



21 Moorfields

Client: Land Securities

About the Project

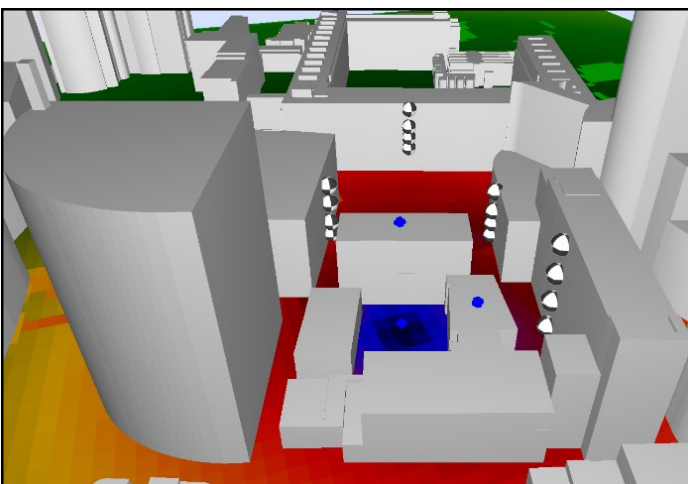
21 Moorfields is situated directly above a Crossrail Moorgate Ticket Hall and, once complete, will provide over 60,000 m² of high quality retail and commercial space. The site is also surrounded by residential and commercial buildings.

The site is also surrounded by residential and commercial buildings and noise, vibration and air quality from the construction were identified as key environmental risks. The City of London has statutory powers in relation to pollution from construction sites and ultimately can stop the works, therefore a good relationship with this key stakeholder and a robust and proactive approach to managing the risks was essential.

Approach

In order to identify the main risks, construction dust risk assessments and noise assessments were undertaken. This detail gave the contractors useful information about which works might lead to complaints, and also demonstrated to the local authority that environmental issues were being reviewed seriously within the realms of the project.

Working in collaboration with the construction team, innovative 3-D noise modelling was used to predict the level of noise at nearby residential and commercial buildings. This data was used to help identify mitigation requirements. It was also fed into the local authority Section 61 applications for 'prior consent' to work which limits the local authority's powers to stop works.



3D Noise Model

Instrumentation and Services:

- Dust risk assessment
- Construction noise assessment
- Environmental trigger action plan
- Construction noise, vibration and air quality monitoring and reporting
- 3 noise monitors, 1 vibration sensor, 1 air quality sensor

Noise and vibration trials took place to identify whether the works were likely to impact London Underground – minimising the chance of works being halted during the construction. Continuous real-time monitoring of noise, vibration and air quality is currently being undertaken and will last for the duration of the project. Resulting data will be live and web-accessible, providing transparency and helping to build trust between the client and stakeholders.

Key to the success of the project was early and constructive engagement with the City of London and London Underground. Our provision of technical consultancy services on specialist topics, such as ground-borne noise and vibration, helped identify and minimise the potential risks of the construction and avoided costly delays and reputational damage.

About Plowman Craven

Plowman Craven provides integrated measurement and consultancy services to the property and infrastructure markets, pioneering the use of technical innovation to deliver proven expertise and trusted results throughout the project lifecycle.

Head Office:
 Plowman Craven House
 2 Lea Business Park, Lower Luton Rd
 Harpenden, Herts. AL5 5EQ
 Tel: +44 (0)1582 765566

London
 Tel: +44 (0)20 7490 7700

Birmingham
 Tel: +44 (0)121 262 4218

Email: post@plowmancraven.co.uk