

# Fisher Street Kingsway Tram Tunnel

<b>Client:</b>	BFK
<b>Location:</b>	Holborn
<b>Value:</b>	£125k
<b>Duration:</b>	4 Months

## In Brief...

The Kingsway tunnel was built in 1906 and once carried trams between Aldwych and Holborn. It had been used by the London Borough of Camden for storage since its closure in 1952 but it has now been reopened by Barhale, sixty years later, to enable an essential grout shaft to be constructed.

This was an extremely interesting and challenging site location due to space constraints, media interest and the fact that the tunnel was a protected heritage structure.

## Customer Benefits...

There was significant management of the existing tunnel as it is a heritage structure. This included protection of the walls and cobbled entrance and also careful removal of the existing old tram tracks in the floor slab of the tunnel. This was of great concern to the London Borough of Camden and was managed with great care with a great result.

During the work, Crossrail took the opportunity to carry out a site visit for NCE magazine, historians and internet bloggers.

## Technical Features...

The existing Kingsway Tram tunnel was 6m wide which provided significant challenges. The existing tunnel walls were propped before they broke out the tunnel floor to ensure that there would be no movement. Once the shaft collar was installed and cured to the required strength the bottom props were removed. The shaft was located 30m inside the tunnel and had limited head room of 5m.

Access was off High Holborn which is an extremely busy and difficult intersection in central London which created its own challenges. Delivery timing and organisation was extremely important as there was no room on site for vehicles to park or material storage.

Barhale choose to operate the crane from inside the tunnel, over the shaft to ensure easy access for materials and the reduction of crane movements. This resulted in the need to design a shaft lid on completion to be able to walk the crane back over the shaft to remove it from the tunnel. Barhale choose to underpin the shaft as the working height restriction would have made jacking the shaft difficult if not impossible.

