

Proceedings of
THE HKIE GEOTECHNICAL DIVISION
42ND ANNUAL SEMINAR:

**A New Era of Metropolis and
Infrastructure Developments in Hong Kong,
Challenges and Opportunities
to Geotechnical Engineering**

Editors
LEE Siew Wei
LEUNG Yat Fai, Andy

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LEE Siew Wei
LEUNG Yat Fai, Andy
(Editors)

Proceedings of
The HKIE Geotechnical Division 42nd Annual
Seminar: A New Era of Metropolis and Infrastructure
Developments in Hong Kong, Challenges and
Opportunities to Geotechnical Engineering
GDAS2022 (13th May 2022)

Organized by
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Volume Editors

- LEE Siew Wei, Director, Golder Associates (HK)
- LEUNG Yat Fai, Andy; Associate Professor, The Hong Kong Polytechnic University

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Geotechnical Division, The Hong Kong Institution of Engineers

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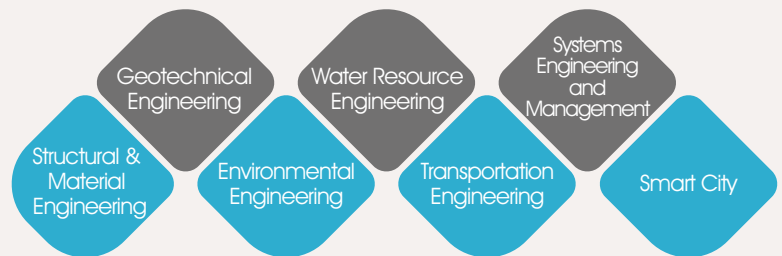
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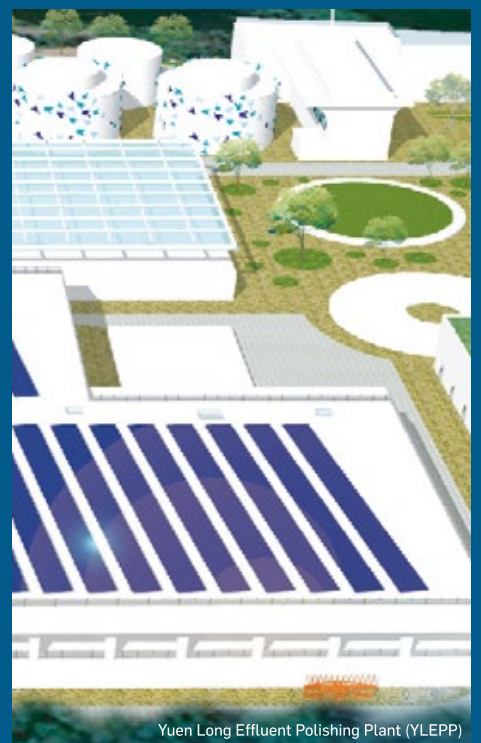
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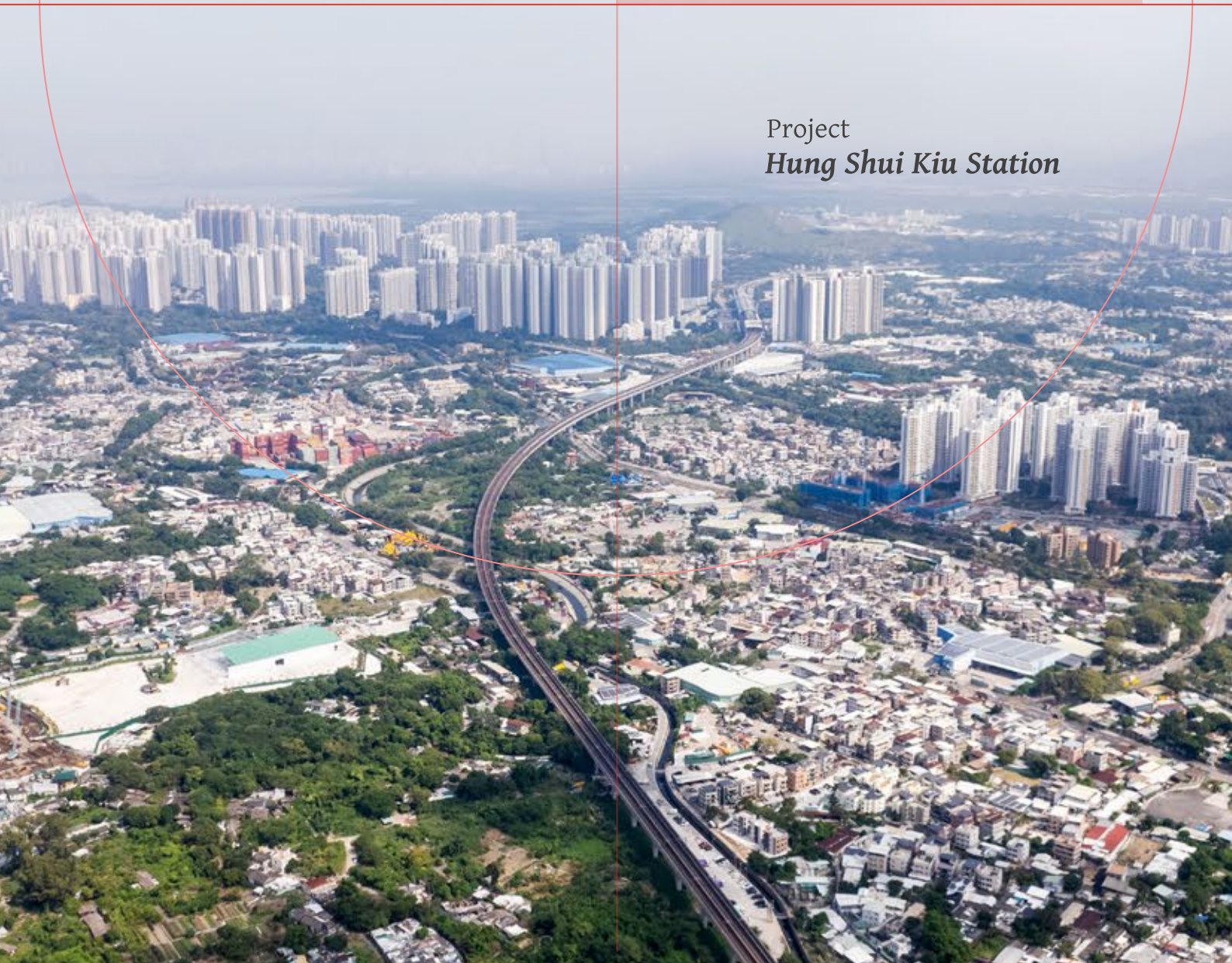
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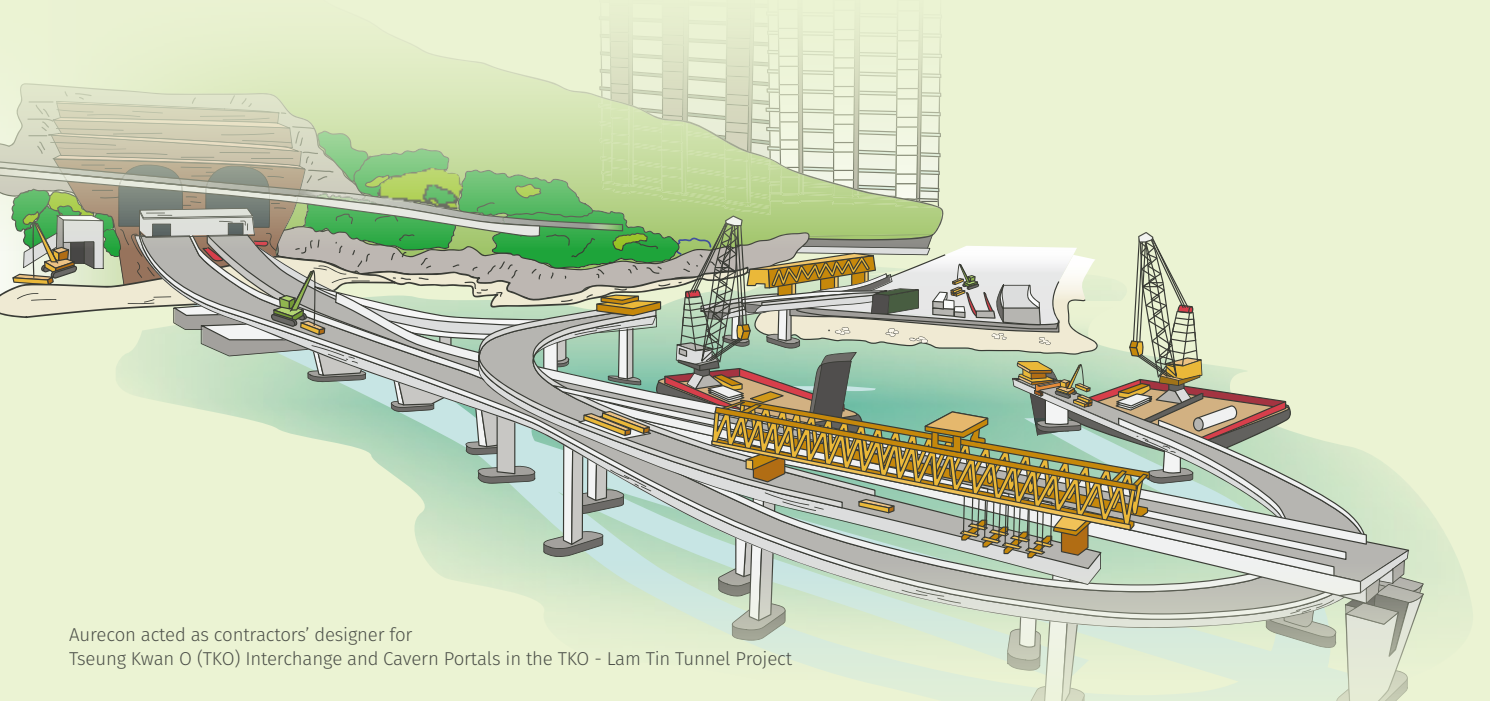
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Message from the Chairman

I am most delighted to extend a warm welcome to all distinguished guests, speakers and participants of the 42nd HKIE Geotechnical Division Annual Seminar.

The HKSAR Government has announced a suite of mega development projects including the Northern Metropolis, Lantau Tomorrow Vision, new railway projects, along with the ten-year public housing plan, twenty-year hospital development plan as well as other land supply and infrastructure projects in the pipeline. This visionary blueprint offers huge opportunities to the construction industry in Hong Kong. At the same time, our challenges are also enormous, particularly in the face of ascending construction volume, extremely tight project schedules and higher technical requirements. Geotechnical professionals, being one of the key contributors, play a pivotal role in the implementation of this master plan and we should leverage our expertise and the latest advances in the technologies to rise to the challenges.

Under the theme of “A New Era of Metropolis and Infrastructure Developments in Hong Kong – Challenges and Opportunities to Geotechnical Engineering”, this seminar provides a platform for the practitioners and academia to share their wisdoms and generate new ideas for further enhancing our capability to shape the new future of Hong Kong. Over 40 technical papers have been received, covering a variety of geotechnical topics relevant to the theme. We are particularly grateful to Ir John Kwong, JP (the Head of Project Strategy and Governance Office, Development Bureau) and Ir Barry Sum (the General Manager - New Territories (Projects), Capital Works Business Unit, MTR Corporation Limited) for delivering two insightful and inspiring keynote lectures. I wish that all participants would find the event fruitful and stimulating, with knowledge gained to move towards the new chapter.

On behalf of the Geotechnical Division, I would like to express my gratitude to the speakers and authors contributing to this seminar. My special thanks also go to members of the Organising Committee, under the leadership of Ir Clifford Phung, for their commitment and hard work in making this event a great success. In particular, I do appreciate the idea of introducing a new session called ‘GED Talk’ into the seminar so as to enable more quality papers to be presented in an interactive way. Last but not least, I would like to thank all supporting organisations and sponsors for their continuous support to this annual event.



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