

Metro-III redesigns underground stn to save 100-yr-old tree

ManthanK.Mehta
@timesgroup.com

Mumbai: A metro station at the domestic airport terminal has been redesigned to save almost 50 trees, including a 100-year banyan tree. The station, with a length of 196m, is probably the shortest for an 8-coach metro train.

Mumbai Metro Rail Corporation (MMRC), which is executing the Metro III underground corridor, had got the tree authority's approval for transplantation of 112 trees. But MMRC officials decided to save the trees by changing the design though preliminary work had begun.

The banyan tree has a girth of 40ft and is almost 20m tall. An official said, "The tree is a sanctuary for birds. We have been taking care by watering it and providing nutrients to the soil. Project director S K Gupta and MD Ashwini Bhide told us to do all we could to save the tree."

He said, "The lowest level at the which the branch falls is 5m. Hence, the contractor, J Kumar, made use of a micro-tunnelling technique with the boom having a height of 6m. In conventional technology, the height of the boom is 12m, which can damage the tree branches. Also, the diameter of the secant piles was restricted to 350mm, instead of 800mm, so that it does not damage the tree's roots."



There will be 8m gap between the tree and station boundary

MMRC has also ensured a gap of 8m between the tree and station boundary to avoid any danger. The station, being built at a depth of 29m, is one of the deepest. Apart from the platform and concourse area, Mumbai International Airport Ltd (MIAL) plans a 10-storey building with three levels of basement.

The official said, "Since the foundation could not be changed, we decided to shift the back-off offices like ventilation shaft and air-conditioning system to other parts of the station from the platform end."

The average length of stations is 240m but this one was planned at 216m.

MMRC also decided to shift the entry/exit point to save more trees at this site.