

Overseas Projects



Subic Bay Development Project - ODA-related project / Philippines

An international container terminal was completed at Subic Bay, the Philippines. President Gloria Macapagal-Arroyo who was reelected in 2004 expressed in her administrative policy speech at an inauguration ceremony, "Clark and Subic Areas should be changed into international logistic service centers leading Asia." The Subic Bay Development Project forms a core of her plan and has been carried out under special Yen Loan by International Cooperation Bank as bay area improvement project for the former US Naval Base, about 80 km northwest to Manila.

Penta-Ocean constructed and supplied container berths (2,000 TEU, 13.7m deep, 280m long, 2 berths), expansion and repair of existing quays (3 locations), access road (3 km long), office buildings, four gantry cranes, seven port service boats, and navigation support facilities.

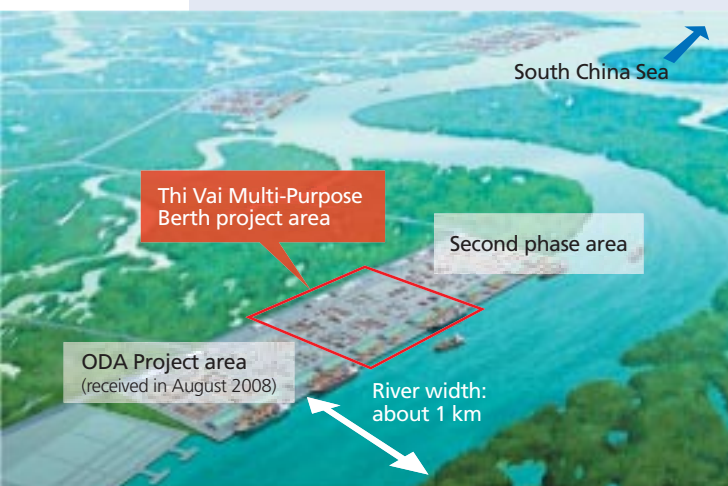
The Company's experience and technologies in port zones accumulated over long periods were applied to the implementation of this project, thereby solving a variety of problems in quality and process control in the case of, for example, suspension of road construction by rainfall, construction in soft ground, and changes in supporting ground depths for foundation pillars. Hence, the Company is pleased to have supplied those facilities that were satisfactory to the ordering party and community people.

The completion of these facilities will smooth and promote physical distribution in the Central Luzon area, including Subic Bay, thereby contributing to the development of the local economy. They are expected to help the Philippines enjoy sustainable economic growth through this marine entrance for physical distribution along Subic and Clark.



President Arroyo attended at the opening ceremony.

On Going Project



Thi Vai-Cai Mep Complex Artistic View

<New order: July 2007>

SP-PSA Thi Vai Multi-Purpose Berth Project Phase 1 / Vietnam

Client: SP PSA International Port Co., Ltd.

Consultant: Surbana International Consultant Pte. Ltd.

Construction summary:

- 600m-long pier (300m x 2 berths attached to the seabed) + three bridges
- Container yard: Approx. 27 ha
- Dredging: Approx. 300,000 m³
- Ground improvement: Approx. 240,000 m²
- Buildings: 7 buildings (floor area of 3,400 m² of 2-storied offices, etc.)

Thi Vai is located in the suburbs of Ho Chi Minh City, Southern Vietnam and a commercial area where large-scale development is being planned.

Container volume handled in this Ho Chi Minh area increased steadily at an annual average of 19% since 1995, reaching about 22,000 thousand TEU in 2005. Its container-handling capacity was nearing limits. Water depth at the pier was as shallow as 10m, preventing containers more than 1,500 TEU (or 20,000-ton) class from touching down. The container-handling capacity is anticipated to continuously grow about 20% every year. Hence, it has been expected that a new port facility should be constructed to cope with expanding volume and touching down of larger vessels. Many pier development projects are planned here in Thi Vai and Cai Mep areas and improvement programs are under way, aiming at constructing an international gateway port.

Universal Terminal Storage and Terminal Facilities at Jurong Island / Singapore

Construction period: December 2005 to September 2007

Client: United Terminal (Singapore) Pte. Ltd.

Construction summary:

- Pier work of a total of 9 berths, including 2 berths for VLCC (for dead weight capacity from 320,000 tons to 5,000 tons, max water depth: 23m)
- Quay construction work: 3 berths (total length: approx. 1,000m, water 11m deep)
- Dredging work: Approx. 600,000 m³

In west Singapore, where world-leading petrochemical bases are situated, Penta-Ocean's land-fill work has long been engaged in land formation work.

A universal terminal was constructed at the top end of the filled land of Jurong Island. The terminal's pier facilities are composed of storage tanks on land and piers where large-sized tankers can unload crude oil and petroleum products. The 14.5 million barrel (approx. 2.3 million m³) of storage capacity means one of the world's largest independent petroleum storage facilities on land.



Keppel Bay Bridge / Singapore

Construction period: March 2005 to July 2007

Client: Keppel Bay Pte. Ltd.

Design and administration: T Y Lin International Pte. Ltd.

Construction summary:

- Cable-stayed bridge, 270m long
- Sunken bank-type bridge protection work: 11 caissons
- Continuous pile-type bank protection work: 570m long
- RC pier construction work: 1,750 m²
- Breakwater construction work: 18 caissons

Marina at Keppel Bay / Singapore

Construction period: June 2006 to December 2007

Construction summary:

- RC-structured, 2-storied building and 1 basement with steel roof
- Site area: 9,383 m²
- Floor space: 11,587 m²

Penta-Ocean engaged in the construction of a 270m-long cable-stayed bridge with maximum span of 91m connecting between the Keppel Island (off the Sentosa Island, one of the most famous sight-seeing spots in Singapore), bank protection work around the island, in addition to the construction of the marina.