

Tower Hamlets Homes  
Jack Dash House  
2 Lawn House Close  
London  
E14 9YQ

For the attention of Mr. Roy MacPepple  
Investment Planning Architect

**Phone:** 0870 145 3355  
*Mon-Fri 8am-5pm*

**Write to:**  
British Gas Business  
Unit3  
Mountleigh Close  
Euroway Trading Estate  
Bradford  
BD4 6SP

**Internet:**  
[britishgas.co.uk/business](http://britishgas.co.uk/business)

**Your customer reference**  
JRM/G/026/E14  
**We sent this letter on**  
2<sup>nd</sup> April 2012

Dear Sirs

**Re: Appraisal of heating system at Elland House/ Cheadle House Copenhagen Place  
London E14 Locksley Estate**

Further to our discussion and site visit, we thank you for the opportunity to carry out an appraisal of the heating system at the above premises and also to offer our quotation for the recommended alterations and replacements to the systems which represents the supply and installation of equipment and services in accordance with the detail below at the above address.

**Current Position**

The boiler plant room for this estate is situated in the ground plant room corner of Cheadle and Britley adjacent to car park. The plant room feeds 2 areas Elland House and Cheadle House and the buildings have 57 dwellings. The systems feed radiators in the dwellings and also hot water cylinders.

The boilers in the plant room are 3 no Ygnis boilers fitted with Nu-Way XGN1000 burners, each boiler had a rated output of 510kw. The boiler efficiency was measured on the boilers which were running at the time of survey and the readings taken were: - 90.0% Nett which equates to 82.1% Gross. The Boilers are non condensing conventional boilers and considerable cost/gas and emissions could be saved by changing the boilers to condensing boilers with a Nett efficiency of 109% in condensing mode (98% Gross) a saving of 19% for the same amount of heat output.

We looked at the controls to the boilers and these are standard controls non weather compensated and we would suggest that these be maintained and that they be re-programmed by the manufacturers' engineers if the boilers are changed. We do not recommend weather compensation for these boilers as they are providing hot water as well as heating.

**Proposed Improvement**

We propose that the 3 existing boilers be replaced with 3 no floor standing gas fired condensing boilers type Broag Remeha Gas310 Eco Pro boiler 9 sections with a heat output of 106-531 kW. The total heat output from the boilers will be 1593kW which is slightly more than the existing 3 boilers which provided 1530kW when all running, the boilers will modulate to match the building heating requirement. The boilers are of a condensing design and as such a great deal more efficient and we would expect a fuel saving between 20-25% for the same heat output compared to the old boilers.



We have included to:-

- 1) Drain down and remove the 3 No Ygnis 510kW boilers from the ground floor plant room.
- 2) Supply and install 3 No New Broag Remeha Gas310-9 gas fired condensing boilers each with an output of 106-531kW in place of existing boilers.
- 3) Supply and install 3No low loss headers and shunt pumps to each boiler, apapt and alter pipework and electrics to suit.
- 4) Erect scaffolding to gain access to the existing flue terminals.
- 5) Re-Line existing chimneys with new 250mm stainless steel class 1 flue liners, supply and install new tapered cone terminals onto top of the existing stack, supply and install new single wall flue within the plant room to each boiler.
- 6) Run new condense line into the existing drain in the plant room.
- 7) Re-use the existing time and temperature controls within the plant room control panel.
- 8) Supply and install new safety valve to each boiler
- 9) Supply and install new 3" Strainers and isolation valves to each boiler
- 10) Re-fill test and commission

Combustion air will be taken from the boiler room which has adequate ventilation.

**We have calculated the cost to replace the boilers at this site and confirm that the cost would be £128,475.00 + VAT.**

This quotation is subject to our general and specific terms and conditions which are available upon request.

We hope that we have fully related to your requirements and look forward to your further instructions.

Should you have any queries, please contact me by telephone or e.mail below.

Yours Sincerely,

John R Moore  
**Field Sales Engineer**  
Mobile:07979 562069  
[john.moore2@britishgas.co.uk](mailto:john.moore2@britishgas.co.uk)

