

3.82-km CSMT-Mumbai Central tunnelling over

Metro 3's 15th breakthrough: Task was challenging as areas are surrounded by heritage structures, dilapidated buildings

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The Mumbai Metropolitan Region Development Authority (MMRDA), responsible for the underground Colaba-Bandra-SEEPZ (Metro Line 3) successfully completed the southbound tunnelling between Chhatrapati Shivaji Maharaj Terminus (CSMT) and Mumbai Central on Friday. This comprises a 3.82-km-long tunnel passing beneath some of the most densely populated areas of Mumbai. It was the 15th breakthrough achieved by the Hindustan Construction Company Ltd (HCC), appointed to carry out work on this stretch, said MMRCL.

The contract for the design and construction of twin tunnels using the tunnel-boring machine (TBM) method and the construction of four underground metro stations at CSMT, Kalbadevi, Girgaum and Grant Road, was awarded to the HCC in July



2016. The contractor successfully launched Vaitarna I (the first TBM) at CSMT on December 4, 2017, and the main drive started in February 2018.

Since the area between the

CSMT and Mumbai Central is surrounded by heritage structures and dilapidated buildings, the task was challenging. Prior to tunnelling, a structural survey was carried out in a 30-metre influ-

ence zone on either side of the alignment to assess impact on the buildings. Besides, various monitoring instruments such as inclinometers, magnetic extensometers, piezometers, rod

extensometers, precise level markers, Bi-Reflex targets and crack meters were installed at regular intervals to check and regulate ground movements to the designated limits during and after the tunnelling work, said MMRCL officials.

In all, there are 169 structures in the influential zone, including 14 highrises and 28 heritage structures. Ashwini Bhide, managing director, MMRCL, said, "The task was challenging and daunting. However, we are confident of completing the project on time. Simultaneously, we are also progressing in station construction work."

On Metro Line 3, the Mumbai Central station will provide direct and easy access to two major commuting hubs -- Mumbai Central Depot and to the suburban and Main line railway stations. So far, it has completed 31 kms of tunnelling, with 17 TBMs commissioned through 10 shafts.

Thane-Mumbai metro: HC seeks MMRDA, govt response on PIL

MUMBAI: The Bombay High Court directed the Mumbai Metropolitan Region Development Authority (MMRDA) and the Maharashtra Govt on Friday to file their affidavits in response to a plea against the metro project that will connect the city to Thane.

A division bench of Chief Justice Pradeep Nandraj and Justice NM Jamdar was hearing a public interest litigation (PIL) filed by a group called Thane Nagrik Pratishthan challenging the permissions granted for the project. The petition claimed the Metro Line 4, which will link Wadala in Central Mumbai to neighbouring Thane, was riddled with non-application of mind by the authorities and defective planning.

—Agencies