



ANNOUNCEMENT

AGS (HK) Technical Seminar

Lessons learned in ELS design and construction: Implementation of GEO Publication No. 1/2023, and Water tightness and strut preloading

by

Ir Dr Gavin Seng-Huat TOH
(Deputy General Manager of Lambeth Associates)

Date: Friday, 20 December 2024

Time: 19:00 – 20:00 (Hong Kong Time)

Venue: The seminar will be conducted through **face to face** and **Zoom**.

For face to face (G/F, Fincher Meeting Room, KCC (Kowloon Cricket Club),
10 Cox Road, Jordan MTR Exit B, Kowloon)

For Zoom (Successful applicants will be informed by emails with a Zoom's link
to the webinar. Participants should arrange for their own device with a stable
network environment to join the webinar.)

Enquiry: agshk.org@gmail.com

Fee: Free of charge

Registration [https://www.ags-hk.org/event-details/lessons-learned-in-els-design-and-
construction](https://www.ags-hk.org/event-details/lessons-learned-in-els-design-and-construction)

**(for Zoom
only):**

Please register by 19:00 on 20 Dec 2024 (HKT). Successful applicants will
receive webinar details after registration. CPD certificate will be sent to the
attendees, who attended more than 80% of the webinar time, within 2 weeks after
the webinar.

Book Prize: Professionals under 35 years of age are encouraged to submit a Book Prize Report
(max. 500 words) on webinars and site visits arranged by AGS (HK).

Contributors to successful Book Prize Reports will be awarded a Book Prize that
comprises of a book "Geology of Site Investigation Boreholes in Hong Kong"
written by Chris Fletcher, and a coupon of HK\$500 for Eslite Spectrum (誠品生活) or
equivalent. The successful Book Prize Report will also be published on the AGS (HK)
website to showcase your accomplishment.

Prior to report submission, please refer to the "The AGS Book Prize Reports –
Assessment Framework"* on the AGS (HK) website. You may submit your Book Prize
Report to our assessors by uploading the report file through the AGS (HK) website at
<https://www.ags-hk.org/book-prize>. Should you have any questions, please contact us
at agshk@meinhardt.com.hk.

*Link to the AGS Book Prize Reports – Assessment Framework:
https://www.ags-hk.org/files/ugd/521a4c_b94496034732484687441c4ed4d0b9.pdf



Synopsis:

In Dec 2023, Geotechnical Engineering Office issued GEO Publication No. 1/2023 – Deep Excavation Design and Construction. It documented the experience gained, and advances in design and construction of deep excavations in Hong Kong since the publication of GCO 1/90. Recommendations given aim to achieve economic excavation and lateral support (ELS) works design, construction time saving, and ground deformation monitoring and control enhancements.

The ELS design for an ongoing project at Kwai Chung implementing the recommendations of GEO Publication No. 1/2023 was recently approved by the Buildings Department. This talk will present experience gained in the approval progress and cover two major aspects in the design: the revamped 5A monitoring scheme, and the design assumptions of ground water levels (GWL). Compared with the traditional 3A monitoring scheme with maximum 25mm settlement limit, the proposed 5A monitoring scheme on trigger level determination is more rational with excavation depth considered. Specific and targeted response actions concerning the values exceedance are also summarized.

The talk will further discuss lessons learned from construction issues such as the water leakage of ELS cofferdam and dropping of pre-loading force in strut. Safety issues and mitigation measures to minimize the effects of such risks will be presented.

About the Speaker:

Gavin came to Hong Kong in 1993 after completing his BEng (Hons) in 1988 and PhD in Civil Engineering in 1992 at The University of Western Australia. He has 30 years of experience in design and construction of foundation and underground geotechnical works. He is currently a Deputy General Manager of Lambeth Associates Ltd. Lambeth is an in-house engineering consultancy of Gammon, where he has worked for over 27 years. He is currently responsible in managing the Foundation and Geotechnical Team to provide safe, economical, and innovative geotechnical engineering solutions for a variety of civil, railways, tunnels, and buildings projects in Hong Kong. He is actively serving in professional bodies such as HK Institution of Engineers (HKIE), and Institution of Civil Engineers (ICE). He is currently the Immediate Past Chairman of the HKIE Geotechnical Division. He has served as ICE CPR Reviewers for 10 years, and currently member of the ICE Professional Review Panel. He is a Registered Geotechnical Engineer (RGE), and Registered Structural Engineer (RSE).