

Morning Star Cement Plant

Detailed Engineering Design of a Cement Plant



Client

Holderbank Management and Consulting Ltd.

Project

Morning Star Cement Plant

Location

Ho Chi Minh City and Kien Giang Province Vietnam

Project Period

Start January 1995
End October 1997

Project Description

The project comprised of two sites:

- The Cat Lai Cement Handling Terminal, located near Ho Chi Minh City (Saigon)
- The Hon Chong Cement Plant, located in Kien Giang Province on the Gulf of Thailand near the Cambodian border.

The Cat Lai Cement Handling Terminal was designed for a capacity of 1.8 million Tonnes/annum. It provided facilities for loading and unloading raw materials and cement from ships and storage as well as distribution of finished products, both in bulk and in bags.

The Hon Chong Cement Plant was designed to produce 1.4 million Tonnes/ annum. It is composed of production facilities for making cement from limestone, laterite and clay. The cement was projected to leave the plant in bulk on ships, for which the required jetty facilities form part of the project.

Scope of Services

The services covered the Phase I (Project Planning) of the overall Project. These included finalization of basic civil design concepts, recommendations for contracting strategy, preparation of tender documents, evaluation of bids and recommendation of the most suitable contractor(s).

TRANS-ASIA

The overall procedure involved:

- Preparation of all aspects of engineering design, definition of criteria for the selection of building materials and construction specifications as well as procedures for contracting and the preferred contractual arrangement in the form of a contracting plan,
- Preparation of tender documents and material technical specifications, in a form appropriate to safeguard the client's interest, for a timely and economical implementation of the project,
- Evaluation of bids and assistance in the preparation of contract award recommendations.

Phase II (Project Execution) covered the detailed civil engineering and design for Hon Chong Cement Plant and Cat Lai Cement Terminal, review and coordination of detailed civil engineering and design prepared by third parties for Hon Chong Cement Plant and Cat Lai Cement Terminal, project coordination and back-up services for site supervision.

Services included the following:

- Preparation of detailed civil design for definition of the dimensions of the complete civil works and relevant building services for obtaining the requisite construction permits and for construction. The detailed design drawings contained all information required to serve as primary construction drawings (working drawings).

Back-up services for construction supervision.

- The design review services served to check the detailed civil engineering and design prepared by third parties in compliance with the conceptual basic design requirements and conform with the contractual requirements, governing codes and approved budget. The services consisted of desk reviews of drawings, preparation of review comments and taking part in design review meetings.
- Revision of basic civil design of cement silos, bulk loading and packing plant as well as site infrastructure for Cat Lai Cement Terminal.