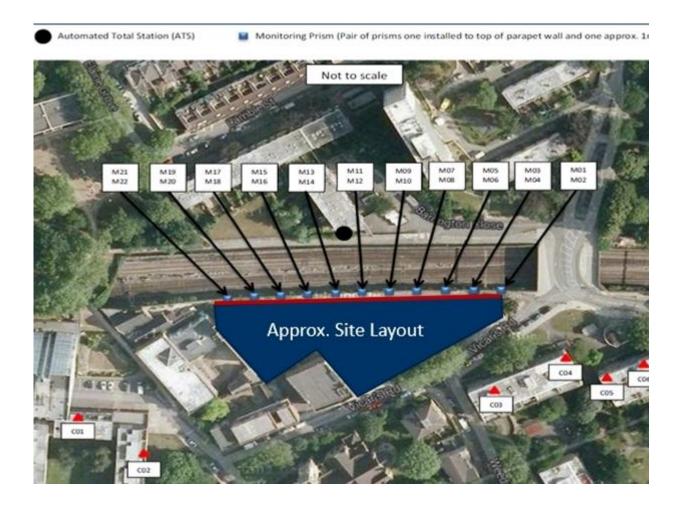


## **Network Rail Retaining Wall Monitoring**

London

The construction of a residential apartment block next to Gospel Oak Station, London, led to the need for a retaining wall at the station to be monitored.



# The project

GEO-Instruments were required to establish if any movement or damage would occur to the retaining wall while Keller carried out piling works directly behind the wall and, at a later stage, during the construction of the residential building.

# The challenge

The main challenge was to ensure the smooth operation of Network Rail asset while the monitoring equipment was installed on a private property away from the construction site. There was also the issue of locating prisms on the retaining wall where they could be seen and communicating wirelessly with a PC based on site in near real time.

### The solution

An Automated Total Station Monitoring System was installed and during the initial phase of the monitoring period the communication equipment was relying on a GPRS mobile network that later on became unstable. The system was promptly redesigned to operate on radio equipment which allowed monitoring to continue without stopping the operations.

### **Project facts**

Owner(s)

Network Rail

**Keller business unit(s)** 

**GEO-Instruments** 

Main contractor(s)

Keller

**Services** 

Automated monitoring

**Markets** 

Rail Monitoring Building Monitoring

**Technologies** 

Automated Total Stations (ATS)

#### **Email address**

enquiries.uk@geo-instruments.co.uk

**Phone number** 

+44 (0)207 709 2030