

case study ♦♦♦♦ ♦ Cross rail - Liverpool Street EC2

Existing Structure & Location:

The Liverpool Street Crossrail project was split into three separate site locations, within close proximity of Liverpool Street or Moorgate Station.

Each site had its own challenges however all were immediately adjacent to the live LU assets which we had to protect and maintain throughout our works.

This high profile project was undertaken direct for Crossrail with us taking the Principle Contractors role, therefore responsible for liaison with LU, Network rail and the City of London throughout our works.

The structures to be demolished were between six and seven storeys in high and previously used as commercial office space. The individual sites were referred to as Blomfield Street, Moorfields and Moorgate.

Scope of Works:- Moorfields

- Demolition of the Moorefield's structure was undertaken on a floor by floor basis with 7 ton excavators, the existing RC structure was heavily reinforced and specialist attachments were used to process the structure reducing the need for percussive methods.
- One of the challenges with this structure was the location of the Metropolitan line tunnel immediately beneath the basement slab. Noise, vibration and movement was a key issue throughout the demolition process and had to be continuously monitored.
- Our methodology and management ensured that all LUL assets remained protected throughout.

Moorgate

- The Moorgate office building was demolished directly over the live station ticket hall. At the outset of the project our team designed and installed a full protection deck over the LU asset to ensure public safety throughout our works.
- During the survey stages of the project we discovered considerable sprayed flock asbestos within the basement area, which had to be removed under fully controlled conditions. The extent was such that we instigated a 24/7 removal team for a 12 week duration to maintain the program.
- Demolition was undertaken on a floor by floor basis with the assistance of an on site tower crane, the installation of which significantly improved the site logistics as space was a premium.

Blomfield Street

- The Blomfield Street building was situated immediately adjacent to an above ground section of the Metropolitan Line tube. Our team designed and installed a temporary protection deck to not only protect the LU asset but also to support the demolition scaffolding to the building.
- Demolished was on a floor by floor basis with all materials being discharged internally within the structure. A conveyor system removed all materials from basement level up to a first floor disposal gantry in Blomfield Street.

Achievements

- All projects completed on time and within budget.



Client : Crossrail

Project Manager: Bechtel Limited

Value: £6.3 Million

Duration: 18 Months