

UNDERGROUND BRIDGE TO PROP UP WATER SUPPLY DURING METRO WORK

To ensure that residents of island city and western suburbs are not inconvenienced during construction of the Sahar Road station of the Colaba-Seepz Metro-III network, authorities have decided not to divert the five water pipelines that run underground near the airport Cargo terminal road. The Mumbai Metro Rail Corporation has come up with an innovative solution: a truss bridge will be erected underground to hold and support the five pipelines when Metro work happens below, reports Manthan K Mehta

WHY THE WATER PIPES CAN'T BE TOUCHED?

- > No space on one side of the Metro station of pressure
- > It would affect water supply to several areas
- > Water supply will be cut for some days to divert pipes
- > Diversion on other end means bending pipes
- > And sharp bend would lead to lowering



STRONG TRUSS BRIDGE

75 metres long

> Can hold 20 tonnes per metre

20 metres wide

> To be built with 600 tonnes structural steel

WATER LINES FOR ISLAND CITY

2,400 mm

600 mm

1,450 mm

2,700 mm

Ground level

4 Suspenders installed to hold pipelines

1 Area on both sides of the pipes to be dug

2 Girders erected on both ends

A storm water drain also to be propped up

3 Excavation done around pipelines

5 Pipes supported, Metro work begins

DEEPEST STATION | At 29 m, Sahar Road station will be Mumbai's deepest Metro station

Ram

6 Columns installed above station roof to support pipes

7 Area from station roof slabs up to the pipes filled

8 Cross girders, suspender are dismantled

9 Pipes covered again, and truss system dismantled

“Usually, we divert pipes in case they come in the way of station. However, diverting these many pipes wasn't technically feasible... The truss bridge will hold the pipes. Once this work is done, the area will be restored and road surfaced

SK Gupta | MMRC DIRECTOR (PROJECTS)