CASE STUDY - DIDCOT POWER STATION

KKB Remediation were appointed to undertake the enabling works to prepare land formerly occupied by the Didcot Power Station in Oxfordshire for the development of a new datacentre.

The works were completed in phase phases. The environmental investigation of the land identified land contaminated by asbestos debris as well as material and ground water containing unacceptable levels of hydrocarbons.

Under our Mobile Treatment Licence we set-up a mobile treatment plant to decontaminate over 100,000 litres of associated groundwater. The water was pumped into the plant which removed pollutants using settlement tanks. Following discussion with the local authority consent was given to discharge the filtrate into the local foul water system.

Twenty thousand cubic metres of contaminated material was excavated and processed. The soils were visually inspected at the excavation face and hauled to the processing area. Within the processing area NNLW (notifiable non-licensed work) trained asbestos operatives picked the asbestos initially operatives from stockpile then from within the Asbestos Picking station.

The soils were then processed through the screening plant with asbestos

Discipline: Remediation, Earthworks, Civils
Client: Cloud HQ
Value: £13 million
Completed: Jul 2025
Duration: 19 months
Location: Didcot, Oxfordshire

Alpha House, Culpeper Close, Medway City Estate, Rochester, Kent, United Kingdom, ME2 4HU
Tel: 01634717712 | Email enquiries@kkbgroup.co.uk | Web: www.kkbgroup.co.uk

pickers sited at the end of the screener belt for further asbestos picking.

All asbestos materials were double-bagged for off-site disposal. The processed soils were then validated by means of laboratory testing and backfilled below the site access road and car parks.

The operation was carried out under the Control of Asbestos Regulations 2012 with an asbestos analyst carrying out air monitoring.

The enabling works phase of the project involved:

- Excavation and sorting of over a 100,000 cubic metres of soils which was tested to meet 1A/2A specification for re use in the earthworks profiles; the breakout and excavation of 28,000 cubic metres of hardstanding, crushed to meet the 6N specification for the construction of a 55,000m2 piling mat/working platform and the 6F2 specification for use in the construction of the roads.
- Excavation of 2 nr Borrow Pits to generate sand & gravels to use as clean cover in re-profiling the site's landscape areas.

An attenuation pond was installed using targeted excavation, site-won clay and two pre-cast concrete headwalls.

Post project assessments revealed that remediating the contaminated land and water on-site saved the client over £5million and reduced the carbon footprint of the enabling works phase by 50% (335 tonnes CO2e).

This second phase of the works included the civils works to create a working platform for Building 1 and the earthworks for Building 2 - involving a cut and fill exercise including associated source and compaction testing, and materials management of over 60,000 cubic metres of material, with more than 80% being site-won.

Building 1 civils and groundworks involved installation of:

- 45,000 sqm reinforced piling mat, using site-won crushed concrete
- 2,500+ driven piles and over 8,000 vibrated stone column piles
- 1,000m+ of drainage, up to 3m deep, including deep manholes
- 3,000 linear metres of ducting for services, up to 2 metres deep, including 26 reinforced concrete chambers
- Incoming potable water supply
- 600+ reinforced pile caps
- 2 reinforced concrete lift shafts
- A large 25 metre reinforced retaining wall

In total more than 7,300 cubic metres of concrete was supplied and installed, with 500 tonne of rebar.

The success of the project was dependent on a comprehensive logistics plan and QA/QC monitoring, ensuring that the complexities of the project were carried out in a manner that maximised the space available of site, allowing multiple phases of works to be undertaken simultaneously.

This ensured the project was completed on time, to the required specifications, and within budget.

Alpha House, Culpeper Close, Medway City Estate, Rochester, Kent, United Kingdom, ME2 4HU
Tel: 01634717712 | Email enquiries@kkbgroup.co.uk | Web: www.kkbgroup.co.uk