

CHENNAI METRO RAIL LIMITED  
CHENNAI -107

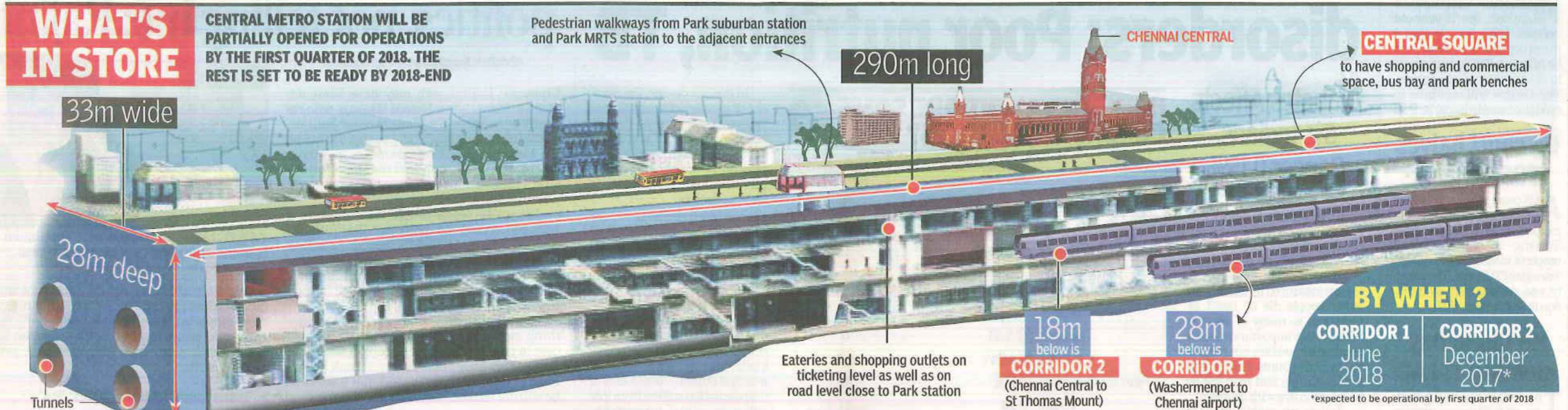
PUBLIC RELATIONS DIVISION

Name of the Newspaper: The Times of India Date: 2/10/18

Transit Hub, Connecting Corridors With Central Metro Station, Will Be One Of The Largest Underground Facilities In Country

# Metro Central to be city's new year gift

Illustration: Shinod Akkaraparambil



**WHAT'S IN STORE**

**CENTRAL METRO STATION WILL BE PARTIALLY OPENED FOR OPERATIONS BY THE FIRST QUARTER OF 2018. THE REST IS SET TO BE READY BY 2018-END**

Pedestrian walkways from Park suburban station and Park MRTS station to the adjacent entrances

U.Tejonmayam@timesgroup.com

**A**way from the hustle and bustle of Poonamallee High Road and deep in the silence of the earth, one of the largest underground metro stations in the country, Central metro station, is taking shape.

With a majority of the work complete, Chennai Metro Rail Ltd (CMRL) is gearing up to open by the first quarter of 2018 a part of the station that will connect Central metro station and the airport via Nehru Park.

The rest of the station is expected to be ready by 2018-end, almost seven years after construction began.

"We have completed track and signal work on the upper deck. We will invite the commissioner of railway safety for inspection in a month's time," a senior CMRL official said.

Central metro station, which will be an underground transit hub with facilities for easy commuter access and travel, will connect both corridors —

Central to St Thomas Mount and Washermenpet to Chennai airport of the 45km phase-1 project. Afcons, the infrastructure company which is building the tunnels for phase-1, is also building the station. With three decks, the 390m-long, 33m-wide and 28m-deep Central metro station will be one of the largest underground transport structures in the country. Hauz Khas in New Delhi is one of the deepest stations, at 29m, and has six decks; Majestic metro station in Bengaluru is one of the largest, built across 48,000sqm.

Being a transit hub, the station will have several facilities that are not present at other underground stations in the city. Commuters can walk down the station's entry/exit points on either side of the road to the top deck of the station which will be the ticketing or concourse level. The entrance will link two levels instead of one built in other underground stations. Commuters heading to the station by car or bike can get into the station through one of the entry

points and head to an underground parking lot before walking to the ticketing level.

The second and the third decks of the station will be the platform levels for the two corridors of phase-1. While the second or upper deck will connect Central and St Thomas Mount (corridor 2), the third or lower deck will connect Washermenpet and the airport (corridor 1). Pedestrians on the arterial road will also find it easy to cross the busy road as the station will be opened along with two new subways that will facilitate easy access to either side of the road.

The station will also have several other features for train operations like a siding line, where trains can begin operations for the day and chug to the main line in both directions and in both the corridors simultaneously. Like the Shenoy Nagar underground station, Central metro station too will have

## FACILITY, BY PARTS

<b>5 ENTRY/EXIT POINTS</b> Park station, Moore Market Complex, Central station, government hospital and Ripon Buildings	<b>3 DECKS</b> concourse, upper track and lower track	<b>2 CORRIDORS</b> meet at this interchange station	<b>2 SCISSOR CROSSOVERS</b> at two ends of the station at the lower track level for trains to move from one track to another during emergencies
<b>1 CROSSOVER</b> at the right end of the station in the upper track level	<b>FOUR SUBWAYS</b> with solar panels on the roof, escalators and elevators (Park to MMC, Buckingham Canal to Central station, Central station to Government Hospital, Flower Bazaar Road to GH)	<b>SIX-DECK PARKING SPACE</b> on either side of station	

**15,000 & 12,000 passengers expected to board and alight per day by 2026**

**“ WE HAVE COMPLETED TRACK AND SIGNAL WORK ON THE UPPER DECK. WE WILL INVITE THE COMMISSIONER OF RAILWAY SAFETY FOR INSPECTION IN A MONTH'S TIME ” SENIOR OFFICIAL | CHENNAI METRO RAIL LTD**



crossover lines where trains can cross tracks in an emergency on either deck. "Around 70% of the work is complete. We will hand over the entire station to CMRL next year," an Afcon official said. The construction posed a challenge from the time work to build the station began. Extreme variation in the soil strata, excavation under several heritage structures, multi-storied buildings with shallow foundation, railway tracks and Buckingham Canal slowed

down construction. There was a thick layer of rock, under a layer of loose soil below the road level, which had to be cut and covered with curved concrete slabs that formed the rings of the tunnels. The concourse level was built around a different type of loose soil, while the upper and lower decks were built on rocks. The mixed soil strata drastically reduced the average speed of tunnel boring on the stretch.

"We drilled an average of 2.5m/day against the usual 8m-10m/day. At the extension project in north Chennai, we are drilling at a speed of 11m a day," a CMRL official said.

"There were frequent damages to the cutters in the cutter head of the tunnel boring machines as we were drilling through rocks," an Afcons official added.

At one point, engineers took more than six months to excavate a 300m stretch between Rajiv Gandhi Government General Hospital and Chennai Central due to rocky soil condition. Engineers did not apply more pressure while drilling through the rocks as it would have affected the weak structures as well as heritage buildings on the road.

"We conducted extensive soil investigation and carried out soil stabilising methods in advance along the tunnel alignment ahead of the boring machine as a precautionary measure against damages on and under the road surface," an official said.