



Ground conditions in the KL city centre are a volatile mix of granite, karstic limestone and Kenny Hill formation. If not managed properly in planning and during construction, ground movements or sinkhole occurrences could bring dire consequences to lives and properties.



Ten tunnel boring machines are now mining concurrently, with two more to be deployed by the third quarter of this year. Tunnelling work is at a painstaking pace of 7m per day.



The sun sets over MRT Sri Damansara West station, where track and signalling works will be in full swing in the next few months.



Beneath the hustle and bustle of the city, tunnel boring machines are in operation. Each 12-hour shift requires about 50 personnel working around the clock on mining, maintenance, pipe extensions, segment erection and grouting.



The intervention shaft, which required excavation using controlled blasting to mine shafts which go down as deep as 60m. An access point for tunnel maintenance, there are three escape and ventilation shafts each along the MRT2 alignment.

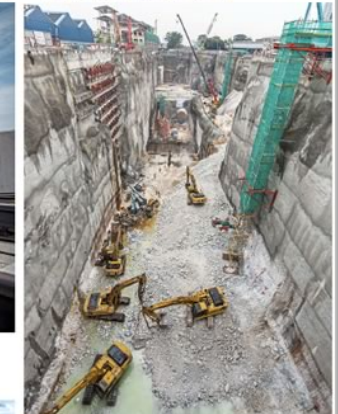
# WORK IN PROGRESS

THE MRT Sungai Buloh-Serdang-Putrajaya (SSP) Line, also known as MRT2, is seeing steady progress as it heads for timely completion. As part of the Klang Valley Mass Rapid Transit (KVMRT) network, the SSP Line is expected to serve a two million-catchment population, with full operation to begin by July 2022. Currently being built by MMC-Gamuda Joint Venture (MGJV) as the turnkey contractor, the SSP alignment spans a distance of 52.2km and 36 stations – of which 11 are underground stations covering 13.5km. Progress of the underground works for the SSP Line stands at 54.95% as at end May, with all 10 stations currently being constructed at variable depths between 20m

and 40m below ground," said Gamuda Engineering Sdn Bhd managing director Datuk Ubull Din Om. "Despite the complexity of underground works in the highly volatile ground conditions of KL city centre, we have overcome these challenges by leveraging our experience and expertise. We will deliver the project on schedule." Ubull said 10 tunnel boring machines are now mining concurrently, with two more to be deployed by the third quarter of this year, to ensure that the mid-2020 completion date target is met. Prior to the MRT2 Line, MGJV constructed the 9.5km-long Stormwater Management and Traffic Tunnel (SMART) and the MRT Sungai Buloh-Kajang Line (MRT1).



There are thousands of workers involved in the MRT SSP Line project, including in planning, civil and structural works, system works, testing and commissioning, traffic management, safety management, public relations and stakeholder management among others.



The 13.5km underground portion of the SSP Line cuts across complex geological conditions comprising karstic limestone. The SSP tunnels traverse seven actual and inferred geological fault lines, which present an additional set of problems.



The MRT Damansara Damai station is currently undergoing architectural and system works fit out for station structures, including entrances, link bridges, an access road and walkway.



The 67ha Serdang Depot which can house 32 trains will receive its first train in 2020. A section of the depot has already undergone system track works.



The SSP Line has a total of 49 trains. Instead of stainless steel, the car bodies are made of aluminium.