

Albert Loh

CONSULTANTS

STRUCTURAL CIVIL & MECHANICAL ENGINEERS

Albert Loh CONSULTANTS

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Albert Loh CONSULTANTS

ESTABLISHED 1981 • STRUCTURAL CIVIL & MECHANICAL ENGINEERS

ESTABLISHED 1981

Albert Loh Consultants is an award winning Structural, Civil and Mechanical Engineering Consultancy established in 1981. We take pride in always striving to provide the best engineering solution for our clients.

Our key service objectives are Quality of Work, Innovation, Integrity and Responsiveness to our clients needs in all our projects.

Our clientele includes major international companies such as Shell, ExxonMobil, Chevron/Caltex, Glaxo, Air Liquide, GATX, Singapore Refinery Corporation, Petrochemical Corporation of Singapore and Tuas Power.

AWARD WINNING PROJECTS:

MOBIL BERTH 7 - Singapore Construction Industry Board's (CIDB) **Best Buildable Design Award**

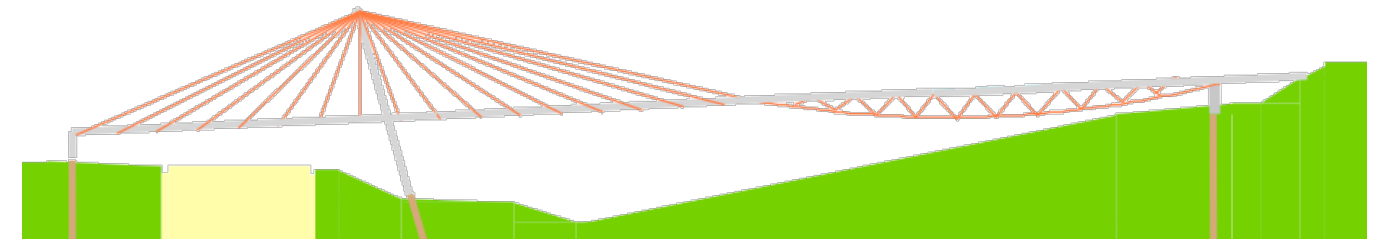
SHELL EAST GATE FERRY LANDING - Institution of Engineers Singapore **Innovators Gold Award**

JALAN BESAR STADIUM - Singapore Structural Steel Society's **Inaugural Structural Steel Design Award**

SINGAPORE SPORTS SCHOOL - Singapore Structural Steel Society's **Steel Design Award**

ALEXANDER BRIDGE - **Merit Prize** at Urban Redevelopment Authority's Southern Ridge Bridge Design Competition





Fields of Specialisation

We are award-winning engineers in the following areas of speciality:-

Wharves & Marine Facilities

Wharves, Dolphins, Ferry Landing Facilities, Seawalls, Offshore Structures. Study of incidents, Study of Up-rating of Berth Capacity, Study of Mooring of Vessels, Study of 4-point Mooring, Study of Berthing, Study of Conversion of Usage of Building, Design of complete Jetty Structures and Toppers

Prefabricated / Precast Structures

Specialist in design and installation of prefabricated steel and precast concrete structures

In-Plant Engineering

Refinery, Piping, Structures, Tank Foundations, Equipment Foundations, Drainage Systems, Blast-proof Buildings, Offices, Switch Houses, Workshops, Warehouses, Air-conditioning Systems. Tankfarms, Sludge farm, Slops & Deballasting Facilities, Controlled Discharged Facilities, Refinery Drainage, Metering & Microfiltering Facilities, Liftpot Facilities, Blender Facilities, Compressor Stations, Seawater Intake Structures, Dynamic Analysis of structures

Long Span Structures

Innovative Long Span Column-Free Structures for Stadiums, Sports Complexes, Auditoriums, Swimming Pools, Bridges

Wharves & Marine Facilities



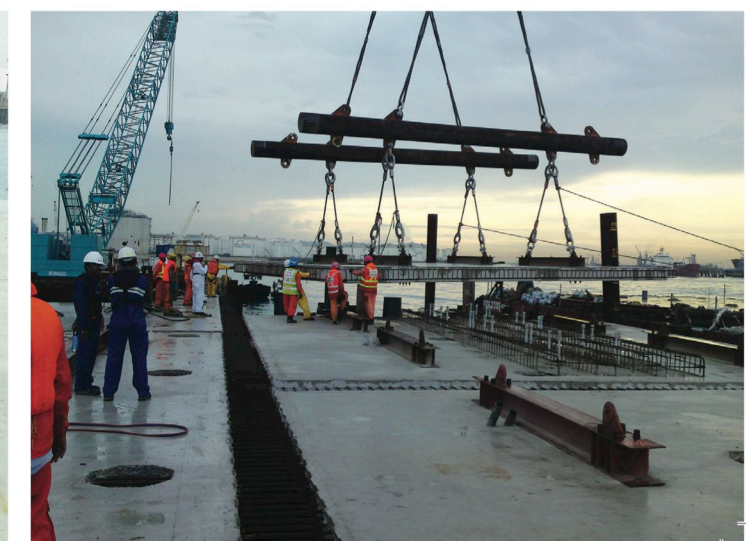
We have established ourselves as experts in this field and have completed many marine related projects for clients in Singapore and other parts of the world.

Our expertise is in the design of new jetties, upgrading of existing jetties with minimum cost and down-time, evaluation of existing marine facilities and modification works to existing jetties, fenders and mooring systems. We have designed **over 20 jetties in and around Singapore for various sizes and types of vessels ranging from ferries to VLCCs.** We have also designed **LPG jetties and the mass handling jetties with large travelling cranes.**

We are the pioneer for design of jetties using large prefabricated modular units with a minimum number of joints and very little in-situ concreting. The design of this system allows immediate use of the deck after placement and saves considerable construction time. The design concept has been awarded the "CIDB Best Buildable Design Awards" in October 1991.

We have completed many feasibility studies, conceptual design studies and detailed engineering packages. We are regularly engaged to perform up-rating studies on existing jetties, mooring system and fendering system to accommodate larger vessels.

We have also been engaged by terminal operators, shipping and insurance companies to conduct review/studies on incident reports or some accident cases and advise on mooring operations at terminal with adverse environmental conditions.



In-Plant Engineering

We have been involved in numerous in-plant projects with workshops, tankfarms, piperacks, tank foundations, bridges, culverts, **Blast resistant buildings**, warehouses, switch houses, fire fighting systems and other plant facilities such as **controlled discharge facilities**, **seawater intake structures** for clients such as Shell, Mobil, Exxon, Chevron, Oronite, Tankstore, BP, Caltex, SRC, PCS, Glaxochem, SOXAL, IPG and Bayer.

We have **designed in-plant foundations, structures and buildings for petrochemical plants, refineries**, the Air Separation Facilities for IPG at Pulau Ayer Chawan and for the Hydrogen Plant for SOXAL on Jurong Island.

We are familiar with designing **blast-resistant buildings** such as control buildings, FAR buildings, switch houses, laboratories, etc. We have also upgraded existing buildings to meet more stringent blast resistant requirements.

We have assisted Tankstore in carrying out the **planning and basic engineering of their major tankfarm** expansion project.

We are familiar with **dynamic analysis and equipment vibration**, and **dynamic resonance of structures** and foundations.

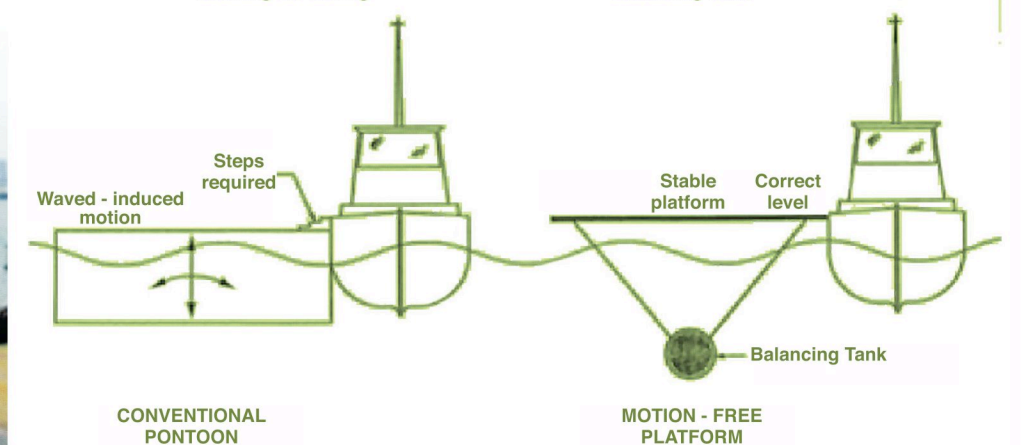
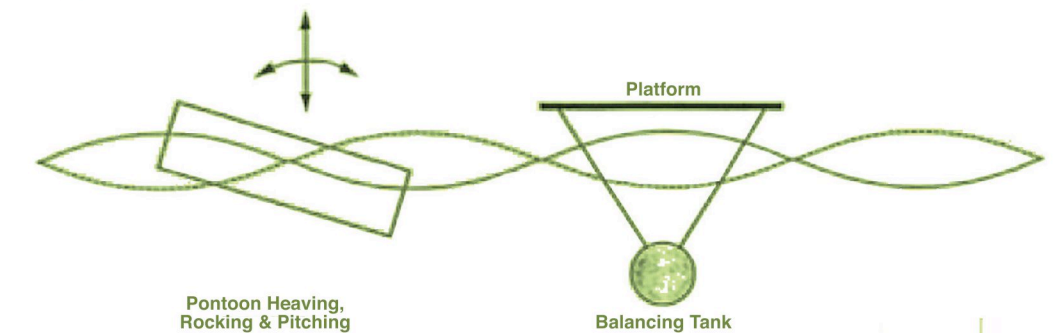
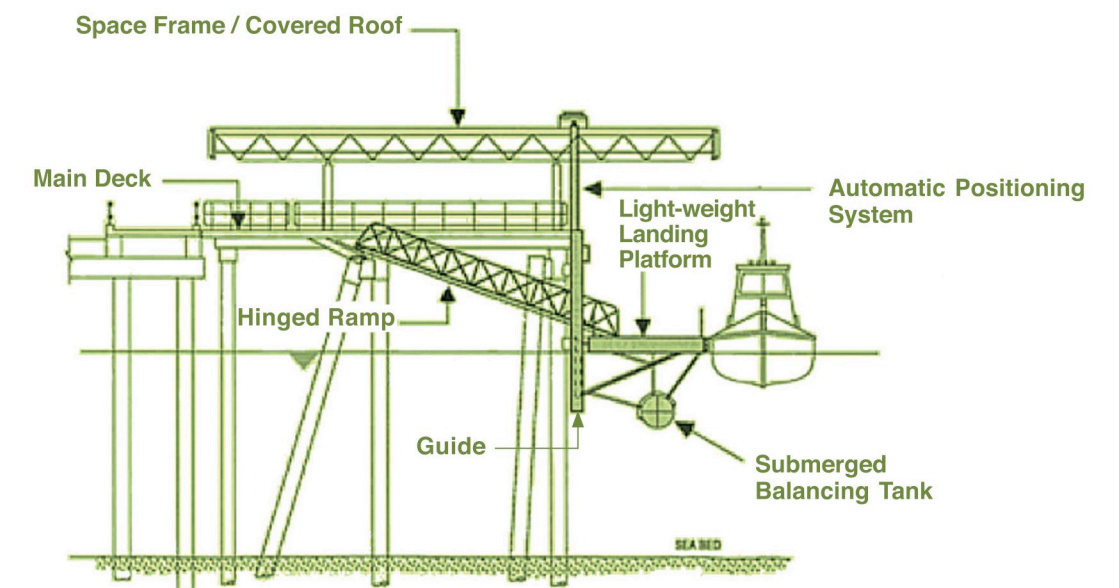
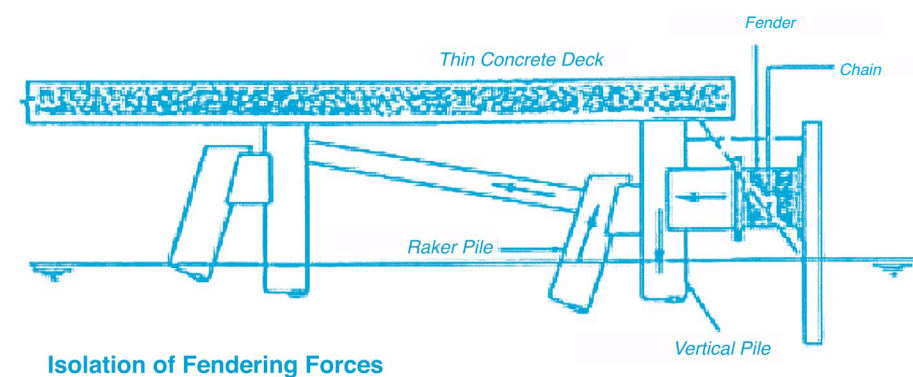
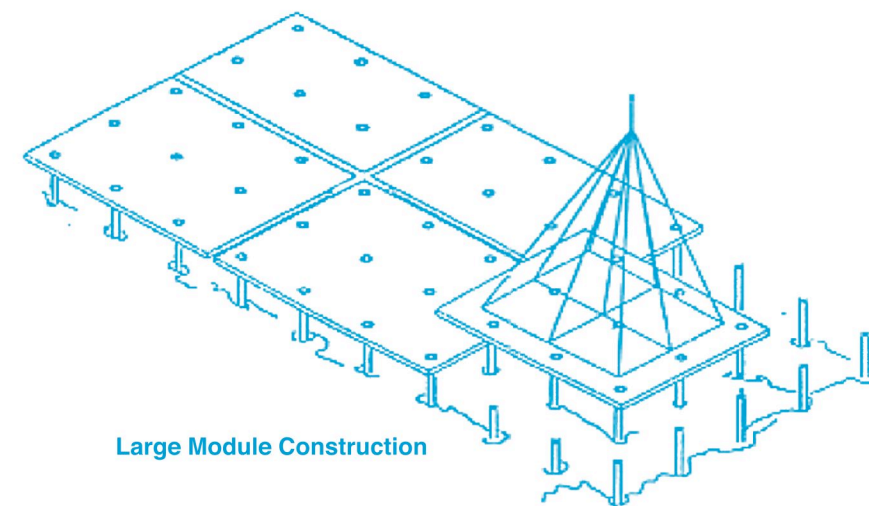


Prefabricated / Precast & Special Structures

AWARD WINNING ENGINEERING

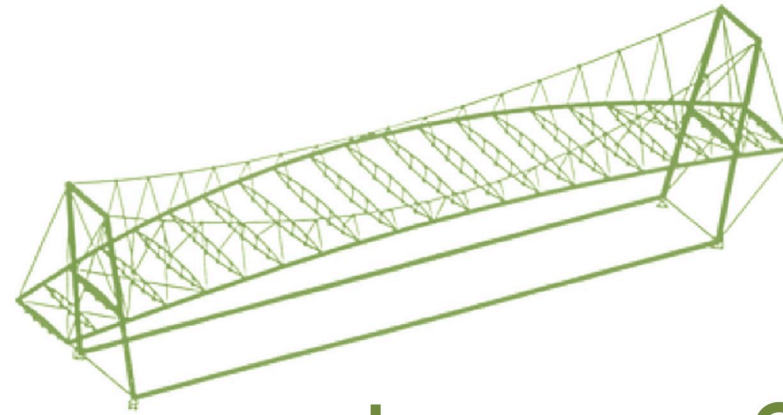
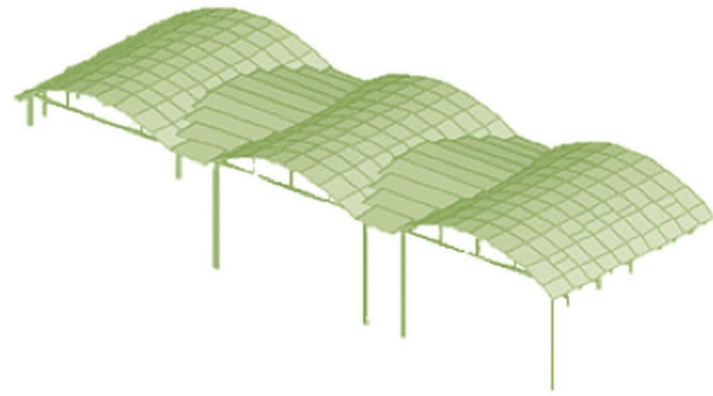
Albert Loh Consultants has a proud tradition of excellent engineering. Our projects have won some of Singapore's most prestigious design awards:-

- Our design for Mobil's Berth 7, which can accommodate up to 80k DWT vessels and handle 21 products, won the **Singapore Construction Industry Board's (CIDB) prestigious Best Buildable Design Award.**
- Our design for motion-free computer controlled ferry landings on Pulau Bukom and Pulau Pesek won the **Institution of Engineers Singapore Innovators Gold Award.**



Large Module Precast Flat Slab Construction

Motion free Computer Controlled Ferry Landing

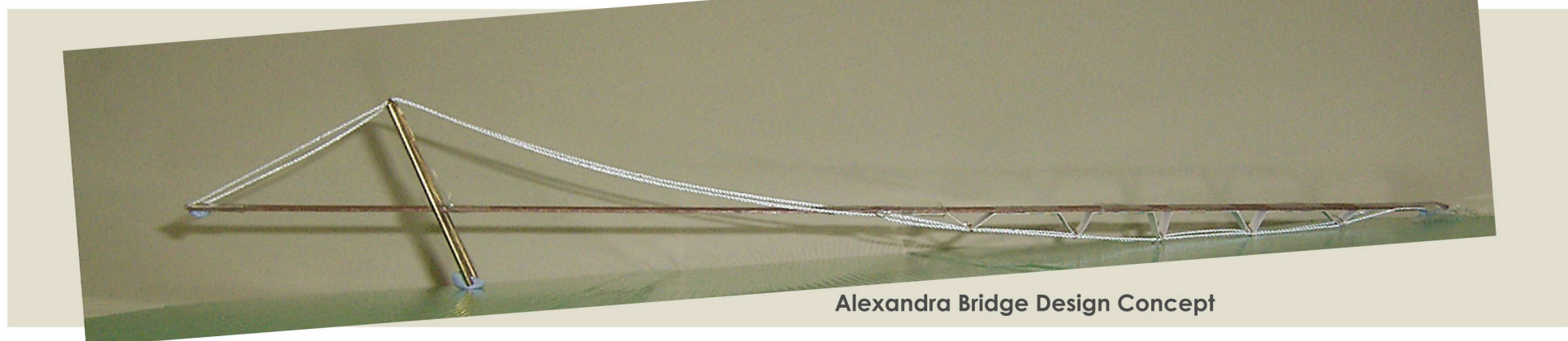
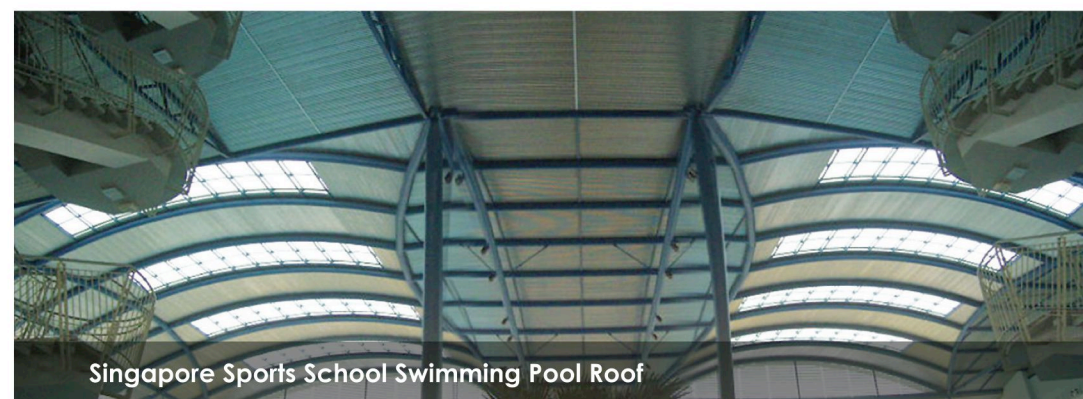
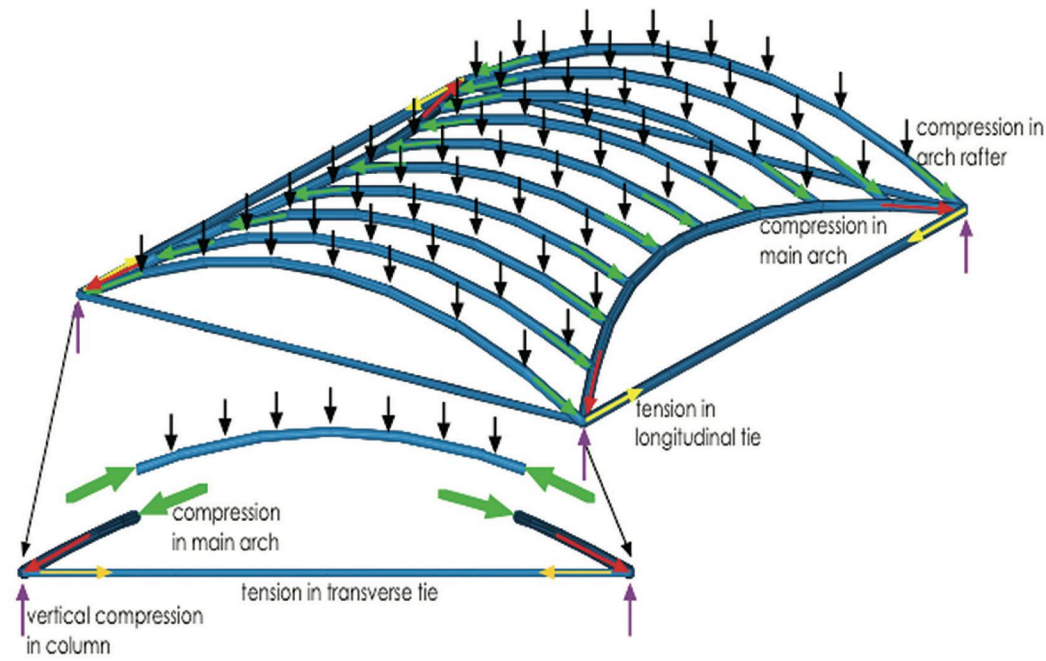


Long Span Structures

AWARD WINNING ENGINEERING

- Our design for long span steel roof of more than 160m long over main grandstand of Jalan Besar Stadium won **Singapore Structural Steel Society's Inaugural Structural Steel Design Award** for Distinguish Use of Structural Steel for its Aesthetics, Innovation and Cost Effectiveness.
- Our design for large span steel roof over swimming pools and sports hall of Singapore Sports School won Merit at **Singapore Structural Steel Society's Steel Design Award** for Creative and Innovative use of Steel.
- Our design for bridge over Alexandra Link won **Merit Prize at Urban Redevelopment Authority's Southern Ridge Bridge Design Competition**.

In addition, we have received letters and tokens of appreciation from our clients for excellent service.



Jalan Besar Stadium

Bishan Stadium

Singapore Sports School Swimming Pool Roof

Alexandra Bridge Design Concept

Project Gallery



Jetties for Oil Refinery Complex



Chemical Gas / LNG Loading & Unloading Jetty



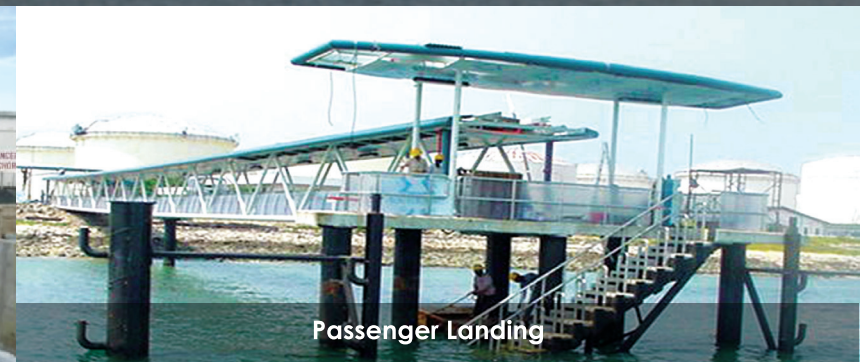
Sea Water Intake Structure



Coal/Biomass Handling Jetty to Multi-Utility Complex (with COGEN Plant)



Material Jetty with Heavy Lifting Crane and Barge Ramp for Heavy Vehicles



Passenger Landing



Computer Controlled Motion Free Passenger Landing



Controlled Discharge Facilities and Drainage Network to Existing Oil Refinery Complex



Piperacks For Interconnecting Pipe Lines to Jetty

Project Gallery



Jalan Besar Stadium



Tampines Swimming Complex



Singapore Sports School



Geylang East Swimming Complex



Sengkang Church



Refinery Office Building



Bishan Stadium & Sports Complex



Refinery Blast Resistant Control Room



Refinery Blast Resistant FAR Building

Our Clients

AIR LIQUIDE ENGINEERING SOUTH ASIA (ALENSA) PTE. LTD.

ANTARA KOH PTE. LTD.

BRITISH PETROLEUM (BP) SINGAPORE PTE. LTD.

BAN HOE SENG PTE. LTD.

BRUNEI SHELL PETROLEUM (BSP) CO SDN BHD

CALTEX SINGAPORE PTE. LTD.

CALTEX HONG KONG LIMITED

CAC METHODIST CHURCH IN SINGAPORE

CHEVRON (CALTEX SINGAPORE) PTE. LTD.

CHEVRON ORONITE PTE. LTD.

CHEVRON USA INC

CHANGI AIRPORT FUEL HYDRANT INSTALLATION PTE. LTD.

EDELEANU ASIA PTE. LTD.

ESSO SINGAPORE PTE. LTD.

EXXONMOBIL PTE. LTD

FOSTER WHEELER PTE. LTD.

GLAXOCHEM PTE. LTD.

HELIOS TERMINAL CORPORATION PTE. LTD.

HSL CONSTRUCTOR PTE. LTD.

HOLLANDSE CLUB

MOBIL OIL SINGAPORE PTE. LTD.

OVAL ASIA PACIFIC PTE. LTD.

PETROCHEMICAL CORPORATION OF SINGAPORE (PCS) PTE. LTD.

SINGAPORE SPORTS COUNCIL

Singapore Sports School

Bishan Stadium

Jalan Besar Stadium

Geylang East Swimming Complex

Hougang Sports Hall

Tampines Swimming Complex

Reconstruction at Kallang Basin Swimming Pool

Sailing Centre at Seletar Country Club

Breakwater at the National Sailing Centre

SEMBAWANG ENGINEERING PTE. LTD.

SHELL EASTERN PETROLEUM (SEPL) PTE. LTD.

SINGAPORE REFINING COMPANY (SRC) PTE. LTD.

SINGAPORE OXYGEN AIR LIQUIDE (SOXAL) PTE. LTD.

TANKER MOORING SERVICES PTE. LTD.

TANKSTORE PTE. LTD.

TUAS POWER UTILITIES PTE. LTD.

WORLEYPARSONS PTE. LTD.