

GROUND INVESTIGATION – NT EAST

HONG KONG - CHINA

Real-time slope monitoring by in-place inclinometers and vibrating wire piezometers, with a GPRS data transmission system

SolData installs in-place inclinometers and vibrating-wire piezometers to perform a real-time monitoring of slopes.

2 uniaxial in-place inclinometers, 8 bi-axial in-place Inclinometers and 3 vibrating-wire piezometers were installed. A CR10x was used as the datalogger for each instrument. GPRS modems were connected to the CR10x for real time data transmission.

The Civil Engineering and Development Department (CEDD), and the HK government department, pay much attention to this project as the landslide risks have to be alerted and controlled with the aim to safeguard public safety.

The slope being monitored is located at a remote area where access is difficult. Therefore, an automatic, reliable and long-lasting system is required to reduce the frequent visits for maintenance.

Solar panels were used to charge the battery in the day time, so that battery replacement was not required.



CLIENT:	CEDD
CONTRACTOR :	DRILTECH GROUND ENGINEERING LTD
DATE OF WORKS :	AUG 2006 – JAN 2008
WORKS CARRIED OUT :	
- Set up and use of Geoscope Web for data acquisition and visualisation	
- GPRS modem for data transmission	
- 191 sensors and 12 datalogger systems for slope monitoring installed	
- Over 4 500 data transferring every day	