

Crossrail Bond Street, London

John F Hunt



Transport For London



£170,000

Costain Laing O'Rourke JV were awarded a £130 million construction contract to redevelop London Underground's Bond Street tube station.

John F Hunt carried out diamond drilling and wire sawing operations to the concrete structure from inside the services trench. Cutting through to the platform invert on the Jubilee Line, allowed CTP pipe work and a hydrant to be installed in the junctions between both the North and Southbound Jubilee Line platforms. This required deep penetrative drilling through the existing cast tunnel rings, which threw up several issues, taking some innovative thinking to overcome.

We undertook the installation of steel sleeves to permanently open the holes for pipe work installation. These works were carried out during rail possession time.



To aid efforts, often a Terex drum cutter was utilised to profile, leaving little impact to the remaining structures.

Working around the clock alongside the CJV engineers and the determined miners, we removed the inevitable obstructions, often assisting the Schaffe, a piece of tunnelling equipment, where areas became inaccessible.

We provided a 24 hour on-call fitters service for all our equipment, with the backup of stand-by BROKK machines and attachments, to ensure a robust and reactive service for our clients.



Working within tight areas where conventional methods could not be used, remote controlled BROKK 160's initially broke out and removed the remaining basement structure. This enabled piling of 3 No. shafts, one of which, the grout shaft, John F Hunt operators dug out using BROKK's with clam shell attachments.

Works involved breaking, digging and profiling invert and crown advances through the stubborn clay and sprayed concrete lining, to form the many adits and cross passages with BROKK 160's and 260's.