



Demolition & Site clearance of Fire Damaged Warehouse Units

- Location:** Dinnington, Sheffield
- Scope:** Demolition of fire damaged buildings, warehouse units and adjoining office block
- Disciplines:** Asbestos Removal, Industrial dismantling, Hazardous Materials Removal, Site Clearance
- Client:** Hodge Clemco Ltd
- Programme:** 6 weeks
- Value:** £280,000

The office block was of brick construction and flat felt roof. The warehouse sections were steel framed with 2m high walls and corrugated sheeting to sides and roof.

One warehouse unit had tin corrugated sheeting (which suffered extensive fire damage) with the adjacent unit having asbestos cement sheeting affixed.

A detailed assessment of the structures was undertaken by the demolition engineer prior to developing the Safe System of Work.

Project Challenges

All asbestos identified in the Demolition Survey was removed by Ron Hull Demolition's approved licenced asbestos removal contractor. The site presented a high risk of asbestos cross contamination due to severely fire damaged buildings.

The chosen sequence of demolition works adopted were carried out by mechanical means due to the high risk of cross contamination.



Description of Works

A full site environmental clean was carried out prior to demolition works commencing. A dust suppression unit was set up adjacent to the excavator and the buildings in the direction of demolition. The water unit operated onto the building to completely wet down prior to demolition.

Utilising the 30t excavator with grab attachment Building A was demolished by first removing the deformed cladding. The steel framed was removed using the shear attachment, processing the structure down to ground level.

Building D at the rear was hand separated from Building A, prior to the mechanical demolition of the adjacent Building A section. Before commencing demolition of Building B, a segregated decontamination wash down area was set up adjacent to the works.

The excavator commenced cutting the steel truss and purlins from the first bay with the shear attachment, this allowed the steelwork and cement sheeting to fall within the footprint of the first bay. The dust suppression unit was in constant use during the works.

The steel was placed to one side for further processing, ready for loading to skips for removal.

The excavator gathered the cement sheets and placed into lined skips/bulkers for removal from site. Once the area had been made safe, operatives entered the area to litter pick the cement sheets that remained, placing large pieces directly into the telehandler bucket.

The method was then repeated utilising the method and sequence working through Building B. During the demolition of Building B, background and personal reassurance air monitoring was carried out.

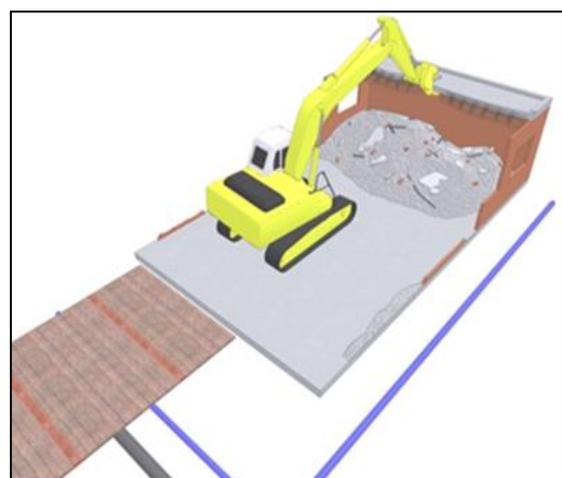
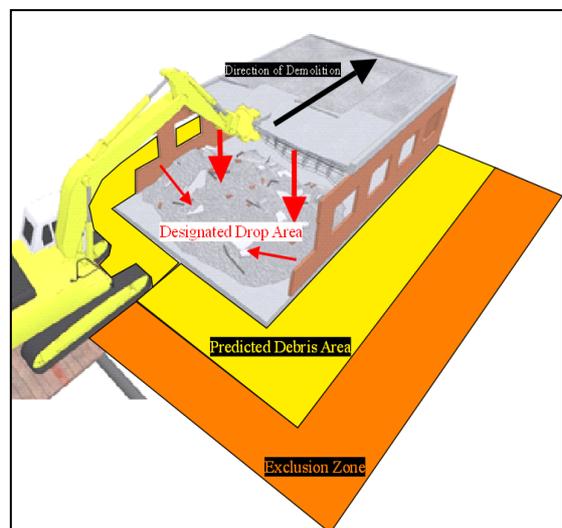
The columns were hot cut flush to slab level ensuring no trip hazards were left. The excavator grabbed and held the column in situ until an operative hot cut the holding down bolts, on completion of cutting, the excavator lowered down the column to ground for further processing. On completion, the slab was swept clean and left in a safe condition.

The office block was then demolished beginning with the removal of the brickwork to the gable, exposing the

concrete flat roof. The concrete roof sections were pulverized by the attachment falling to ground in a controlled manner, internal walls were progressively pushed into the footprint of the building.

As the 360° excavator progressed through the building, arising's were periodically segregated where possible, and placed into the relevant waste receptacles ready for removal from site

Below is an indicative illustration to show how the building was deconstructed: -



In conclusion, the project was completed safely, without any environmental or safety incidents and to the total satisfaction of our client, local community and immediate businesses, in line with a Waste and Resources Action Programme (WRAP) and Demolition Protocol.