



- Location:** Former Goodman Sparks site, Cliffefield Road, Sheffield
- Disciplines:** Demolition within a residential environment, close to houses and roads
- Client:** Duke Developments
- Programme:** 6 weeks

Introduction:

The former Goodman Sparks site, located on Cliffefield Road, Sheffield, was a former laundry and dry cleaner’s service. The company relocated elsewhere in Sheffield, and the Cliffefield Road premises had been derelict for some time.

The site had various sensitive receptors along all four boundaries. The Meersbrook Park Walled Garden site abutted the demolition site to the North, with an old, protected stone dividing wall. An existing residential property was located to the East, approximately 5m from the demolition site. Cliffefield Road was located to the South, the buildings directly facing the footpath. Derbyshire Lane was located to the West; this being the main bus and vehicle route from the A61.

Ron Hull Demolition secured the project to demolish the former Goodman Sparks building down to top of slab, our competitive quotation being the deciding factor of contract award. The future development would be to build further residential properties.

Scope of Works:

- Pavement closure and permit
- Half road closure and permit
- Traffic management
- Engagement with residents and stakeholders
- Full demolition of structure (down to slab)
- Removal of all demolition waste off the site



Sequence of Works:

Due to the site's location, within a built-up residential area, close to various sensitive receptors, we realised that greater emphasis was needed on work planning and preparation for this project in comparison to other works we have undertaken, where risks from public interface was not so much of an issue.

The Ron Hull Demolition project management team engaged with the Client at the earliest stages, helping to prepare for the work. As the Client's team was inexperienced in demolition and manging projects of this nature and size, we worked collaboratively with them from the outset, issuing the demolition notices and providing advice as to pavement and partial road closure requirements to include traffic management companies to approach.

The planning work also included engagement with the Client appointed structural engineer and discussions with the team at the Meersbrook Park Walled Garden site to review demolition work at the party wall areas and agree methodologies and safe working exclusion zones.

Following the asbestos removal, which included licensed and non-licensed materials, Ron Hull Demolition work onsite began in earnest with the enabling stage, that included setting up the pavement closure and single lane closure along Cliffe Road, setting up site establishment (hoarding/welfare) on the site and protective scaffolding to various elevations to protect the public.

Whilst the enabling stage was taking place, the buildings were internally soft stripped with the waste being stockpiled inside at designated points, due to the lack of space onsite. The waste was later loaded into skips by the machine during the structural demolition.

A closer site survey (as part of the demolition methodology review) highlighted structural cracks to the Cliffe Road elevation, therefore the method of demolition also incorporated a by hand reduction at the façade, working off the scaffolding, helping to avoid any premature collapse.

A pedestrian walk through scaffold, was set up to the Derbyshire Lane elevation, helping to maintain pedestrian access and avoiding any unnecessary pedestrian road crossings. The demolition at this area was carefully managed, with banksmen located roadside in assistance.



Pedestrian walk through scaffold at the Derbyshire Lane elevation



Footpath and half road closure in effect along Cliffe Road for full demolition duration

Sequence of Works:

The demolition was completed using our 14t and 25t machines, with bespoke shear and grab attachments following an agreed sequence through each building. Due to site space constraints, the 14t machine was initially needed to create room and working area for the 25t machine to operate.

A full pavement closure and half road closure was in effect along Cliffefield Road throughout the demolition, with letter drops conducted to affected residential properties. It was decided that the best way to manage the traffic issues would be to close off access onto Cliffefield Road from Derbyshire Lane and instead create a one-way road.

The demolition waste was loaded into skips and lorries, before being removed off site, leaving the Client with a clean site, back to top of slab, for the next stage in the site's development.

Project Challenges:

Working within a residential area with houses, footpaths and roads within proximity to the worksite. This was managed by extending the demolition zone, closing off pavements and having half road closures to Cliffefield Road. Scaffolding was also set up as an added public protection measure and was also used as means of access for a by hand manual wall reduction at sensitive areas along the front elevation.



Demolition by 14t machine



Demolition by 25t machine



Removal of the waste following completion of the demolition work



Road closure at Cliffefield Road