

## British Museum LONDON - UK

### Noise and vibration monitoring of the British museum during piling works

The British Museum North West Development Project requires noise and vibration levels to be controlled and managed in order to protect the museum's artefacts and maintain acceptable levels of noise and vibration at the residential and commercial properties in close proximity, especially during piling works.

SolData was appointed the noise and vibration monitoring of this sensitive heritage building, which consisted in:

- Vibration trial measurements in order to determine the propagation of vibration on site;
- Noise impact assessment in order to assess the impact of the construction activities and identify the sensitive receptors;
- Noise and vibration monitoring in order to verify the compliance with requirements;
- Installation of a video camera and noise monitoring systems.

For the vibration monitoring, SolData provided and installed 2 vibration monitoring units (one mobile and one semi permanent) in appropriate locations adjacent to the piling rigs and the Museum.

For the noise monitoring, SolData provided and installed 1 permanent noise monitoring unit. The microphone is installed with the video cameras on a pole and the box inside the site office of Bachy.

2 video cameras were also installed.

All the data collected from these various devices are stored, presented and managed in Geoscope, SolData's data monitoring and management system. In this case, the full web version of this software is used, enabling the access to the measured data from any computer via the Internet.



<b>OWNER :</b>	BRITISH MUSEUM
<b>MAIN CONTRACTOR :</b>	MACE
<b>TRADE CONTRACTOR :</b>	BACHY
<b>PROJECT DURATION :</b>	APRIL – AUGUST 2011
<b>SCOPE OF WORKS :</b>	
<ul style="list-style-type: none"> <li>• Monitoring of sensitive, heritage buildings</li> <li>• 2 vibration monitoring units</li> <li>• 1 noise monitoring unit</li> <li>• 2 video cameras</li> <li>• 'Real-time' monitoring and instant client access to data via Geoscope.</li> <li>• Text message, email alarms.</li> <li>• Remote archiving of all data on secure servers.</li> </ul>	