



## Mumbai-Ahmedabad Bullet Train: Afcons Begins Piling Work for Shaft-2

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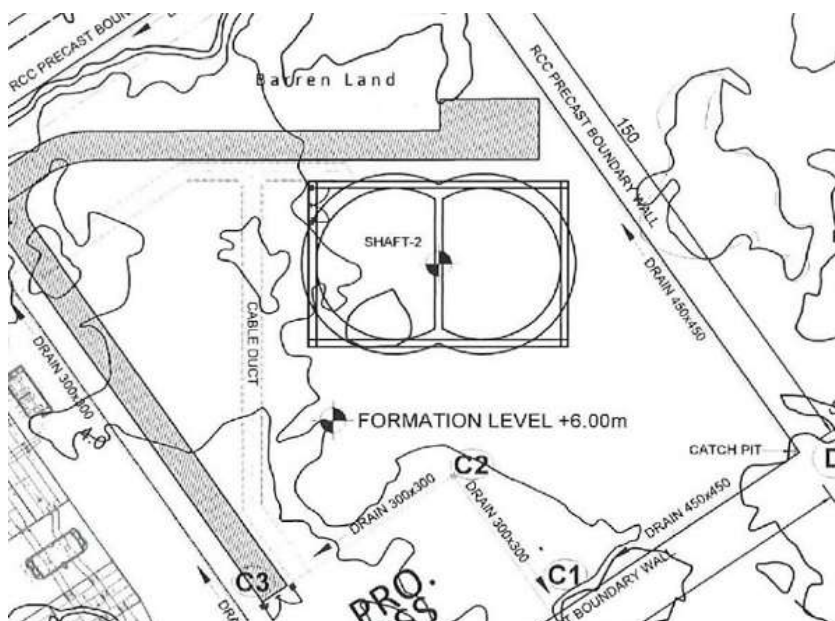
Afcons Infrastructure has started piling work to build Shaft-2 at Mumbai's Vikhroli neighborhood for 20.377 km underground Package C-2 of the 508.17 km Mumbai – Ahmedabad High Speed Rail (MAHSR Bullet Train).

This 56 meter deep shaft at the project's chainage Km 6.95 is one of 4 shafts to be constructed by Afcons for the line's underground section connecting chainage Km 0.773 (Bandra Kurla Complex Station) and Km 21.150 (Shilphata Ramp).

Afcons will use Shaft-2 to launch 2 Herrenknecht tunnel boring machines (TBMs) – one towards Shaft-1 (BKC Station's east-end) and another towards Shaft-3 in Sawli, Navi Mumbai.

The shaft is located on a 3.95 hectare parcel at CTS 1A and 51A in Vikhroli. Back on June 30, 2023 – the Maharashtra State Tree Authority granted permission to cut 1687 trees and transplant 141 trees. A total of 5317 number of trees are proposed to be planted as compensatory plantation by the Forest Department in Mankhurd, Kurla and Goregaon.

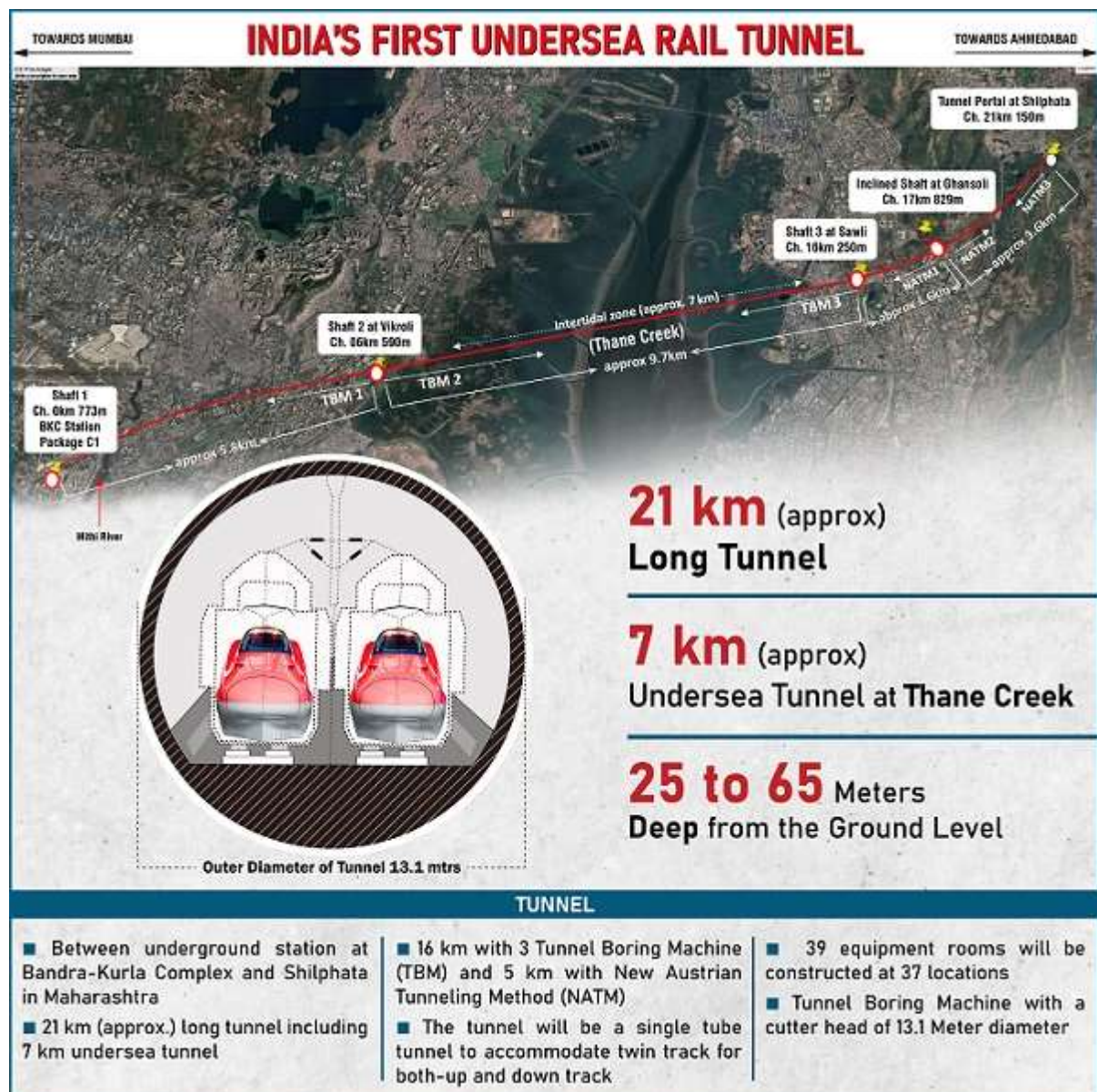
Two hectares of land will be used for the construction of a traction substation and distribution substation, while the rest will be used to construct an approach road, segment stacking yard, batching plant, shaft, muck pit, and Afcons' site office.



National High Speed Rail Corporation Ltd. (NHSRCL) had awarded Afcons Infrastructure with Package C-2's Rs. 6397.27 crore contract in June 2023 with a 1888 day (5.17 years) deadline.

Afcons will construct 3 shafts at BKC Station, Vikhroli, and Sawli at approximate depths of 36m, 56m and 39m respectively to launch and retrieve 3 TBMs to launch and retrieve 3 Mega Tunnel Boring Machines (TBMs) with a diameter of roughly 13.1 meters to bore approximately 16 kms of tunnel.

An inclined shaft of 42m at Ghansoli and tunnel portal at Shilphata will facilitate NATM tunneling works.



The shaft's figure-8 or infinity loop design, as my significant other likes to call it, sort of reminds me of Mumbai Metro Line-3 Package UGC-07's Pali Ground Shaft built in 2017-18. After construction on shafts 2 & 3 ends, Afcons will build tunnel ventilation buildings on top of them.