

P.R.No.74/2025 Date: 19.09.2025

Press Release

In Corridor-4 of Phase-II, a critical engineering challenge was encountered at Vadapalani, where the new alignment crosses over the existing Phase-I Corridor-2. This location already accommodates a busy flyover and an operational elevated metro line. To integrate Corridor-4, the new viaduct had to be constructed at the third level with adequate clearance for the overhead traction system.

A major hurdle was the 45m obligatory span of Phase 1 corridor at this junction. Conventional crane erection was not feasible due to traffic congestion and the presence of the operating corridor. Hence, a Launching Girder methodology was adopted to erect the U-girders safely over this critical span.

To support the span, an extended pier cap was specially designed with dimensions of 23m (length) \times 10.46m (width) \times 3.5m (depth), involving a concrete volume of 470 cubic meters and a total weight of about 1200 MT. Despite the spatial and utility constraints, this massive pier cap was completed in a record time of just 2 months following the utility shifting.

With the higher rail level, the Vadapalani Metro Station (Corridor-4) has been developed as a three-level structure:

- Commercial Level
- Concourse Level
- Platform Level

This milestone stands as a significant engineering feat in the execution of elevated metro systems, achieved within the densely built-up stretch of Arcot Road, and demonstrates advanced planning and precise execution under complex urban conditions.

Issued By: Public Relations Department, CMRL, Chennai – 600 035.