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Metro rail tunnel linking north Chennai complete

Job Finished Five Months Prior To Deadline

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Chennai: One of the two tunnels for the underground section of Chennai Metro Rail's phase-1 extension project connecting North Chennai will be completed on Sunday. It will be the fastest tunnel built in the city as it will complete almost five months ahead of the deadline.

The 1.82km underground line is part of the 9km extension project from Washermenpet to Wimco Nagar, which is expected to be operational in 2019.

Officials said that the tunnel for the downline will be completed on Sunday while the tunnel for the upline is expected to be completed by mid October 2017.

"The deadline for tunnelling in the project is February 2018. But we have completed tunnel boring close to five months ahead of the deadline. It is the fastest underground tunnelling we have completed for Chennai Metro Rail project," said an official from Afcons, the infrastructure company involved in the tunnelling.

The company is also building tunnels for CMRL in phase-1 of the project.

Construction for the 1.82km underground stretch was launched in July 2016 by former chief minister J Jayalalithaa, a month after Centre approved the project estimated to cost ₹3,770 crore.

LIGHT AT THE END OF THE TUNNEL



Underground line

- Phase-1 extension
- Total distance | **9.05 km**
- Washermenpet to Wimco Nagar
- Total number of stations | **8**
- Cost | **₹3,770 cr**
- Deadline | **2019**



The underground line will be connected by two stations - Theagaraya College and Korukkupet beyond which metro trains will run on an elevated corridor.

Officials said they were able to build tunnels in North Chennai in a record time, as they had a favourable soil condition.

A geo-technical report released in 2016 following a soil test conducted along the alignment showed the soil conditions mostly consisted of three types - silty sand, clay or fine sand. "The soil was mostly clay which was favourable for tunnelling," an official said.

Explaining the tunnelling process, an official involved in the project said the

tunnel boring machine placed the first ring, which will serve as the tunnel's exterior wall, in Washermenpet on April 6, 2017.

As the cutter head of the tunnel boring machine drills through the soil, a part of the machine automatically installs curved concrete panels against the circular excavated soil to build the tunnels. On an average, the boring machines were able to install 7.6 rings a day.

"It was the highest compared to other tunnelling stretches we have completed in the city where we were able to install 2.1 rings a day," an official explained. "On September 24, we will be installing 1298th ring, which is the last one in the stretch."