



**Client**  
Rent a Port



**Location**  
Kuala Kedah, Malaysia



**Period**  
April 2008

### Technical Report for Marine Facilities for Sierra Petroleum National Hydrocarbon Complex

#### Background

Sierra Petroleum, a company in Malaysia holds the vision of becoming the world's energy hub. For this vision to be reality, Sierra Petroleum is seeking to construct a National Hydrocarbon Complex at Kuala Kedah in Malaysia.

Rent A Port, seeing the potential in this is thinking of becoming a development partner in the project.

Rent A Port therefore commissioned PMI to conduct a study and produce a Technical Proposal on its behalf for submission to Sierra Petroleum.

The aim of the proposal was to present Rent A Port as a potential strategic partner in the reclamation of the requisite land area and the development of port facilities.

#### Scope of Study

The study proposed a conceptual layout for port development and

facilities. The proposal covered the following:

- On- and offshore soil investigations
- On- and offshore surveys
- Preliminary design
- Detailed design
- Procurement
- Dredging works
- Construction of containment bunds
- Land reclamation including compaction
- Construction of marine facilities including the main harbour, the fishing harbour and the single point mooring facility

#### Description of proposed works

Based on presentation covering the business plan, a land size of 10,000 acres will be required for the project.

This land will be provided for by reclamation using material dredged at the proposed site in two distinct phases:

- Land covering approximately 5 000 acres will be recovered in the first phase to allow for the provision of a new waterfront city, a marina bay development, the refinery and supporting industries along with the required harbour facilities.
- A further 5 000 acres of reclaimed land is proposed as phase 2 to house the gas processing plant,

the petrochemical plant and crude storage areas.

The proposed facilities of the complex comprise the following:

- Main Harbour
- Fishing Harbour
- Single Point Mooring

#### Proposed construction Sequence for both phases

Containment bunds will be built first to designed elevation after which dredging, backfilling and compaction will be carried out.

Construction of Marine facilities will commence soon after that.

#### Deliverable

A comprehensive Technical Report was submitted to Rent A Port.