



GEOTECHNICAL SEMINAR ON

Challenges In Tunnelling Through Bukit Timah Granite in Thomson Line T206, Singapore

by **Willie Ang**
Shanghai Tunnel Engineering Co (Singapore)

(PDU/STU pending approval)

Date: Thursday, 10 May 2018
Time: 6:30pm Registration
7:00pm Seminar
Venue: Room 320, Level 3
Suntec International Convention & Exhibition Centre
1 Raffles Boulevard, Suntec City, Singapore 039593
To register: www.cma.sg/e/geoss10may18

SYNOPSIS

Designed to enhance rail connectivity in the north-south corridors to the Central Business District and developments in the Marina Bay area, the 30km Thomson Line is fully underground with 22 underground stations, including six interchange stations at Woodlands, Caldecott, Stevens, Orchard, Outram Park and Marina Bay and served by a Depot at Mandai.

Contract T206 covers the construction and completion of mainline bored tunnels between Woodlands Station and Woodlands South Station and between Woodlands South Station and Sembawang Airbase. It also includes reception bored tunnels between Woodlands Station and Mandai Depot; and reception bored tunnels between Mandai Depot and crossover tunnels at Sembawang Airbase. Whilst not regarded as a typical rail project that involves station construction and bored tunnelling in an urban environment, the technical challenges of tunnelling in Bukit Timah Granite Formation as experienced by previous projects, notably the Singapore Power Transmission Cable Tunnel and the Land Transport Authority Circle Line Stage 4 proved to be very demanding.

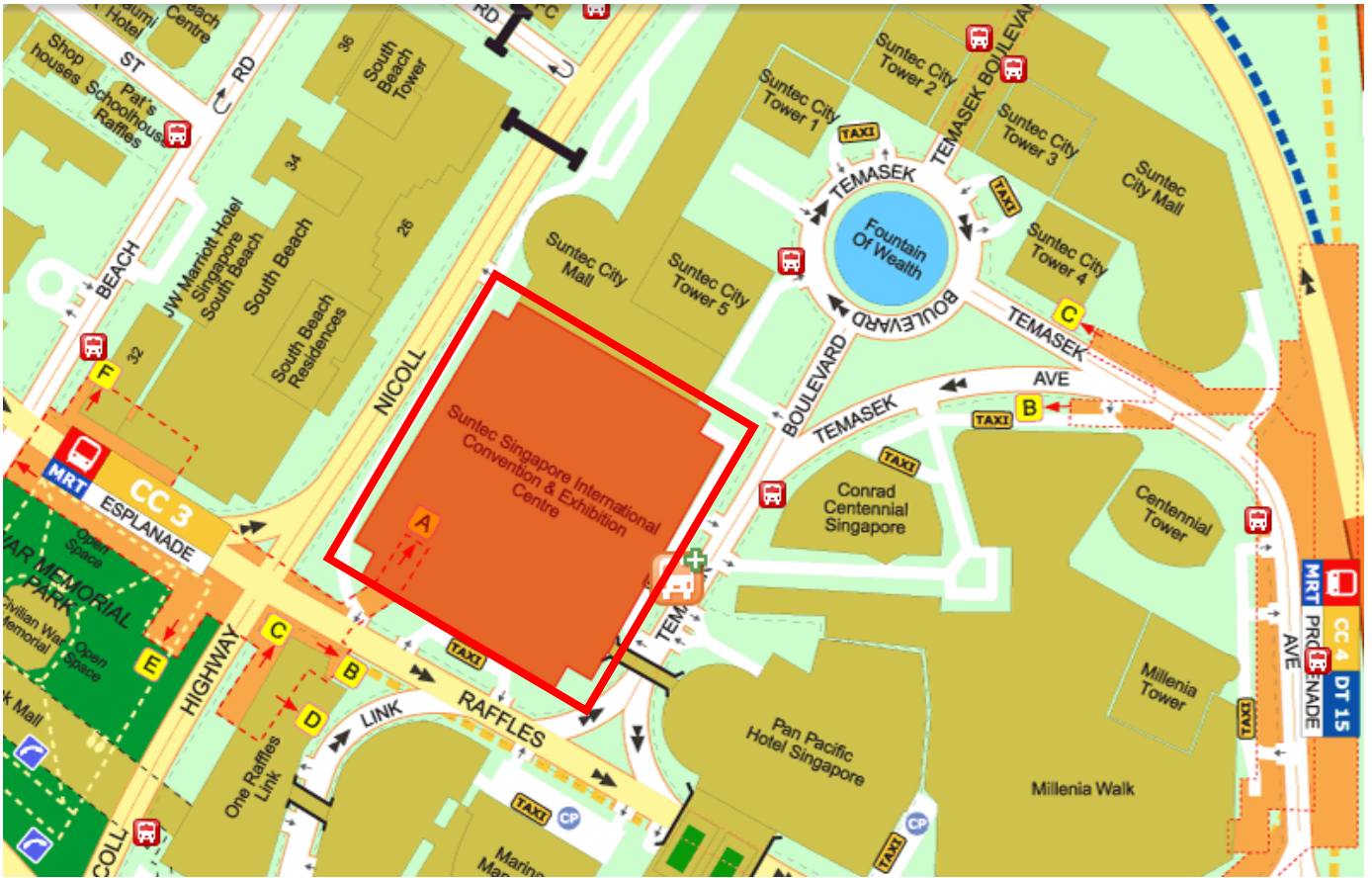
The presentation will provide an outline the expected challenges in tunnelling through Bukit Timah Granite Formation using a Mix Shield TBM and particularly how the contractor overcome them through TBM design and during the tunnelling works.

THE SPEAKER



Willie Ang is a Senior Project Manager of Shanghai Tunnel Engineering Company in Singapore and is also involved with projects in India, Vietnam and Malaysia. He was involved with tunnelling works in Singapore for the past 20 years since the North East Line as a TBM operator and has worked with open face machine, earth pressure balance machine and slurry TBM in different ground conditions.

LOCATION



BY BUS

36, 70M, 111, 133, 133A, 162M, 518, 518A, 700A, 857, NRI, 97, 97A,
70A, 106, 502, 502A, 502B, 518, 551, 578, 581, 577, 580, 575, 576, 579

BY TRAIN

Circle line - Esplanade MRT Station: Take Exit A

Circle line/Downtown line - Promenade MRT Station: Take Exit C