

International award for SMART

Recognition given by British construction industry

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THE Stormwater Management and Road Tunnel (SMART) clinched the International award category in the prestigious British Construction Industry award, given out to any British-based projects from around the world, on Oct 8.

"The selection process was a grueling one and we were one of the 183 projects shortlisted for excellence in innovation and engineering," said general manager (tunnel division) of Gamuda Engineering Sdn Bhd, Yeoh Hin Kok.

The project is a joint venture between Gamuda and MMC corporation. For Gamuda, the win was nothing short of a surprise.

"We were contending in the International category with five other competitors like the Beijing Terminal three, retail towers in Tokyo and the transportation hub in Amsterdam," Yeoh added.

He said that the selection process involved a presentation from their side as well as a site visit by the panel of judges.

"They have to look into all the aspects of the construction like how the project satisfies the client as well as its contribution to the community," he said.

He added that apart from looking at the safety aspects of the tunnel, the panel was intrigued by the idea of a dual purpose tunnel that has traffic as well as water passing through.

"I'm proud to say that the idea came from Gamuda but making that idea into reality, into something workable, was a challenge," he said.

The tunnel has a 9.7km stormwater tunnel and a 3km motorway tunnel and it is equipped with lighting as well as close circuit cameras.

The Smart Tunnel has three flood modes, 'no storm' and the 'yearly storm' which allows cars to pass through the first and second deck and the 'major storm' that is closed for vehicles so flood waters can pass through all three decks.

Every inch and detail of the tunnel had to be made to endure the pressure of the water when it is released into



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the tunnel to alleviate the flood problems in Kuala Lumpur during a storm.

"We had to ensure that the equipment can handle the surge of pressure from the water or we will have to fish for the equipment after the stormwater management is over," he said.

The three-tier tunnel had to be dug through a karstic limestone with a high water table using the tunnel boring machine (TBM).

The TBM is an innovative factory of its own that weighs 25 jumbo jets and is four storeys high.

"We had two of these machines and we were very ambitious to actually run one of it on our own and we found that ours produced better results," said the elated engineer Yeoh.

To top the achievements by Malaysia,

the building of the tunnel also used the mechanised haunched formwork which was Yeoh's brainchild.

"We have achieved so many things while building this tunnel, now we can venture out to help other countries as well," he said.

According to the agreement between Gamuda and the government, each time the tunnel is closed for flood management, they should reopen after four days.

"However, we have managed to reopen the tunnel within a day and a half so that the motorists will not be stranded in traffic jams," Yeoh added.

The Smart Tunnel has been closed for the storm nearly 10 times and each time it has helped alleviate flood woes in Kuala Lumpur.