



## Sovereign Court

**Client:** St George Property Developers

### Background

Sovereign Court is an exclusive residential development in West London comprising of five separate apartment blocks. Constructed in two separate phases, the project involves extensive demolition, piling and basement excavation works. The scheme borders the District line and therefore presented a risk to existing LU assets.

Due to our extensive experience of monitoring works on LU infrastructure, PC Monitoring was commissioned to provide a structural and track movement monitoring system to meet LU asset protection requirements.

### Approach

It was understood that the monitoring system would be required to meet strict LU standards and measurement parameters.

The management of the project was a core consideration, as Plowman Craven was able to work directly with LU to provide the necessary documents and permits required to access, install and monitor the scheme.

The system encompassed track prisms mounted along both running rails to allow the core parameters of cant, twist and displacement to be recorded. This was supplemented by wall-mounted prisms on the parapet and retaining walls adjoining the track.

The monitoring prisms were recorded using high accuracy Total Stations, the results being checked against pre-established alarm criteria levels. The manual monitoring approach allowed the alternation of survey frequencies to meet the effects of ground movement, changes in the construction programme and LU/client requirements.

### Instrumentation and Services:

- 3D Track Prisms
- 3D Structural Prisms
- Precise Levels



### About PC Monitoring

PC Monitoring provides manual and automated monitoring to the construction industry. With a forward-thinking and progressive approach, we deliver expert advice and practical benefits to clients requiring complete and seamless monitoring solutions.

Our construction monitoring services are also fully integrated with PC Enviro, Plowman Craven's environmental monitoring division for centralised installation, management and delivery of a complete package.

#### PC Monitoring

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