Smart works as it should

WE refer to "Far better drainage needed, especially for urban areas" (*Sunday Star*, Oct 21) and are disappointed with the prevailing confusion in linking the inadequacies of the current Greater Kuala Lumpur/Klang Valley drainage system with the functionality of the Stormwater Management and Road Tunnel (Smart).

The commentary underlined the ironic sentiment that even highly urbanised dwellings, such as Kuala Lumpur, still need to grapple with the onslaught of seasonal downpours, despite having encountered such problem for many years.

Since Smart first opened to the public in 2007, its stormwater bypass tunnel has been utilised 236 times, equivalent to an average of 40 times a year, or three times a month.

According to a study by the Department of Irrigation and Drainage, Smart has since averted potential flood disasters amounting to an estimated RM500mil.

Notwithstanding the many successes of Smart, the public needs to understand that it is not a one-all solution for all the floods in Kuala Lumpur.

It was designed to address floods afflicting potential areas in Kuala Lumpur central business district, Masjid Jamek, Leboh Ampang, Jalan Melaka, Dataran Merdeka, Dang Wangi, Leboh Pasar, Pasar Seni, Dayabumi, Sungei Wang, Bukit Bintang, KLCC and Pavilion – due to bursting of the river banks in the catchment area of the Klang River basin, particularly at the confluence with the Gombak River.

As a dual-purpose tunnel, Smart is also conceptualised to provide an alternative and faster highway route in and out of the capital's city centre.

To this end, Smart has performed well above expectation.

With a four-mode operating system, the conversion of Smart into a flood relief system depends on the water intensity at the confluence of the Klang River/Ampang River, located upstream near Kampung Berembang in Ampang.

The water flow and velocity at the confluence is measured in cubic metres per second (cumec). If the cumec reading is less than 70, Smart operates only as a motorway tunnel under Mode 1.

If the reading goes above 70 but less than 150, it will operate in Mode 2, as an underground highway, where the lower culvert will be opened to channel excess floodwater from the holding pond in Kampung Berembang to the storage reservoir in Taman Desa, to be subsequently released to the Kerayong River in a regulated manner.

If water levels rises above 150 cumec, Smart will immediately enter Mode 3 and issue a notice of evacuation of the motorway tunnel within one hour, after which the motorway will be closed to public.

The closure is necessary to allow time to prepare the tunnel, in anticipation of it being filled with surplus stormwater to avoid flooding in critical stretches of Kuala Lumpur.

Should inundation persist, Smart will run into Mode 4, where the floodgate will open to allow unfavourably excessive floodwater to be diverted through the motorway tunnel.

The shutting of the motorway tunnel potentially saves Kuala Lumpur from floods – as Smart is designed to.

Since the past month, the Smart team has been on high alert and has doubled its manpower for tunnel patrol and river monitoring at the Stormwater Control Centre in Kampung Berembang, in view of the possible rise in water levels.

Thanks to the Government's commitment to mitigate floods in the Klang Valley, local residents are indeed fortunate to have Smart as the one and only dual-function system in the world to help alleviate our seasonal monsoon dilemma.

Smart's innovative engineering is now being studied and emulated as a solution for floods in highly-developed metropolises such as Bangkok and Singapore.

The public is encouraged to check the latest Smart tunnel updates at *http://smarttunnel.com.my* and direct enquiries and feedback to the Smart Helpline at 1300-88-7188.

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