

Client: Royal Society (Knight Harwood)

Location: Chicheley Hall, New Port Pagnel

Sector: Hotel/Conference Facility

Project value: 1.5 million

Project: Chicheley Hall



Brief

We were asked by the client to supply and install a complete new heating system, ventilation system, BMS and approx 30 new high specification bathrooms. The Royal Society had purchased Chicheley Hall from the previous owners, with the aim of turning it into their new headquarters and conferencing facilities. The whole project was installed to a very high specification at the request of the architects and the client.

Action

The whole project comprised of the main house (grade 1 Listed), the North and South wings (grade 2 listed) and the coach house (grade 2 listed).

Along with the main fit out works, we also installed all the mechanical plant in a new purpose built energy centre; located at the edge of the grounds. Due to the nature of the site, this energy centre needed to be built out of something that would eventually merge in with the surroundings. We had to install new flow and return pipework from the energy centre to all the relevant buildings and this was done via trenches through cobbles. Due to the nature of the site the cobbles were kept and replaced at the end of the contract.

The heating system comprised of two new bio fuel boilers and a complete new infrastructure to support this. Each building had a new 2 pipe system installed, along with all new high spec radiators.



As the main house was a grade 1 listed building, we put forward the use of crimp fittings on all copper pipework, which was accepted. This therefore negated the requirement for hot works.

Due to the state of the main house, the existing single pipe heating system was kept and incorporated into the new system via a heat exchanger. As it was a grade 1 listed building it was not possible to remove floor boards in order to remove the existing system.

Along with the heating system, we also installed a ventilation system throughout each building for the new bathrooms. The main kitchen was supplied with a dedicated extract from the basement through to the roof.

The existing coach house was also refurbished and we installed an air handling unit to serve 2 new lecture theatres. As the ducting would be on show, various samples were created and it was decided to install the ducting and wrap it with polished aluminium.

We also installed a new BMS system that linked all the buildings together and back to the energy centre.

Outcome

The project at Chicheley hall was a challenging one due to the nature and listing of the buildings involved. The main focus of JCA was to install what was required with the minimum amount of disruption to the buildings or the building fabric.

Our role at chicheley was to manage and install the heating, domestic hot and cold water, new ventilation and a new BMS, whilst keeping the nature of the buildings in mind. This was carried out without issue and on time and to budget.