

Keller gets to work in Brisbane

■ USEXPLORATION LINK-UP

USExploration Equipment has partnered geotechnical engineering specialist Testech on a large public works project starting in Indianapolis, US. The scheme aims to improve infrastructure for storm and wastewater control in the areas. Testech has drilled a number of deep boreholes with 6 1/4 in ID and 4 1/4 in ID heavy-duty hollow-stem augers. They were cased down to the bedrock, with HQ-3 series coring equipment used to recover overburden and rock samples. The boreholes were Packer tested, as required by the client.

■ ROYAL OLDHAM FACELIFT

Integrated Health Projects (IHP), a joint venture between Vinci Construction UK and Sir Robert McAlpine, has been awarded a £32.8 million contract to build phase 3 of a new development at The Royal Oldham Hospital in Manchester, UK, which will have a super centre for women and children. It includes the construction of a new four-storey building and represents the largest capital investment made by the Pennine Acute Hospitals NHS Trust. This will be the fourth project that IHP has undertaken for the client.

■ VINCI WINS ECO-OFFICE JOB

Vinci Construction UK has been selected by Veolia's development partner, Opus Land, to build an environmentally friendly turnkey office building for Veolia Environmental Services at the Kingswood Lakeside site in Cannock, Staffordshire, UK. Once complete, the three-storey facility will extend over 3,716m². Planning was applied for in December 2009. The new offices are set to be finished by summer 2011.

■ BOLSTERING HUME DAM

A Bauer BG40 drill rig has been imported from Germany to work at the Hume Dam project on the Victoria-NSW border, Australia. The contractor, Advanced Foundation Solutions, bought the rig in July, and it has now been assembled and tested. The rig will be used to install improved drainage systems before the second phase of work begins to strengthen the southern training wall where the Victorian embankment meets the concrete spillway. The A\$60 million, five-year project is designed to improve the dam's capacity to withstand extreme floods and earthquakes. Work is progressing well. A smaller rig has been carrying out the initial drilling works since June.

THE Australian division of leading contractor Keller Group has been undertaking a series of works as part of the Brisbane Airport Link project.

A 6.7km-long, underground toll road is being built that will link the Clem 7 Tunnel, Inner City Bypass and local road network at Bowen Hills and the northern arterials of Gympie Road and Stafford Road at Kedron, Sandgate Road and the East West Arterial leading to the airport.

The Link will comprise two tunnels (one north- and one southbound), approximately 20m apart and up to 50m below Windsor and Kedron, and 35m below Kedron and Clayfield.

There will be three lanes of traffic each way between Bowen Hills and Kedron, and two lanes between Kedron and Toombul/Clayfield.

The Link is expected to be opened in 2012, and cater for 95,000 motorists a day, rising to 120,000 by 2026.

Keller has employed a number of Hutte 609 drill rigs, supplied by Casagrande, to help stabilise the ground under a railway embankment for the construction of a 42m-wide box. The rigs are installing a combination of steel structural and fibre-glass reinforced manchette tubes to support the



layers of sand, gravel and soft clays, which are interspaced with stiff clays and siltstone. The tubes, which are up to 60m long, will also allow for post-fracture permeation grouting.

A total of over 23,000m of horizontal drilling will be carried out over the duration of the contract within a 1% accuracy window.

Bauer installs ductile piles for local housing project in Luanda

BAUER Angola has been appointed to install the piled foundations for 24 new buildings at the Nova Vida (New Life) Housing Development in Luanda, Angola.

Sponsored by the Angolan Government, it is the largest building project ever undertaken in the region and aims to provide better housing for the local population.

Each residential block is founded on 172 ductile piles, which are capped by reinforced-concrete strip footings. These piles consist of ductile, cast-iron pipes, which are driven into the ground using a high-frequency impact



hammer and subsequently filled with concrete.

Bauer recommended the use of the system to the main contractor, Chinese company Jiangsu.

Each pile has been designed for a working load of 40t. A static pile-load test, carried out on site, established an ultimate load of 110t, which is an excellent result.

Installation of the piles, totalling 33,000 linear metres, is being carried out with a Bauer MGB 12 drill rig, fitted with a hydraulic impact hammer and adapter. The site crew consists of two teams – one for driving and one for filling the piles with concrete.

As construction has advanced, progress has increased progressively, and completion of the project is likely to be earlier than the March 2011 deadline originally envisaged.

