



Asia

Nicoll Highway Collapse (Singapore) Expert Witness Role

Description of Work

In Singapore on 20th April 2004 a 33m deep excavation in soft clay for a new mass transit railway system immediately adjacent to the Nicoll Highway collapsed, resulting in 4 fatalities and extensive damage to the surrounding area. A Committee of Inquiry (COI) was established by the Singaporean Government in attempt to determine the cause of the collapse and to identify the lessons that could be learnt from this investigation so that similar events can be avoided in the future

GCG (Asia) Ltd working with their sister company GCG based in London were appointed as one of the Expert Witnesses to the COI. Their involvement resulted in detailed investigations, reports and presentations over a period of almost 1 year. Their work addressed several issues including the sequence of events leading up to the collapse, the roles and responsibilities of the various organizations and individuals associated with the works, the nature of the ground at the collapse site, the geotechnical and structural design of the temporary works support system, the interpretation of instrumentation data and physical and numerical modeling of critical structural connections. Their work led them to conclude that the collapse was the result of a failure of a strut to waler connection detail triggered by a forced sway mechanism that is not routinely addressed by design standards and codes. GCG Asia has maintained this Expert Witness role in formal mediation proceedings between the contractor and their insurers in a dispute related to compensation for reinstatement of the works.

Client: Rodyk & Davisson for
Nishimatsu Construction Co Ltd

Dates: 2004-present

Estimated Project Cost: N/A

