



CASE STUDY

Works: Licensed
Asbestos removal
and Demolition

Sector: Transport

Former Bus Depot, Muller Road, Bristol

OVERVIEW: Lawson Group were awarded the contract to undertake the licensed asbestos removal, demolition, removal of tanks and protection of underground of infrastructure at a former Bus Depot site in Bristol Centre. The bus depot had been operational but then left redundant for several years.

CHALLENGE: Prior to the construction of the bus depot, the site had been used as a sewage treatment plant. Underground infrastructure from this plant remained below the former bus depot with manholes spread across the site. The site was made up of concrete hard standings that held a former large bus depot comprising red brick masonry walls and pitched roof building with internal steel structure. There were also flat roof buildings and smaller ancillary buildings adjoining the main building.



The main structure comprised of a large open space with several inspection pits, several smaller internal rooms were located to the rear of the building. The roof was formed with three pitched sections comprising of a steel frame enclosed with cement bonded roof sheets.

Environmental consideration had to be given to nearby residential properties and a public footpath that ran adjacent to the site. A bus stop, used by school children, was positioned close to the site entrance, so all deliveries would have to be prescheduled to avoid busy school times. A live substation was positioned within the site perimeter, this would require protection and remain live throughout the project.

The site was surveyed and scanned with the use of a CAT4 and Genny, all services feeding into the demolition and clearance zone were traced back to the substation and would need

disconnecting. Asbestos containing materials were also located in the boiler room and internal offices. These works were notified to the HSE with an ASB5 and completed under controlled conditions by Lawson Environmental (part of Lawson Group) whom are licensed by the HSE to work with asbestos.



SOLUTION: The buildings were first stripped of any loose furnishings and fixtures. Next, Notifiable Non-Licensed Work (NNLW) commenced for the removal of the CBA roof sheets. Cat B trained Demolition Operatives worked within Mobile Elevated Working Platforms



(MEWPs) to remove the sheets. Three MEWPs were in operation with a pair of operatives assigned to each one, all operatives were IPAF and CAT B trained. MEWPs were logistically positioned for the safe removal of CBA sheets. All sheets were first dampened using a suppressant mix, the bolts were cut and sheets lowered one by one. They were then removed using a skid steer and placed in a stacked pile into an enclosed 40-yard skip. During the CBA

removal, independent background and personal air monitoring was carried out.

Once all CBA sheets had been removed, a 360 excavator with a hydraulic shear attachment was used to cut the steel frame of the roof. A second excavator was used to process and load the steel into 40-yard skips.



Included in the scope of works was the requirement to remove all footings, slab and hard standings. Due to the previous use of the site, several manholes were located within the site boundary - this was a challenging element of the project.

At 6 metres below ground level, a live Wessex Water chamber for storm and foul sewage was in operation with a manhole located within the site perimeter. Once all slab and footings



surrounding the manhole were removed, the access was raised and encroached above ground level. Lawson Group were required to reduce the height whilst protecting the Wessex Water's assets below ground. Confined space trained operatives installed a scaffold crash deck to prevent any falling debris. The surrounding piles

and ring beams were separated by skilled operatives using wire saw techniques. The manhole was then reduced in height by 1m.



Additional requirements within the scope included the instruction to locate and remove all obstructions up to 3m deep, this included the removal of 1no Interceptor tanks and 2no storage tanks. Lawson Group were required to plot on drawings where remaining piles footings were left that exceeded a depth of 3 metres.

Once all slab, foundations and underground obstructions were removed, all the concrete and hard-core were processed on site with company owned mobile processing equipment. This produced 6F2 crushed stone material suitable for reuse within the future residential development.



RESULT: The project was completed to programme and to the client's specifications. The site was then handed over for the next stage of development. Lawson Group have continued to work with the client having successfully tendered for a number of further developments. Further references are available upon request.

To find out more on how Lawson Group can help with your next demolition or asbestos removal project, call 01793 782000, email enquiries@lawsongroup.co.uk or visit www.lawsongroup.co.uk