Shield

Mechanical, Electrical & Facilities Services Case Study

Student Accommodation Hot Water Vessel Replacement

Experts in Providing
Specialist Services
Nationwide

Collegiate, Clarendon Street, Nottingham

The Shield Mechanical, Electrical & Facilities Services division was contracted by our client to remove and replace an existing hot water storage vessel from a busy student accommodation site in Nottingham.

Collegiate's Clarendon Street student accomodaton is located in the heart of Nottingham and is surrounded by busy, tight residential streets where access to large vehicles can be a challenge. With this in mind, the works to remove and replace an existing hot wter storgae vessel had to be scheduled ober the August Bank Holiday weekend in 2023.

The client had identified the need to upgrade the storage vessel resulting in the requirement to remove the existing long-serving, 2000 litre solution with a new, bespoke manufactured 3000 litre alternative from World Heat of Manchester.

Original 2000L vessel (Left) and Replacement 3000L vessel (right).

Following approval to proceed, on the first day, the cladded roof system for the plant room was carefully removed to allow access to the vessel. This was then drained and stripped ready for the crane company to remove.

Council authorised clousres were put in place to ensure safety.

On the Sunday (Day Two) as planned the road was closed, in accordance with the plan and authorised Council permits, to allow for the access and safe operation of the lifting crane. The crane removed both the old vessel and lifted the new solution into place.

These works were completed to plan with students still occupying the accomodation.

Replacement is lifted into rooftop location from the street below.

Once in situ, the pipework to the vessel was completed, with the unit filled and tested, reinstatement works were finished, ensuring the hot water was back on line.

The plant room walls and roof were then reclad, making any adaptations required to accomodate the increased size of vessel.

"We had an incident where the entire site, with 200 students, lost heating and hot water supply due to a failed water storage vessel. The plantroom was located inside the roof with the only access via a ladder. The team responded quickly to and an emergency plan was put in place to initially get the heating back into operation. The HW required major re-piping, fabric alterations, enabled a scaffold erection for access & pigeon waste clean-up within the plantroom. With Shield's dedicated team the site had hot water back on within 10 days."

John Saddington Technical Manager, Collegiate