNIUM CENTRE, ONTARIO WAY, LIPHOOK ,HAMPSHIRE GU30 7LD

## **Project**

Bramshott and Liphook Parish Council seek to appoint a contractor to undertake the replacement of aging boilers and associated ductwork. It also wishes to improve the radiators controls and to provide for a central control system in the building rather than the plant room.

## **Tender**

Tenders must be addressed to the "Proper Officer". You should provide the tender in the envelope specifically provided for this project. Failure to follow this procedure will invalidate your tender and it will not be considered.

This invitation to tender and specific envelop can be obtained from:

The Proper Officer  
Bramshott & Liphook Parish Council  
Haskell Centre  
Midhurst Road  
Liphook  
Hampshire GU30 7TN

**Your tender documentation should be received at the above address by 1 pm on Wednesday 31<sup>st</sup> March 2021.**

## **Existing Equipment**

The building is provided with gas fired heating by 3 Ideal Mexico floor standing atmospheric boilers connected to a central flue dilution system and associated fan and ductwork. This is controlled by a central control panel with basic time clock located in the plant room.

The Scouts and Guides halls have a single Ideal Mexico boiler with an input of 46Kw and an output of 36Kw with a manufacturer's seasonal efficiency of 71%.

The main building has two atmospheric Ideal Mexico boilers with an input of 37Kw and an output of 30Kw with a manufacturer's seasonal efficiency of 71% providing a total heating output of 60Kw.

Heat is circulated via 2 zone pumps in the Scouts and Guides area and 3 zone pumps in the main building.

Heating is provided by steel panel radiators fitted with a combination of standard and thermostatic radiator valves.

The heating systems are gravity fed via expansion tanks located in the roof.

There is a basic control system for each boiler, which required the central flue dilution fan to operate whichever system is required to run.

## **Specification**

**You are invited to tender for the system specified below or an alternative system that delivers the same or very similar specifications.**

### **MAIN BUILDING**

- 2 x 30KW fully modulating wall mounted condensing boilers complete with individual shunt pumps, each boiler has a seasonal efficiency of 97.5% dependant on water flow temperatures.
- Manufacturers flue header kit.
- Vertical flue system to pass through the service cupboard above and through the pitched roof (further investigation may be required in the service cupboard to confirm the exact route).
- The boilers will be connected to a new low loss header, custom manufactured to suit the boiler layout.
- 3 off new single head variable speed heating zone pumps.
- 3 off 3 port zone heating valves to allow each zone heating flow temperature to be controlled.
- A pressurisation set and expansion vessel to provide a sealed heating system and remove the requirement for the feed and expansion tank.
- A gas safety panel with CO2, emergency stop and gas proving system linked to the existing gas solenoid valves.
- Replacement of isolation valves within the boiler room.
- Removal of thermostatic radiator valves in the main hall area and replacement with handwheel valves to allow large spaces to be controlled via new control sensors.
- Installation/ replacement of thermostatic radiator valves in smaller rooms to improve temperature control.
- Flushing of the heating system in conjunction with the above works to remove residual sludge and addition of inhibitor on completion.
- Insulation of boiler room services with foil backed mineral wool and ID marking.

## CONTROLS

It is proposed that a new control panel will be manufactured to provide control and indication of all of the new system components. A new universal DIN-rail mounted main plant controller.

The controller which will be programmed to provide control of the 3 heating zones by controlling the heating flow temperature via the boilers and zone control valves, dependant on individual zone time settings , internal and external temperatures and required zone room temperature setpoints.

A remote touchscreen will be located in a suitable position and will provide access to all controller functions and alarm/fault indication.

The system will comprise of the following.

- 1 off new control panel with hand off auto control switches.
  - Run and fault indication lamps.
  - Internal components including distribution circuit breakers and all associated control components.
  - Facia Mounted controller and associated modules.
  - Power and control wiring to all plant items.
  - Indoor wall temperature sensors located in suitable positions within the building zones.
  - Outdoor temperature sensor and heating flow temperature sensors.
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- **SCOUTS AND GUIDES HALLS**
  - 1 x 45KW fully modulating wall mounted condensing boiler complete with an individual shunt pump, the boiler has a seasonal efficiency of 97.5% dependant on water flow temperatures.
  - Manufacturers flue header kit to connect to the main hall flue system.
  - The boiler will be connected to a new low loss header, custom manufactured to suit the boiler layout.
  - 2 no. port zone heating valves to be installed to allow each heating zone to be individual controlled, 1 - Scouts, 1- Guides.
  - 2 off new single head variable speed heating zone pumps.
  - A pressurisation set and expansion vessel to provide a sealed heating system and remove the requirement for the feed and expansion tank.
  - Replacement of isolation valves within the boiler room.
  - Removal of thermostatic radiator valves in the hall areas and replacement with handwheel valves to allow large spaces to be controlled via wall sensors.
  - Installation/ replacement of thermostatic radiator valves in smaller rooms to improve temperature control.
  - Flushing of the heating system in conjunction with the above works to remove residual sludge and addition of inhibitor on completion.

- Insulation of boiler room services with foil backed mineral wool and ID marking.

## **CONTROL**

The system will be connected to the main hall control system safety circuit but will be provided with a small control panel to control the boilers and associated components. It is assumed that the same emphasis of control will be provided by using the boilers integral controls. For ease of use a time and temperature controller will be located within the entrance foyer.

The system gas usage can be monitored via the existing separate meter and there will no longer be a requirement to access the boiler room for control of the system.

## **Site Visit**

A site visit may be arranged any time prior to the tender submission deadline by contacting the Property Manager.

Email: [property@bramshottandliphook-pc.gov.uk](mailto:property@bramshottandliphook-pc.gov.uk)

Telephone: 07547 227130

## **Restrictions**

Prospective contactors must not contact any councillor or staff member to encourage or support their tender.

## **Decision**

The contract will be awarded at the council meeting to be held on 22<sup>nd</sup> April 2021.

**Peter Stanley**  
**Proper Officer**  
**Bramshott & Liphook Parish Council**  
**01/03/2021**