



Sheik Zahed Centre, Lahore, Pakistan



PROJECT SUMMARY

NAME: Sheik Zahed Centre - Lahore

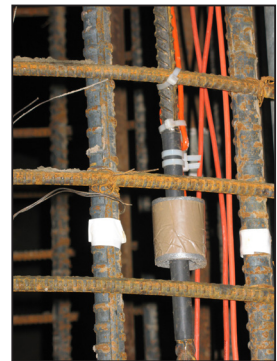
YEAR: 2007

CLIENT: Sheik Zahed

MAIN CONTRACTOR: Indus Valley Construction Co

CONSULTANT: Talbot Consultants International Inc

INSTRUMENTATION SPECIALIST: Gage Technique



OVERVIEW

The Zayed Centre is a multi-use complex which is constructed on 94 kanals of land on Ferozpur Road, Lahore, Pakistan. The building, the tallest in Lahore, consists of a 63 storey office and apartment tower complemented by three supplementary apartment buildings. A 28-level premier hotel and an international standard fully covered shopping mall covers ground floor and levels 1 to 4.

The architectural design of the complex is by HOK (Washington) and the construction work is being managed by Turner Construction.

MONITORING

Due to the very poor ground conditions, a series of pile tests were required as part of the design validation.

Vibrating wire sister bar arrays were installed at various elevations along the pile length together with rod type 'Tell Tales' to monitor strain changes and overall compression within the concrete.

Each of the seven piles testing were constructed to differing depths and diameters, some were post grouted to ensure pile toe integrity and increase skin friction.

Static load tests up to 3000 tonnes were carried out on each pile using conventional steel and concrete kentledge to determine the end bearing and skin friction properties.

An automated pile test monitoring system was used to gather data from all the instruments during the tests which were intended to reach three times the working load or failure.

PRODUCTS USED

VWS-4000 sister bars

Installed to monitor and verify load transfer in the pile.

VW 2106 readout

Measures all types of vibrating wire instruments.

Data logger

Provides automatic data acquisition of all types of sensors. Can also have modem for remote accessing.