



THE INSTITUTION OF ENGINEERS, MALAYSIA

Bangunan Injenieur, Lot 60/62, Jalan 52/4 Peti Surat 223, 46720 Petaling Jaya, Selangor Darul Ehsan
Tel : 03-79684001/2 Fax : 03-79577678 E-mail : sec@iem.org.my IEM Homepage: <http://www.myiem.org.my>

INTERNATIONAL SITE VISIT – SINGAPORE'S WOODLANDS STATION (T203) AND ORCHARD STATION (T219) JOINT VISIT WITH AND SUPPORTED BY THE INSTITUTION OF ENGINEERS SINGAPORE (IES)

(Organised by Tunnelling & Underground Space Technical Division)

BEM Approved CPD/PDP hours: 6 hours

Ref. No.: IEM17/HQ/353/V



THE INSTITUTION
OF ENGINEERS,
SINGAPORE

Date: 8th & 9th September 2017

Site Visit: Singapore Woodlands Station (T203) and Orchard Station (T219)

Transport: Coach will be provided

**Commitment fees inclusive of GST
(Non refundable & non transferable)**

IEM Member : RM 200.00

Non Member : RM 300.00

SYNOPSIS

The Institution of Engineers Malaysia (IEM) and Institution of Singapore (IES) will be jointly visiting the sites, which provides a platform for interaction and exchange of ideas between IEM and IES.

The site visit: The 30-km long Thomson Line will enhance rail connectivity in the north-south corridors to the Central Business District (CBD) and developments in the Marina Bay area. Fully underground, Thomson Line comprises 22 stations, including six interchange stations: Woodlands, Caldecott, Stevens, Orchard, Outram Park and Marina Bay. These interchange stations will link to the North-South-East-West Line (NSEWL), Downtown Line (DTL), North-East Line (NEL) and Circle Line (CCL), providing greater accessibility and significantly improve travel time for commuters. Every construction stage in the underground station faced its own unique challenges, dictated by project specific purposes and diverse stakeholder expectation, in addition to technical challenges and complexities related to ground geological conditions.

Woodlands Station (T203)

Contract T203 for the construction of Woodlands station and its associated cut-and-cover tunnels was awarded to GS Engineering & Construction Corp at a contract sum of S\$292 million. When completed, Woodlands station will serve as the interchange between Thomson Line and North-South Line. In this site, the deep excavation works are supported by steel struts and secant bored pile (SBP) walls.



Orchard Station (T219)

Contract for T219 for the construction of Orchard Station and associated tunnels has been awarded to a joint venture between Penta-Ocean Construction Co Ltd and Bachy Solentanche Pte Ltd. In this site, the most prominent construction constraint is the close proximity to the adjacent Ion Orchard building and existing Orchard MRT station. In this site one can see strutted deep excavation and pipe roof mined tunnel.



TENTATIVE ITINERARY – (subject to change without prior notice)

Day 1 : 8th September (Friday) KUALA LUMPUR/SINGAPORE		
10:00 AM	- 5:00 PM	Journey from Kuala Lumpur to Singapore.
5:00 PM		Upon arrival at local hotel, dinner/free and easy
Day 2 : 9th September (Saturday) SINGAPORE/KUALA LUMPUR		
7:30 AM	- 8:30 AM	Breakfast and hotel check out.
8:30 AM		Travel from hotel to T219 Orchard Station Site
9:00 AM	- 12:00 PM	Site visit at T219 Orchard Station Site
12:00 PM	- 1:30 PM	Lunch and free and easy at nearby food center. (Recommendation: Zion road hawker center)
1:30 PM		Travel to T203, Woodlands Station
2:00 PM	- 5:00 PM	T203 Woodlands Station site visit
5:00 PM	- 6:30 PM	Dinner and free and easy at Woodlands Causeway Point, a shopping mall.
6:30 PM		Journey back, home sweet home.

PRICE INCLUDES	PRICE EXCLUDES
<ol style="list-style-type: none">1. Accommodation based on single/twin sharing2. Transportation as per program.	<ol style="list-style-type: none">1. Travel insurance.2. Items not mentioned herein such as extra expenses incurred due to disruption of travel plan, deportation, refusal entry, sickness, death, riot, act of nature, rumours, war, and diseases.3. All personal incidental such as room services, laundry, beverage and telecommunication bills.4. Personal protective equipment.

- The visit is strictly limited to **30 participants** registered on a first-come, first-served basis.
- Interested participants are to register and pay online at www.myiem.org.my or register by returning the appended registration form **before 31st AUGUST 2017** together with the payment.
- Cheques are to be made payable to **The Institution of Engineers, Malaysia**.
- Please note that the commitment fee must be settled prior to the visit.
- After this closing date, IEM reserves the right to allocate seats on first come first pay basis.
- Members are also reminded that IEM **MAY** cancel the reservation if payment is not received before the closing date

SAFETY REMINDER: Participants to be well equipped with their own safety equipment i.e. safety helmet, safety vest and safety boots in order to gain site access.

Ir. Syed Rajah Hussain Shaib Bin A.H. Mohd Haniff
Chairman
Tunnelling & Underground Space Technical Division, IEM

Contact:
Zainun Rani (Secretariat)
Email: zainun@iem.org.my
Fax: 03-7957 7678

