

JIMAH EAST COAL FIRED POWER PLANT

JIMAH, NEGERI SEMBILAN, MALAYSIA



Key achievements

- A cost-effective, packaged solution provided the client with a single team to deliver the works.
- Effectively dealt with various and unexpected site challenges while successfully completing the work on time.

The project

Keller was engaged to carry out foundation and ground improvement works at Jimah, Negeri Sembilan, Malaysia, for a new 2x1,000MW Coal Fired Power Plant.

The challenge

The site presented challenging ground conditions with a 10m thick layer of sand material followed by very soft marine clay up to 40m below ground level. This posed difficulty for the Stone Column installation as sand layer would densify during the process making it increasingly difficult to penetrate as works progressed. Work execution planning was critical as phasing of the works and methods piling areas were outspread and multiple contractors were also working in the same areas.

The solution

Keller in collaboration with Ansa Asia, carried out a range of Geotechnical solutions – Driven Spun Piling, Deep Soil Mixing, Jet Grouting and Vibro Stone Columns. Ansa Asia drove approximately 8,000 nos. Spun Piles, 40 meters deep to support various plant structures. Deep Soil Mixing and Jet Grouting columns were installed to act as temporary support for waterfront retaining wall and to facilitate deep excavation for intake pump station and box culvert.

Application

Deep Foundation & Ground Improvement

Technique

Driven Spun Piling, Deep Soil Mixing, Jet Grouting, Vibro Stone Columns

Market

Power

Client

Jimah East Power Sdn. Bhd.

Main contractor

Hyundai Engineering Co., Ltd.,
HSL Constructor Sdn. Bhd.,
Taisei Corporation Sdn. Bhd.,
IHI-Toshiba-Hyundai Consortium

Contract Value

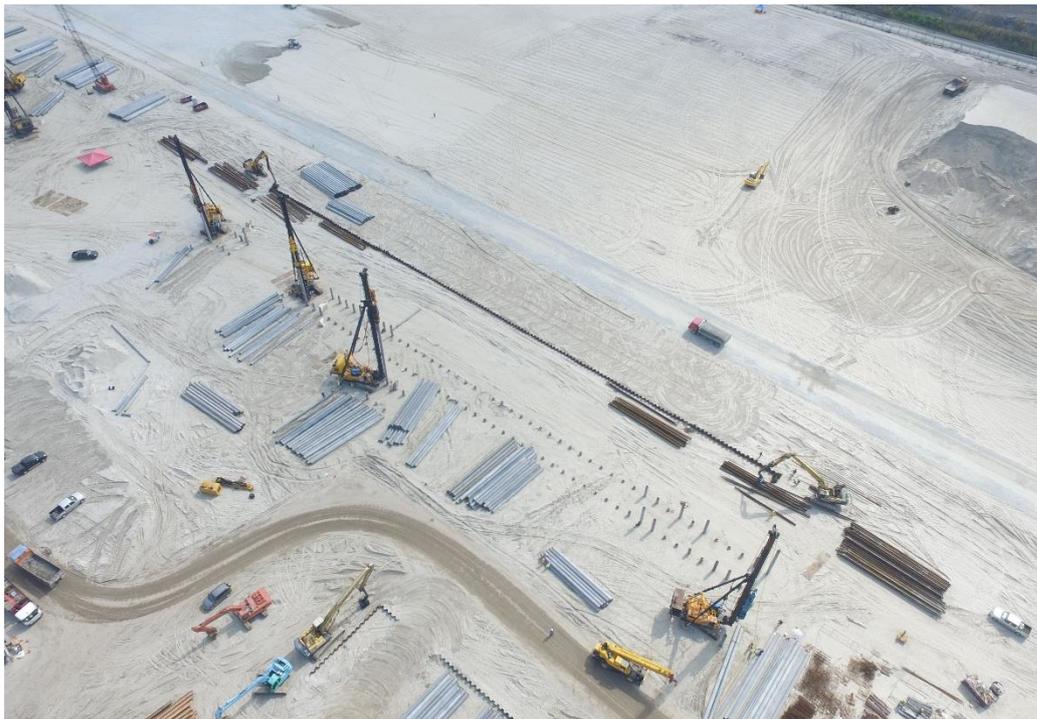
RM 31.5 M

Keller business unit (s)

Keller ASEAN
Ansa Asia Sdn Bhd

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(Cont.)

Stone Columns were installed to support the seawater intake channel rock mound jetty. Enforcement of stringent HSEQ practices, regular meetings and constant communication with the main contractors helped the team to improve the production process and to meet client's requirements on time.

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