

## Pro-bono partners helping to make IES Building project a reality

Representatives of some of the companies that are contributing valuable time, materials and manpower, give reasons for their involvement in the project and outline the scope of their work.

### Mr Koo Chung Chong, Executive Director of CS Construction & Geotechnic Pte Ltd

"We were invited by then IES Vice President (now Deputy President) Er. Chong Kee Sen to participate in the piling works for the redevelopment of IES Building. He was looking for a piling method that is environment-friendly, so that it causes no disturbance to the neighbours of IES. As part of our social corporate responsibility, we accepted the IES invitation to propose and sponsor an environment-friendly pile installation system.



Mr Koo Chung Chong

IES is surrounded by schools, and part of the redevelopment is on a slope, thus we felt that we can contribute to this redevelopment by proposing the use of our jack-in piling and micro-piling systems. Jack-in piling is a more economical system, compared to micro piling, thus we proposed jack-in piles to be used on the less challenging terrain, and micro piles on those areas nearer or below the slope. Both methods are noise- and vibration- free, which suits the environment around IES.

### Various stages in the piling work

Before the award of any contract, we normally visit the site to ensure the suitability of the proposed piling system. If the site is located near residential or sensitive locations, we will advise our clients to use a suitable piling system that would minimise disturbance to the neighbours.

Once the piling system is confirmed, we will prepare the applications to authorities for permits, create access within the site, and set up site facilities like wash bay, site office, toilets etc. We will also conduct a photographic pre-condition survey around the site, commission a pre-computation survey by registered surveyors and a CCTV sewage survey, install essential monitoring instruments around the site etc. Upon the approval of all the surveys and permits by the architect and authorities, we will commence our piling works.

### Challenges relating to the environment and ground conditions

The challenges that we are facing these days relate to the environments neighbouring our piling sites. As Singapore is getting more and more built up, it is very important to ensure that piling works are carried out with minimum disturbance to neighbours working or living around the site. The most common issues in piling sites are vibration and noise. We need to use the right system to install piles without causing excess noise and vibration, and also ensure that the installed piles achieve their design capacities.

Another challenge is to ensure that public and private properties are not damaged. This can be overcome by carrying out an



The IES Building construction proceeds smoothly with the contributions of pro-bono partners.

environment impact assessment before commencement of piling works, to anticipate the damage that could be caused during the piling works. From this assessment, we will decide on the form of instrumentation to be installed in order to monitor any soil movement and also to determine the sequence of piling works".