

EXCITEMENT had been building up in Malaysian construction company Gamuda Bhd for the past few weeks.

This was because a significant milestone for its very high-profile RM1.9bil Stormwater Management and Road Tunnel (Smart) project which it shares in a 50:50 joint-venture with MMC Corporation Bhd was fast approaching.

That much-awaited day came on the evening of April 22 when the tunnel boring machine (TBM) named “Gemilang” emerged just beside the lake near Taman Desa in the southern part of Kuala Lumpur after burrowing beneath parts of the busy Kuala Lumpur-Seremban Expressway since September 2004.

With this “breakthrough”, excavation works for the project’s 4km “south drive” tunnel was complete.

Although there is still another 25% of the total project to be completed, including finishing the excavation of the “north drive” tunnel, the breakthrough was nevertheless cause to celebrate.

It is the “south drive” that has brought it worldwide fame. It is this stretch of tunnel that will perform the dual function of being a subterranean bypass for the busy Kuala Lumpur-Seremban Expressway above, as well as a stormwater diversion tunnel.

This is the first time such a con-

Breakthrough for tunnelling experts



BREAKTHROUGH: North Drive tunnel exit at the North Junction Box where the shared road and water portion meets the stormwater only portion.

—STARpic by KEVIN TAN

cept is being tried.

Within the 13m-diameter tunnel — the widest to be constructed in Malaysia — two decks have been built, each to cater for traffic flowing in one direction.

The “north drive” — meant purely for stormwater diversion — diverges from the shared portion under Jalan Cochrane and ends at the Sungai Klang inlet point near the Gleneagles Hospital at Jalan Ampang.

For Gamuda executive director Datuk Azmi Mat Nor, the sense of achievement from the breakthrough does not merely come from the fact that Malaysians will soon be able to admire such an engineering marvel in their own country.

It is the fact that Malaysia has at last joined the elite club of countries having the capability and expertise to carry out tunnelling works that makes him feel extremely satisfied.

“We have managed to do it,” he said proudly.

Azmi’s pride is somewhat modest because Smart is not exactly Gamuda’s first tunnelling job. There have been three other projects, with one located overseas.

They are the 480m Sungai Selangor Water Supply Scheme Phase Three water diversion tunnel, the two 710m Penchala Link tunnels, and the two 3.86km tunnels for the Kaohsiung Mass Rapid Transit project in Taiwan.

The total value of all four tun-

nelling jobs just crosses the RM3bil mark.

It is now busy with another tunnelling package at the new Doha International Airport in Qatar.

What Azmi finds most significant is that a pool of Malaysians with the skills, expertise and, most importantly, confidence to handle tunnelling jobs has been nurtured.

He said there were now some 60 people — from the management team to tunnel boring machine and mechanical engineers to foremen, technicians and wiremen — who can be considered specialists in the area.

The Smart project also required specially designed equipment and machinery as well as new methods in erecting concrete structures within the tunnel. It will also set new standards in Malaysia as it adopts European standards for tunnel fittings and fixtures which can withstand underwater pressure.

This is quite an achievement considering the fact that such expertise was not available locally just a couple of years ago.

“I believe this is in line with Prime Minister Datuk Seri Abdullah Ahmad Badawi’s call for the development of human capital,” he said.

Azmi said nurturing such expertise is what moving up the value chain is all about.

The April 22 breakthrough was particularly sweet because it proved beyond doubt the ability of the Malaysians.