



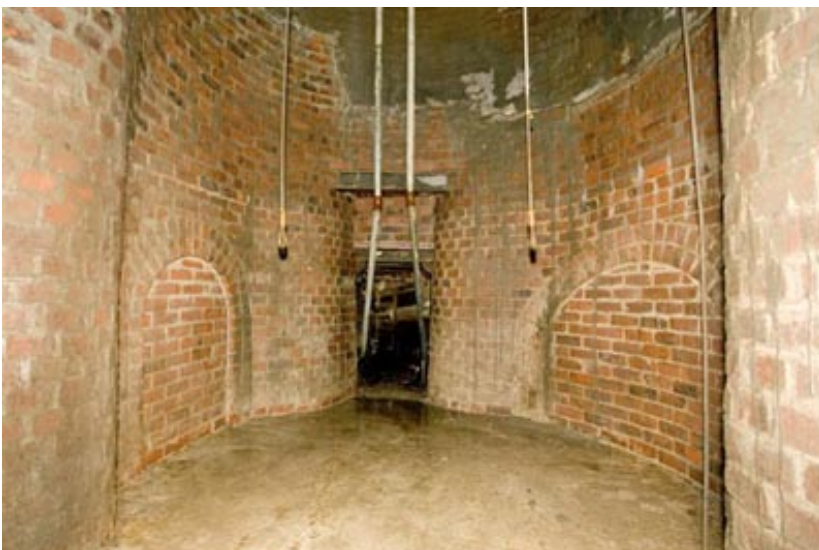
Alan Auld
ENGINEERING

Project Data Sheet - Caphouse Colliery Shaft Repairs

The historic Caphouse Colliery, near Wakefield in west Yorkshire, is home to the National Coal Mining Museum for England. The mine was originally ventilated by means of a furnace situated in the upcast shaft and years of acidic fumes had resulted in extensive deterioration to the brick lining. Rotting of the original timber curb rings had also resulted in bugling and movement of the lining, resulting in the shaft becoming unstable. In addition the shaft base had also become unstable and was unsafe to enter.

Following an initial investigation and a detailed site inspection of the affected areas by Alan Auld, mining contractor Amco Ltd were awarded a contract to carry out repair work to stabilize and rebuild the unsafe areas of the shaft lining and rebuilt the shaft bottom area. In addition a new roadway was driven from a junction with an existing roadway

Alan Auld Engineering were engaged by the contractor to design and supervise the repair and stabilization works in the upper shaft, the old furnace area at the shaft bottom, together with the design of a new junction and roadway to connect with bottom of the shaft.



Due to the unstable nature of the lower part of the shaft, it was also necessary to develop and design the temporary works, as well as the permanent works, necessary to enable the contractor to develop a safe method of working to ensure the safety of the workforce as well as the public, who were still able to visit the mine during the period of the works.

A particular feature of this work was that due to the historical nature of the structures traditional materials had to be used where possible and therefore the new work had to incorporate bricks recovered during the rebuilding works.