

1 more Metro tunnel digger on way, work begins in Nov

Swapnil Rawal

swapnil.rawal@hindustantimes.com

MUMBAI: The tunnelling work for a 4.5km section between Azad Maidan and Grant Road of the Colaba-Bandra-SEEPZ Metro-3 underground corridor will commence by early November.

The tunnel boring machine (TBM) for the section has been shipped from China and would be arriving in Mumbai next week, Mumbai Metro Rail Corporation officials (MMRC) said.

The tunneling work for package 2 of the project will start from the Azad Maidan launching shaft. The TBM for the section will arrive in this week and the work there is expected to start by early November," said SK Gupta, director (projects), MMRC.

This will be the second TBM being brought for the Metro-3 work. Last week, the MMRC received its first TBM from China, and the machine will be used for boring a 6.10km tunnel between Dharavi and Siddhivinyak Metro station. In all, 17 TBMs will be deployed at 11 launching sites across the 33.5km alignment between October and February next year.

Several old and dilapidated structures dot the proposed alignment of the section along with heritage structures. Last month, Hindustan Times reported that the structural health of some buildings in the Girgaum-Kalbadevi area has not been found to be satisfactory in a detailed survey. A pre-construction building condition survey revealed that few of the buildings in the area fall under 'severe' category of damage

17 BORING MACHINES WILL BE USED FOR THE TUNNEL



The heavily-mechanised Tunnel Boring Machine (TBM), which weighs around 700-800 tonnes, will be transported to the launching site in different pieces.

It is divided in parts — front shield, middle shield, cutter head, erector, screw conveyor and tail-skin shield

17 TBMs will be deployed for tunnelling. The twin tunnels between stations will have a diameter of 5.8 m each.

A total of 51 km of tunnelling will be carried out for this project. For this, about 2.8 lakh tunnel segments will be erected.



degree, while some others fall under 'moderate' category.

The residents of these buildings are a worried lot and fear that tunnelling could lead to collapse of their buildings. However, Gupta dismissed these fears and said, "This is the fear of the unknown. These are unfounded fears; I would like to assure people that they should not have any such worries. The MMRC will take precaution while carrying tunnelling activities," Gupta assured.

Apart from south Mumbai,

the tunnelling work at Vidyana-gari (Kalina, Santacruz east) will start by in November followed by Pali ground at Andheri east in November and Cuffe Parade sometime in February.

TBMs are highly-mechanised Earth Pressure Balance device that will grind earth around 20-25 meters below the surface to construct twin tunnels with circular cross section. The TBMs are divided in various parts and it takes around 45 days to be lowered and assembled at the launching shafts.