



CASE STUDY

Works: Asbestos removal and demolition

Sector: Government

Government Communications Headquarters (GCHQ), Cheltenham

OVERVIEW: Lawson Group were awarded the responsibility of asbestos removal and the demolition of the former Government Communications Headquarters (GCHQ) in its entirety, located to the east of Cheltenham.

Government Communications left famous Bletchley Park in the 1950s and came to Oakley Park, Cheltenham as the government were concerned about the safety of their communications systems after the German army's Enigma code was cracked.

Due to the nature of use at the historic site, prior to works commencing, a contract was awarded to decommission GCHQ. This included removing files and anything of value from this high security location.

During the decommissioning period of the site, Lawson Group undertook excavation work. They found that cable tunnels had been reinforced by concrete, many metres below ground level. This was to be expected on this site due to the nature of the operations that took place. Other structures were also found underground in order to ensure all communications were secure from threat.

CHALLENGE: This complex project was to be broken down into a five-phase methodological plan in order to help with the transformation of the site into both luxury and social housing. Lawson Group had to commence work with an initial soft strip of Q Block in phase one of the plan. This was to coincide with the asbestos removal in F Block, situated in phase four of the methodology, which Lawson Environmental would be contracted to do.



Phases one, two and three consisted of extended buildings which were added to the site throughout the time GCHQ was a live working complex. M Block was the largest building on the complex and was built into the side of the hill, this meant that it was reinforced by the

ground. The design of M Block and the reinforced structures, which were implemented within the building, would require its own demolition.

SOLUTION: The planning of the works was produced in accordance with the client as Lawson Group sent their method statements and health and safety plans to the CDM coordinator for approval. The asbestos removal in F Block was three months' worth of work, removing asbestos insulation board and undertaking an environmental clean of the building.



For the first three phases, the demolition work commenced in phase one and worked its way down the hill entering into the new phases once each one had been completed. After the demolition of every phase, the demolition arisings were crushed to a 6F2 specification in agreement with the client so they could be reused as a sub base.

Phases four and five of the complex consisted of the original buildings that were built on the site in the 1950's.

The demolition of M Block required the use of Lawson Group's Liebherr 954 excavator. The height of the extendable arm was utilised to its full extent of 26m to reach the top of the atrium roof. A four-tonne scissor attachment was used at the end of the arm in order to cut through the heavy steel framework of the building.

The building's outer shell was divided up into three sides by the existing three, very large tower blocks which were reinforced into the building.

The methodology of this building was therefore broken up into three sections, starting on one side and gradually demolishing the building - ensuring that the correct procedures were made to avoid the building collapsing.

The towers were demolished in turn. It was asked by the client to keep an outline structure of the base for one of the towers. This was because it was planned to be kept and installed as part of the design of one of the new buildings to be built.

The project required eight of Lawson Group's fleet of machines including the CAT 374 which was bought specifically for GCHQ and other secured works.

RESULT: A significant amount of the waste accumulated from this site was able to be recycled. Lawson Group aims to recycle 95% of the waste that arises as a result of demolition work. The site was cleared on budget and within time limits, this meant that it was ready for the client to commence work - building houses with an excellent view over Cheltenham.



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