



Case Study

Datum Monitoring



Overview

The 65 Fleet Street development is a student accommodation project in the City of London, on which McAleer & Rushe are carrying out the demolition & enabling works. It is part of a larger mixed-use scheme that also includes a permanent home for the St Bride's Foundation.

Features:

- 850+ beds
- A 13,000 sq ft space for the St Bride's Foundation
- A roof terrace
- Social and study spaces, gym and wellness zones, and entertainment spaces
- Renovations to the Grade II listed Tipperary Pub & Whitefriars Crypt

Construction:

- Demolition of the former office block has started
- The scheme is targeting a BREEAM Excellent rating for sustainable construction and operation

Sustainability:

- The project will use offsite manufacturing, including prefabricated bathroom pods and green biodiverse roofs

The Challenge

McAleer & Rushe faced a challenge to monitor air quality around the development as the City of London's Environmental Health Office and Pollution Control requires construction projects to implement air quality controls on new sites. Developers must adhere to guidelines outlined in the City's Air Quality Supplementary Planning Document (SPD), which provides detailed instructions to minimise emissions during construction and demolition activities.

Air quality impacts all local business and residential properties, and is a major issue for people in the area of construction works, in particular. The council sets specific requirements for developers to measure and monitor air quality to achieve optimal outcomes.

By implementing an air quality solution, McAleer & Rushe aimed to provide assurance that the construction process stays within the required thresholds and design parameters.

The Solution

The solution implemented at the Fleet Street development was the Zephyr air quality monitor from EarthSense, installed and commissioned on-site by Datum Monitoring Ireland Ltd.

The Zephyrs provide continuous monitoring

The monitoring process has been highly successful in achieving its objectives, and continues to serve as a reliable source of data and confidence for the contractor throughout the working day.

Outcomes

of air quality 24/7 with data presented to the Datum presentation suite. Daily/weekly reports are sent via email and alerts are activated in the event of a threshold breach.

Long Term Benefits

During the construction process, which involves multiple services operating simultaneously, real-time monitoring allows for a proactive approach to mitigating potential disturbances. Noise, vibration, air quality and structural stability can all be tracked to ensure that project activities remain within acceptable limits.

This data-driven approach enables teams to validate whether initial expectations for minimising disruption to nearby communities, businesses and infrastructure are being met. If discrepancies arise, adjustments can be made in real-time, improving operational effectiveness and regulatory compliance.

Beyond the current site, the insights gained from this strategy provide a replicable model for future projects. As data patterns emerge and best practices are refined, these monitoring techniques can be standardised across other locations. The ability to predict and control environmental impacts with greater accuracy supports long-term sustainability goals, strengthens stakeholder confidence and demonstrates a commitment to responsible construction practices.

Quotes

Riordan O'Sullivan, Project Manager, McAleer & Rushe

Working with Dominus Real Estate on the 65 Fleet Street development has been a rewarding experience.

The integration of the EarthSense Zephyr monitors has proven highly effective, delivering accurate and reliable data around the clock. LDG Datum's real-time alerts and automated reporting have allowed our project team to respond quickly and confidently to any potential exceedances, ensuring continuous compliance with the City of London's environmental requirements.

The collaboration between all stakeholders has been seamless, and the air quality monitoring strategy is already proving to be a valuable asset—not only for meeting planning obligations but also in promoting a safer, more sustainable working environment. This project sets a strong precedent for the environmental monitoring standards of future developments across the city.

The Future

The current site is meeting its obligations as outlined by the council and planning agreement. However, the growing emphasis on air quality monitoring highlights its importance, not only for protecting neighbouring properties but also for ensuring the health and safety of workers on-site.