## 500 metres of Metro-3 tunnelling complete; sixth machine arrives

AT AZAD MAIDAN 'Vaitarna-2' is set to bore a 4.5 kilometre tunnel between CST and Mumbai Central

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MUMBAI: With the Mumbai Metro Rail Corporation (MMRC) initiating operations of the sixth tunnel boring machine (TBM) on Wednesday at Azad Maidan, the city has now crossed more than 500 meters of boring.

The sixth TBM, named Vaitarna-2, will bore a 4.5 kilometre tunnel between Chhatrapati Shivaji Terminus (CST) and Mumbai Central. Vaitarna-1 has already completed 132 meters of boring between Azad Maidan and Mumbai Central.

The first TBM, Krishna-1, was launched at Nayanagar shaft in November 2017 and has also completed 132 metres of boring. It will be used to bore a 2.5-kilometre tunnel between Naya Nagar and Dadar metro station. The second TBM, Krishna-2, is boring a parallel tunnel.

The MMRC will also begin tunneling from the Science Museum to Worli, and is currently in the process of shifting a TBM from the port to a site near the Siddhivinayak temple.

Ashwini Bhide, managing director, MMRC, said, "The project is on track and we are expecting to complete the tunneling work by June 2021."

The city has already received 11 machines, of which six are in its initial drive and one in its main drive. The TBMs at Azad Maidan, Naya Nagar, and Pali ground, Marol are preparing for their main drives. The rest of the TBMs are expected to arrive in the city by the end of May.



"When we lower the machine inparts, we start the initial drive. Once it is lowered completely, it is called the main drive," Bhide explained.

Phase 1 of the city's first underground metro corridor - Metro-3's (Colaba-Bandra-Seepz) - is expected to be operational by December 2021. The corridor is a 33.5-kilometre underground line that will connect the island city to the western suburbs via 27 stations. On Wednesday, the MMRC awarded two contracts for the

corridor's electrical work to Larsen & Toubro Limited and a consortium of Alstom Transport India Ltd & Alstom Transport S.A.