

# **Metro Bus Service** Lahore, Pakistan

**Concrete Admixtures for Bridge** 



# Metro Bus Service Project, Lahore First Local Metro Bus Project in Pakistan with Sika Chemicals

#### Proiect:

Lahore is the provincial Capital of Punjab, and the business hub of Central Pakistan. Everyday hundreds of people travel between Kasur and Shahdarah to earn their living, making Ferozepur road a major artery of Lahore. The city required a local metro bus system to support the massive travelling on this route. The project was of vital importance for the Government of Punjab, for the welfare of the society.

Further, it was imperative for the Contractor, National Logistics Cell (NLC) to construct this Metro Bus service project within 11 months period as the heavy traffic at intersecting roads could not be diverted for long. As proposed by the Consultant Nespak, heavy flow at the flyover required strict compliance of Construction and Concrete Standards.

## Project Requirements:

BRTS project is designed to avoid the congestion of Public transport from Shahdara, Yadgar Chowk, Data Darbar Road, Secretariat, Jain Mandar, Lytton Road, Ferozpur Road upto Gajjumatta.

The total route track was of 27 km from Shahdara-Gajjumatta, including an 8 Km flyover (elevated section), and 19 Km road to cover the track, along with 15 Pedestrian Underpasses.

Kalma and Muslim Town Flyover constituted the project where Muslim Town Flyover had to be built along Ferozpur Road at Canal/Wahdat Road junction and the Kalma Flyover was to be constructed at the intersection of Ferozpur Road and Main Boulevard Gulberg, Garden Town.

Due to size and complexity of the project, it was divided among three sub-contractors:

- Data Darbar-Secretariat a total track of 2.1 Km by NLC/ HCS, to be completed in 8 months.
- MAO College-Shama Chowk a total track of 4 Km by ZKB IV to be completed in 6 months.

- Shama Chowk-Muslim Town a total track of 1.5 Km by SKB to be completed in 6 months.

## Sika Solution:

Consultant:

Contractor:

Sika was approached by the Sub-Contractor Habib Construction Services. ZKB IV and SKB.

Sika products proposed by the Sika Sales Team included; as per the site requirements:

- Plastiment PR 250\* Pk, for 4000 Psi to 5000 Psi, with concrete slump retention of 1 hour .
- Intraplast Z, is used as cable grout for post tensioned girders.
- Sikadur 31 CF Slow, is used as an adhesive for bearing pads to concrete bonding.
- Sikament 512, is used for 4000 Psi and 5000 Psi concrete, slump retention of 2-3 hours is required.
- Intraplast Z, is used as expanding grout for post tensioned girders.
- For the first time precast transoms were constructed in Pakistan and Sikament 512 was used in concrete for 2 hours retention and to meet early strength requirements.
- Sikadur 41CF slow, was used to bond steel shims on column surface to give platform for precast transoms.
- Sikadur 42 MP slow, was used to bond between column and transoms.
- Sikagrout 114, was used to fill the anchor holes in transoms.

Proiect Name: Metro Bus Service Project Project Owner: **Communication and Works** Department, Government of Punjab Nespak National Logistics Cell (NLC) Habib Construction Services Sub Contractor: ZKB - JV SKB BUILDING TRUST

