



KEY PROJECTS

CONTRACT J107 – TAWAS AND GEK POH STATION AND ASSOCIATED VIADUCT

Duration: 2020 – 2022

Client: CES-SDC Joint Venture

Developer: Land Transport
Authority (LTA) - Singapore

Role: QP (Geotechnical)

PROJECT BACKGROUND

The Jurong Region Line (JRL) is planned to serve Choa Chu Kang, Tengah, Jurong West, Jurong Industrial Estate, Nanyang Technological University (NTU) and Jurong East to West Coast. The total route length is approximately 24km. Contract J107 comprises of the design and construction of elevated Gek Poh Station (JW1) and Tawas (JW2) Stations and approximately 1.3km of elevated viaduct, and an advance work at Jurong Hill involving over 300m long of hill slope excavation and stabilization.

The project is located in weathered Jurong Formation geology with Limestone cavity which posed great challenges to the design and construction of viaduct & station pile foundation.

Furthermore, complex hydrology and terrain of hill-side area of Jurong Hill also requires in-depth analysis and construction of soil nail slope drainage system, ensuring overall slope stability.

OUR APPROACH

Digital scanning of 3D slope surface has been adopted to capture the existing and on-going slope excavation profile. Periodic reviews of instruments and soil nail testing

THE OUTCOMES FOR THE CLIENT

Safe completion for excavation for all slopes, pile cap excavation and station retaining structures

Completion of pile foundation in limestone geology.