



Technical Study Team International Opportunities 2018

Introduction to EWB-HK Technical Study Team

Purpose:

- To connect like-minded individuals with great interest in humanitarian engineering or missions
- To establish a strong technical knowledge database to facilitate project engineering
- To form a sustainable cycle of knowledge-transfer with university students, professors, NGOs and community partners
- To provide base information to facilitate quality training to the local communities through overseas projects
- To upgrade general knowledge level of all volunteers
- To understand current state of the art solutions being implemented by NGO's/Non-profits for UNSDG
- To provide base knowledge for easy communication with NGOs or community partners

Volunteer's Role:

- To equip yourselves with general knowledge on topics which you are interested
- To transfer your knowledge to the team through casual sharing.
- To assist in project-specific studies.

Study Scope:

- water sanitation/ filtration
- electricity/hydropower generator
- waste management
- fire hazard
- computer and internet programming
- renewable energy

Benefits:

- Gain new knowledge and skills
- Make a difference to shape a better world
- Have fun!

Application Procedures:

- First, please register as our volunteer by access to <http://www.ewb.hk/renewalvolunteerForm.aspx>.
- Second, Please send your application including name, contact telephone number, e-mail address, brief descriptions of you and your experience (if any) to ewwb@ewb.hk on or before 10 March 2018
- Engineering and Non-engineering volunteers are all welcomed.
- We will contact you within 2-3 weeks of your application.
- For further enquiries, please contact: Mr. Sam Chan (+852-62317504)

For more information about EWB-Hong Kong, please visit our facebook: www.facebook.com/EWBHK/

Establishment of Overseas Projects Committee

6 Jan 2018

Hong Kong

South East Asia Investigation Trip

1 ~8 Oct 2017

Singapore, Cambodia, Myanmar, Malaysia

Engineers Without Borders (Hong Kong) is an independent and engineering-based social service organization in Hong Kong. EWB-HK is a member organization of EWB-International, and is an approved charitable institution which is exempted from tax under section 88 of the Inland Revenue Ordinance.

The Overseas Project Committee (OPC) focuses on the provision of engineering services to disadvantaged communities and social services organizations outside of HK. The UN Sustainability Goals are the foundation for our provision of engineering services to disadvantaged communities, NGO's, Academia and Social Service organizations for the purpose of technical and management expertise and training and capacity building to achieve sustainable development to the beneficiaries. We are structured to work with local organizations, academia and local communities to achieve better sustainability in Myanmar, Cambodia and South East Asia. Our goal is to learn from, teach, and serve the local beneficiaries to enhance livability of their communities.



Committee Members:

- Chairman: Sam Chan
- Secretary: Brooks H. Smith
- External Secretary (Cambodia): Charity Pan
- External Secretary (Myanmar): Chris Ho
- Technical Study Group Convener: Anthony Leung
- Marketing Secretary: Christy So
- Advisor (Capacity Building): Raymond Lopinski
- Advisor (Project): Peter Pong



Nature of Trip:

- Sustainable Cities learning (Singapore and Malaysia)
- Community Investigation (Cambodia and Myanmar)



We organized a community investigation trip to Phnom Penh and Yangon to meet and engage community, engineering, and academic partners for upcoming engineering-based mission projects in Cambodia and Myanmar.

As global citizens, we are eager to learn about the sustainable development of cities such as Singapore and Malaysia. We met with EWB-Malaysia for an idea exchange on the engineering in electricity and water supplies to disadvantaged communities.

With one of our core values as a learning organization, we aim to walk and grow with local communities. Through direct communication with communities, we learned about their local life and the challenges they were facing. We will organize community investigation trips frequently to let our pro bono engineers learn and engage with the communities they aim to help. With more exposure, we can shape our humanitarian mission map and train passionate pro bono engineers.

Trip Members:

- Sam Chan, Tommy Wong, Andes Wai, Jess Lau, Brooks H. Smith, Jean Van Bourgondien, Hamish Low, Edward Chan



Photo: EWB-Malaysia

Design Typographer: EWB-HK Overseas Projects Committee

Cambodia Water Hall Project

(Sept 2017
- Ongoing)

Battambang,
Cambodia

Nature of Project:

Building services and wastewater treatment infrastructure

6 CLEAN WATER AND SANITATION



Role of EWB-HK: Engineering partner

Partner Organisation:

Architect for All, an award winner of services award of The Hong Kong Institute of Architects, 2017

Scope of EWB-HK: Scheme & design development in building services, and wastewater treatment infrastructure

“Water Hall” will be constructed in a village within Battambang province of Cambodia. The engineering infrastructure including a water collection system, water treatment system, and a gathering area for villagers. Such project concept was introduced by our project partner and funded by the Hong Kong Institute of Architects. EWB-HK participates in this project to provide engineering knowledge transfer, system design, and technical advice in structural, building services, environmental, geotechnical engineering, and project management.

At the end of 2017, water samples in the village were collected and soon will be delivered for environmental testing. Schematic engineering design has been produced; while architectural design would be further developed by the Architect for All. Construction will be commenced in the dry season of 2018 tentatively.

Project Team Members:

Jenny Chan, Anthony Leung, Sam Hui, Sueann



Overseas Projects Committee
contact: ewwb@ewb.hk

South Africa Refugee Child Center

(Sept 2017
- Ongoing)

Cape Town,
South Africa

Nature of Project:

Education Center for Refugee Children

4 QUALITY EDUCATION



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Role of EWB-HK:

Engineering partner

Partner Organisations: Cybertecture For Humanity (Hong Kong), You2Africa (South Africa), and supported by EWB South Africa University of Cape Town Chapter

Scope of EWB-HK: Schematic & design development in building services and structural engineering

Last year, a design competition was held by The Cybertecture Academy for students to design a dual-purpose house/child center for a refugee community outside Cape Town, South Africa. Adopting the winning shipping container-based design as the form, the architectural team s working with EWB-HK to bring the structure to fruition. EWB-HK is providing engineering expertise to create viable electrical, mechanical, water, and structural details for the building, while the lead architect James Law takes care the project management. As of late 2017, the interior design and electrical / mechanical work were completed. The surprisingly high cost of shipping containers in South Africa led to a complete structural re-design, and structural engineering work is still ongoing. Construction of the prototype is targeted to begin by the end of 2018 , and it is hoped that the design can be used in future community structures.

Project Team Members:

Brooks Smith, Ruth Best, Kevin Leung, Sam Fan, San San Wang

