HIGH-MULTIPLIER BENEFITS

Contractors reap MRT job benefits

Project divided into smaller packages and tendered out to small and medium firms

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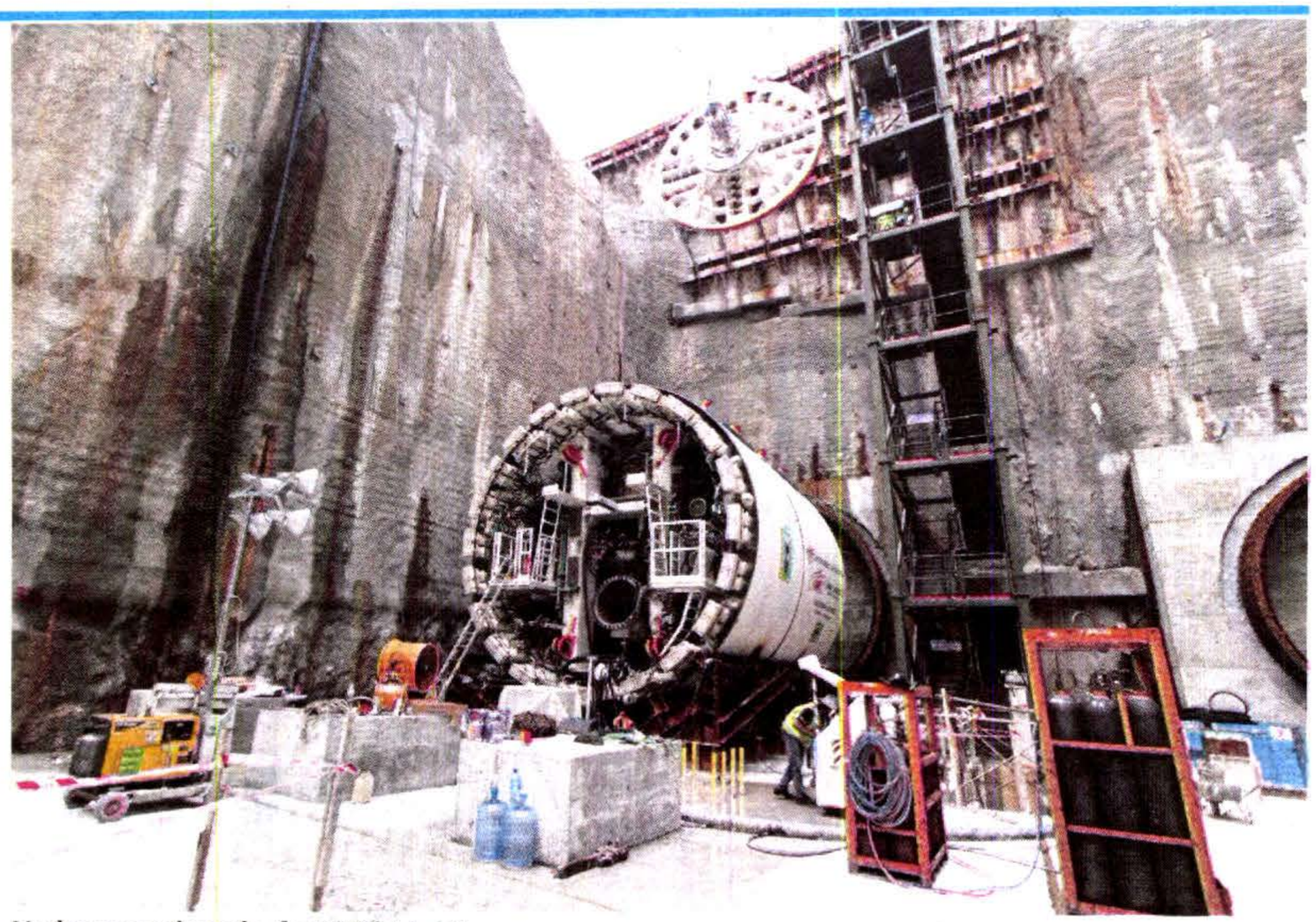


Underground works for MRT Line 1.

THE underground works for the Klang Valley Mass Rapid Transit (MRT) projects Line 1 and 2 are benefiting more than a thousand small and medium contractors, a testament of high-multiplier benefits to our economy.

In a recent interview here, Gamuda Engineering managing director Datuk Ubull Din Om noted that the bulk of the underground jobs awarded to MMC Gamuda KVMRT (T) Sdn Bhd, were divided into smaller packages and dished out to small and medium contractors.

He explained that working underground poses different risks as contractors and their staff are limited to confined space.

"Tunnelling work is a new growth area in civil engineering. The safety measures are a lot higher compared with working above the ground.

"For Line 1, the tunnelling job amounted to RM8.2 billion. With the exception of highly-specialised jobs, 633 small and medium contractors undertook underground job packages amounting to RM4.8 billion," he said.

Line 1 (also known as Sungai Buloh-Kajang line) comprises both elevated and underground portions; the latter involves tunnelling more than five basement floors deep into the heart of Kuala Lumpur's busy city centre, across the length of 9.5km.

Ubull, who has 30 years of experience in the construction industry, noted that it was vital for continued local participation in big projects in the country.

"As Malaysia's economy becomes increasingly knowledge-based, the bigger contractors facilitate the upskilling of small and medium ones. That is how we raise the standards and have the construction industry move up the value chain," he said.

Slightly over a year ago, Mass Rapid Transit Corp Sdn Bhd awarded MMC Gamuda KVMRT (T) the RM15.47 billion underground works package for the MRT Line 2 (also known as the Sungai Buloh-Serdang-Putrajaya line).

Gamuda Engineering managing director Datuk Ubull Din Om says tunnelling work is a new growth area in civil engineering.

"Line 2 is much longer — spanning 52.2km and 37 stations. Line 1 is 51km with 31 stations. In fact, the underground portion of Line 2 is also longer at 13.5km, compared with Line 1's 9.5km," said Ubull.

Under the national Construction Industry Transformation Programme, the Construction Industry Development Board encourages all contractors to use the Building Information Modelling (BIM) system for government projects.

Gamuda has been using BIM to plan and design the underground portion of the Klang Valley MRT project for the past five years. "We have now set up an academy which will train over 1,000 staff in BIM — in 3D, 4D and 5D workflows — over the next two years."

BIM is essentially usage of sophisticated computer software that involves three-dimensional (3D) imaging to plan and design buildings, which helps reduce human errors and raise overall productivity of the project.

"Based on our experience with Line 1, we have optimised our coordination between different functions in the construction supply chain through the usage of BIM. This helped to avoid costly and time-wasting rectifications when two or more elements get into each other's way at the construction site," said Ubull.

"Wherever possible, 3D engineering imaging is simulated digitally and the processes are streamlined for more efficient implementation. Creating a digital building information model allows for real-time changes without incurring significant costs."

In a separate interview, Zumatex Engineering Sdn Bhd said it was awarded the contract for gas relocation works at KL Sentral, Merdeka and Sentul West, KLCC East and Kampung Baru North in Line 2 for RM12 million.

In relocating 2km gas pipelines ranging from 50mm to 400mm in diameter, Zumatex is using the hot-tapping and line-stopping method, a highly-specialised and technically complex task that mandates strict adherence to safety measures — to prevent explosions.

"We have invested RM10 million in our equipment for gas relocation works. We have managed to move up the value chain from a company established in 2001 to where we are now in the range of a large enterprise, thanks to the MRT project," said Zumatex director Mayamas Omar.

Another mid-sized contractor Worktime Engineering was awarded the contract to relocate the existing power supply cables for KL Sentral, Pasar Seni, Merdeka and Bukit Bintang.

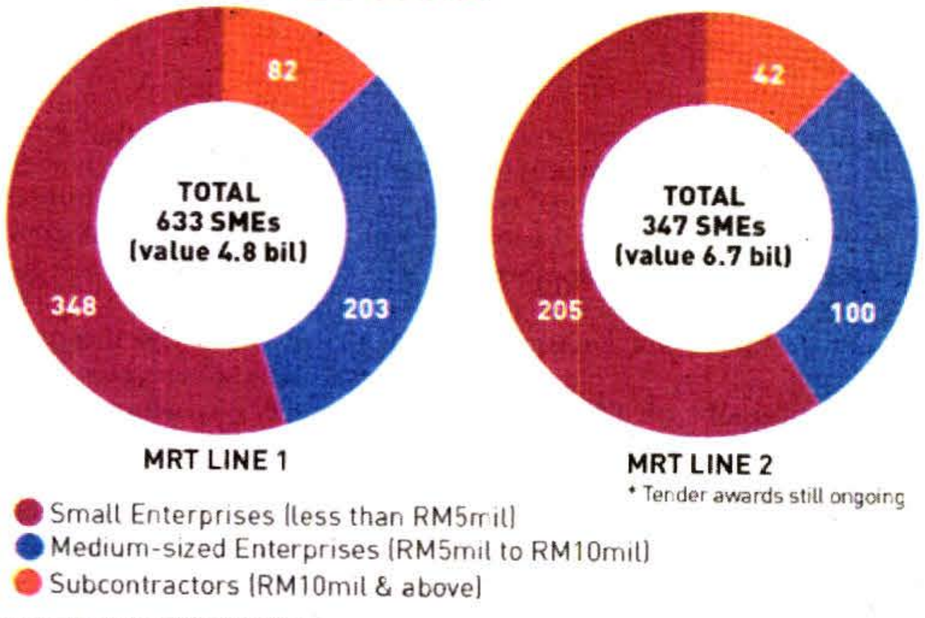
In Line 2, Worktime Engineering's contract includes power supply cables laying works for tunnelling operation from Hospital Kuala Lumpur to Titiwangsa, and relocation of existing power supply cables in Hospital Kuala Lumpur and Kampung Baru North for RM11 million.

Worktime Engineering is laying 20km of high-voltage cables ranging between 132kVA and 275kVA to support the operation of four Tunnel Boring Machines and surface plants.

Its director Affendy Arifin noted with pride that his company's participation in the MRT project has brought about much innovation among his staff.

"Being involved in relocation works of power supply cables is a fortunate opportunity to be a part of this national project. We're able to improve on our technology and knowledge that directly moves us ahead of competition in the long run".

UNDERGROUND WORKS ON MRT LINE SUPPLY CHAIN



Source: MMC Gamuda Q1 2017

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