CURICULUM VITAE

A. PERSONAL DETAILS

1. Name : Ir. Muhd Salmizi Bin Jaafar
2. Date of Birth : 01.06.1968 Place:
3. Sex : Female
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B. ACADEMIC QUALIFICATION

Bil	**Kelayakan** (*Qualification*)	**Tahun** (*Year*)	**Institusi** (*Institution*)
1.	M. Sc (Integrated Construction Project Management)		**Universiti Teknologi MARA Shah Alam, Selangor, Malaysia**
2.	B. Eng (Hons) Civil Engineering		**Universiti Teknologi MARA Shah Alam, Selangor, Malaysia**
3.	Diploma in Civil Engineering (UiTM)		**Universiti Teknologi MARA Shah Alam, Selangor, Malaysia**

C. **MEMBERSHIP**

- Member, Institution of Engineers, Malaysia
- Member, Board of Engineers, Malaysia
- Member, American Society of Civil Engineers

D. **FACILITATOR / SPEAKER**

No	Topics	Role	Organisation/Event/Venue
1	Communication and Liaison	Speaker	Lembaga Pembangunan Industri Pembinaan Malaysia (CIDB) *Supervisory Management for Young Engineers* UEM Learning Centre, UEM.
2	Forensic Engineering	Speaker	K Builders Training and Consulting *Basic Forensic Engineering* RISDA Training Centre, Port Dickson
3	Construction and Project Management	Speaker	Jabatan Keselamatan dan Kesihatan Pekerjaan Malaysia (DOSH) *Basic Civil Engineering and Project Management* Menara NIOSH, Bandr Baru Bangi.
4	Quaywall and Steel Pontoon Design	Speaker	Jabatan Kerja Raya Malaysia *MARITIM* Menara PJD, Kuala Lumpur
5	Building Design, Construction and Operations on Peat	Expert Speaker	Peat Technology Research Institute *IConCEES International Workshop 2015* UCTS, Sarawak

E. **PUBLICATION**

- Analysis of multi-column pier of bridge using STAAD.Pro under static and dynamic loading – *Springer*

- The behavior of rocking multi-column pier of unskewed bridge under seismic performance using quasi-static lateral cyclic loading – *Springer*

- Seismic Behaviour of unskewed two bridge piers under in-plane lateral cyclic loading - *URCAE (Universal Researchers)*

F. **SUMMARY OF EXPERIENCE**

Project Management

- Audit and Assessment for the Physical Infrastructure and Computerisation of 500 Secondary and Primary Schools in the Northern Region of Peninsular Malaysia under Ministry of Education.

- Resident Engineer for Kuala Lumpur Sentral Project; This is a huge infrastructure development with a concept of building a modern township with all facilities such a buildings, hotels, recreational facilities, modern transport facilities etc. As a part of this project certain new bridges and widening of existing bridges, to provide a smooth traffic in and out of this township into main Kuala Lumpur city, have been planned.

- Kertih Marine Facilities Expansion Project for Kertih Port Sdn. Bhd; Handled this huge marine construction project independently as Project Engineer (Project Management Consultant), for which the client is Malaysian Multinational oil major PETRONAS, in the South China sea, consisting offshore and Onshore construction costing around US$ 100 million. Providing all aspect of technical and management services inclusive of environmental management. Involved in this project from preparation of Project Layout, Preliminary Structural design, tender document preparation, and conceptual design drawings, cost estimation, tender evaluation and award.

- Asian Development Bank Road Employment Project for Settlement and Integration of Returning Refugees and Displaced Persons; Design-Build Contract for the Rehabilitation of the Kandahar to Spin Boldak Road, Afghanistan. – *Project Coordinator.*

Feasibility Study

- Feasibility Study of Coastal Road (Teluk Air Tawar to Kuala Kedah); The coastline of the State of Kedah has been neglected in terms of development, mainly due to poor accessibility and inadequate infrastructure. In recognition of this, the State Government of Kedah has initiated the development of the region along the coast in order to provide a more balanced and widespread development. To generate the development in this area, the Government of Malaysia had approved the construction of the coastal road from Kuala Sanglang to Kuala Kedah in 2001. The continuation of this road southwards from Kuala Kedah need to be studied in detail in order to determine its viability before the Government embarks into its construction. In this connection, the GOM through the Highway Planning Unit (HPU), Ministry of Works has directed a feasibility study be carried out for the proposed coastal road from Kuala Kedah in Kedah to Teluk Air Tawar in Seberang Perai Utara, Pulau Pinang. - *Project technical team for the planning and conceptual design of the alignment and bridges.*

Planning and Design (Building and other Structures)

- National Sports Complex; Checking the Contractor's as built drawings. Inspection of outdoor stadium comprising of precast beam at gallery portion and the staircases and more or less all the structural elements.

- Proposed Expansion of Perodua Audit Track; Civil and Structural design engineer.

- 3x700 MW Coal Fired Power Plant, Tanjung Bin, Johor; Design audit and professional endorsement for boiler steel structure.

Planning and Design (Bridge)

☐ Proposed Third Lane Widening for The North – South Expressway Between Rawang and Tanjung Malim; The stretch of the expressway between Rawang and Tanjung Malim, approximately 42 km in length, is traversing mostly through undulating ground. This stretch of expressway is currently provided with a dual 2-lane carriageway. PLUS intends to widen the mainline of this stretch to a dual 3-lane carriageway and other associated works such as interchange ramps widening and toll plaza extensions. - *Design team, Preparing the preliminary bridge design drawings*

- Machang Bypass; The Machang bypass involves construction of bridges over Sg. Sat, Sg. Pinang, Sg. Hala, Sg. Kweng Hitam and bridge over East-West Highway (Diamond Interchange). The portion is under Package E of the Kota Bharu – Kuala Krai Road construction. The superstructure consists of cast-in-situ deck slab over precast prestressed JKR standard beams resting over piers/abutments supported on piled foundation. The structures have been made continuous by providing wide in-situ RC diaphragm over pier. - *Project coordination, planning of concept of the road bridges.*

- Kuantan-Kertih Railway Project (Kemaman Branch Line); A 13 km Railway line project comprises of 3 nos. highway bridges to cross railway, 1 no. River Bridge carrying railway line, 1 no. Railway Bridge crossing roadways and 1 no. Railway Bridge crossing river and roadway. The bridges proposed with pre-tensioned and post tensioned beams and slab bridges with RC substructures and bored and pre-stressed spun pile foundations. - *Project coordination, planning of concept of the bridges.*

- Rawang – Ipoh Double Track Project; The Electrified Double Track metre gauge Project consists of double track railway lines from Rawang to Ipoh with a design speed of 160 kph & 20T axle load. Out of this 67.5km stretch that is from Bidor to Ipoh is our scope of work. - *Planning of concept and detail design of road bridges and pedestrian/cycle bridges.*

Planning and Design (Marine)

- West Port Development, Construction and Completion of 600 Metres Container Wharf 3 (CT3) at West Port, Pulau Indah, Port Klang, Selangor; Klang Multi Terminal wished to extend their facilities to Westport by the construction of an additional 600, 1200 or 1800 metres of container berths. Independent Consulting Engineer (ICE) for the project.

- Relocation of Passenger Barge Jetty Facilities at South Port, Port Klang for Asa Niaga Sdn. Bhd; This project was taken up by Port Klang Development Authority – Layout planning, structural design to handle barges unto 500 DWT fishing vessels, timber piles importing vessels and passenger boats. Planning and design of all necessary facilities like fendering systems, mooring dolphins, on shore administration building etc.

- 3 X 700MW Coal Fired Power Plant at Tanjung Bin, Johor (Package H – Coal Unloading Jetty); The project consists of jetty head of 330m x 30m suitable for bulk goods coal vessels of 35,000 to 150,000 DWT, including Handimax, Panamax and Cape size vessels with all facilities such as Mooring dolphins, fendering system, access bridges, approach bridges.

Planning and Design (Oil and Gas)

- LPG Bottling Plant for Petronas at Hai Phong, Vietnam; Design of Civil and Structural works LPG storage and distribution.

- LPG Bottling Plant at Pulau Indah, West Port, Port Klang for Mobil Malaysia Sdn. Bhd. and BP Malaysia Sdn. Bhd. Design of Civil and Structural works of a 6000 metric tonne LPG storage and distribution.

- Ethylbenzene and Stryrene Monomer Plant at Pasir Gudang, Johor; Design Engineer for civil and structural works of Stryrene Monomer and Ethylbenzene Plant at Pasir Gudang, Johor. The owner of this plant is Idemitsu Chemical (Malaysia) Sdn Bhd and the turnkey contractor is Niigata Engineering Co. Ltd. The plant covers an area of approximately 480 hectares with the capacity of production of 200,000 MT/year of stryrene monomer and 220,000 MT/year of ethylbenzene.

G. **DETAILS OF SEQUENTIAL EXPERIENCE**

MINISTRY OF HIGHER EDUCATION, MALAYSIA (MAY 2015 – TODATE)

Project Leader (NBOS-PILS)

Appointed as a Project Leader (Technical and Industrial Training) of NBOS-PILS under Ministry of Higher Education, Malaysia. The NBOS-

PILS, which stands for National Blue Ocean Strategy - Program Inisiatif Libat Sama (joint initiative programme), is a joint effort by the Education and Higher Education Ministries with the help of industries. The NBOS-PILS was initiated as a means for lecturers in the professional fields of engineering, architecture, quantity surveying, law and other fields to be engaged in special tasks to help in issues that affect development of schools.

UNIVERSITI TEKNOLOGI MARA (JUNE 2011 – TODATE)

Senior Lecturer

Job Scope

To carry out research, teaching and administration within the Department of the Faculty of Civil Engineering, especially in the areas of structural engineering and construction/project management. Areas of expertise are bridge/structural engineering and project management.

Main duties and responsibilities:

- To teach at undergraduate and graduate level in areas allocated by the Head of Department and reviewed from time to time by the Head of Department.

- To carry out research and produce publications, or other research outputs, in line with personal objectives agreed in the Staff review process and to obtain research-funding support and to engage with the broader scholarly and professional communities.

- To supervise or assist with supervision of undergraduate, taught graduate (Masters) students in Bridge Engineering and to contribute to the development, planning and implementation of a high quality curriculum.

- To assist in the development of learning materials, preparing schemes of work and maintaining records to monitor student progress, achievement and attendance. To participate in the development, administration and marking of exams and other assessments.

- To participate in departmental and faculty seminars aimed at sharing research outcomes and building interdisciplinary collaboration within and outside the department and to participate in the administration of the department's programmes of study and other activities as requested.

- To contribute to departmental, faculty, or facilities working groups or committees as requested and to maintain own continuing professional development.

Involved in engineering consultancy services focussed on providing 'hands on' and regulatory expertise in structural design and bridge engineering. Some projects undertaken are as below:

1) Appointed as a University's Internal Auditor – Responsible for design/project review for projects undertaken by the University. The projects that to be audited were selected by Unit Audit Dalaman (Internal Audit Unit of the University).

2) Independent checker – As a project leader (registered under Research Management Institute of UiTM) investigating the structural integrity of the three (3) sample houses selected by a housing developer (Kebunmaju Sdn Bhd) in Shah Alam, Selangor.

3) Contract Research – As a project leader (registered under Research Management Institute of UiTM) for Field Study On Track Corrugation For Kelana Jaya Line.

4) Contract Research – As a project leader (registered under Research Management Institute of UiTM) investigating the structural integrity for Integrity Study Of QC26 of Northport

5) Services and Evaluation – As a Project Leader (registered under Research Management Institute of UiTM) for evaluation of material and structural characteristics of fibre-reinforced concrete for Asia Powermix (M) Sdn Bhd.

CREST ONE CONSULT (JANUARY 2010)

Principal

Overall in charge of all activities ranging from project management, conceptual design and detailed design of the following projects undertaken by the company:

1. Cadangan Perlaksanaan Projek Pembesaran Loji "KR2 Debottlenecking" di Atas Tanah Lot 3679, 3825, 4462 & 1585 Mukim Kertih, Kemaman, Terengganu. Client: Toyo Engineering & Construction Sdn BHd

   Scope of work: Independent Checker

2. Cadangan Pembangunan Perumahan Yang Mengandungi 28 Unit Rumah Berkembar dan 2 Unit Rumah Sebuah Di Lot 1832 Mukim Labu, Daerah Sepang, Selangor Darul Ehsan

   Client: Mahakerjaya Construction Sdn Bhd
   Scope of work: Engineering Design for Civil and Structural Works

3. Cadangan Pembangunan dan Menyiapkan 11 Unit Ruang Pameran Kereta, Sebuah Dewan Penjualan Kereta, Medan Selera dan Kerja-kerja Berkaitan di Lot PT20, Jalan 14/16, Seksyen 14, 40000 Shah Alam, Selangor Darul Ehsan

   Client: Westland Alliane (M) Sdn Bhd
   Scope of work: Engineering Design for Civil and Structural Works

4. Cadangan Kerja-kerja Pembaikan cerun di KM 45, Jalan Gua Musang ke Jelawang, Gua Musang, Kelantan Darul Naim.
   Client: Ambangan Engineering Sdn Bhd
   Scope of work: Engineering Design for Civil Works

5. Proposed Design and Build of Double Storey Link House at No. 2, Jalan Aminuddin Baki, Taman Tun Dr Ismail, Kuala Lumpur.
   Client: Gabungan Rekabina Sdn Bhd
   Scope of work: Engineering Design for Structural Works

6. Cadangan Membina dan Menyiapkan Kolej Matrikulasi Kelantan, di Atas Sebahagian Lot 3317 (80 Ekar) Mukim Merbau, Daerah Pasir Puteh Kelantan
   Client: Jabatan Kerja Raya
   Scope of work: Engineering Design and Supervision for Civil and Structural Works

7. Second Penang Bridge Land
   Expressway Package 3B – Batu
   Kawan Expressway Client:
   Perunding Kejuruteraan MPA

   Scope of work: Design Checker (Engineering Design for Bridge works)

8. Cadangan Jalan Utama, Jeli, Kelantan

   Client: Jurutera Perunding Nusa Sekutu Sdn Bhd
   Scope of work: Conceptual and engineering detailed design for Bridge at CH140.00

ACE VECTOR SDN BHD (MARCH 2009 - DECEMBER 2009)

(Strategic Alliance of Opus)

Principal Engineer (Mar 2009 – Dec 2009)

Job Scope

Lead Engineer, responsible for the planning of concept and detailed engineering design of Chrouy Changvar Bridge in Cambodia and preparation of drawings and bill of quantities.

Design review team; responsible for design review of the following bridge engineering design works in accordance with the design standards:

- Proposed Interchange and Buildings at Bukit Gambir

- South Klang Valley Expressway – due diligence.

OPUS INTERNATIONAL (M) BERHAD (NOVEMBER 2005 – MARCH 2009)

Manager/Project Coordinator (Nov 2005 – Mar 2009)

Job Scope

- To prepare records of project activities; oversee and ensure the timely processing in and the delivery of required materials for calling tender. To maintain liaison between the Employer, Consultants, Contractor and the Project Team (Site) at various stages of work to resolve problems.

- To assist the Project Manager in project budget planning and development and to review bridge engineering drawings and to provide comments as appropriate.

- To coordinate project work plan or project schedule; monitor, review, and evaluate progress. To coordinate and attend meetings and to follow-up on engineering and contractual issues; establish and maintain internal and external contacts as necessary.

- To prepare notes of discussion, minutes of meeting and fortnightly progress report to the Employer. Other duties as directed by the HOD.

Proposed Widening of the Existing Penang Bridge

General responsible for the project management of the proposed widening of the existing Penang Bridge. To coordinate the project to ensure the project is implemented in full

compliance with the contract. Monitoring the progress and cost of the works and taking appropriate actions to ensure the project is completed within the stipulated schedule and budget respectively. Responsible for coordinating and reviewing bridge engineering drawings and other engineering related designs and project management tasks.

MINCONSULT SDN BHD (JUNE 1995 – NOVEMBER 2005)

(A multi disciplinary engineering consultation company providing a comprehensive range of consulting services in civil, structural, mechanical, electrical, petrochemical and environmental fields.)

Assistant Manager (May 2002 – Nov 2005)

Job Scope

- To take directions from General Manager.
- Responsible only for technical aspects of the projects undertaken.
- To assign task to staff under Assistant Manager.
- Preparation of proposals and follow-up action.
- To assist General Manager in staff assessment.
- Liaison with other divisions.
- Attend meetings with clients, architects, etc.

Proposed Third Lane Widening for The North – South Expressway Between Rawang and Tanjung Malim.

The stretch of the expressway between Rawang and Tanjung Malim, approximately 42 km in length, is traversing mostly through undulating ground. This stretch of expressway is currently provided with a dual 2-lane carriageway. PLUS intends to widen the mainline of this stretch to a dual 3-lane carriageway and other associated works such as interchange ramps widening and toll plaza extensions.

The stretch consists of 6 nos. of road bridges and 19 nos. of single and twin cell vehicular box culvert. The existing bridge will be widened with the road in order to meet the prerequisite of the third lane widening. The new bridge deck is connected structurally by in-situ stitching using delayed closure concreting with the existing deck. However, the substructure and foundation are kept separate i.e. not connected structurally.

- Responsible for carrying out desk studies of all existing data and information relevant to the works including as-built drawings, available topography surveys and soil investigations.

- Preparing the preliminary bridge design drawings and submit to PLUS for approval, together with the Preliminary Design Report describing among others the design philosophy.

- Preparing Preliminary Bills of Quantities and undertaking a preliminary cost estimate for submission to PLUS.

Emergency Infrastructure and Reconstruction Project. Contract 2: Rehabilitation of Road from Balkh via Sheberghan to Andkhoy, Afghanistan (182km).

The 110 km Mazar Sharif – Sheberghan road section and the 48 km section of the Sheberghan – Andkhoy road (72 km) are largely deteriorated and require major pavement strengthening. The remaining 24 km section of Sheberghan – Andkhoy road requires embankment rehabilitation and construction of asphalt pavement.

- Project Coordinator and design review team; responsible for review and approve the detailed engineering design by the civil works contractor. Review the submitted documents in accordance with the design standards, criteria and conceptual design provided in the contract.

Asian Development Bank Road Employment Project for Settlement and Integration of Returning Refugees and Displaced Persons. Design-Build Contract for the Rehabilitation of the Kandahar to Spin Boldak Road, Afghanistan.

The project road is about 105 km in length. It is located in south -eastern Afghanistan, starting in Kandahar city and extending to Spin Boldak, close to the border of Balochistan Province of Pakistan. There are five bridges and 182 culverts along the project corridor.

- Project coordination, Design Review team.

3 X 700 MW Coal Fired Power Plant at Tanjung Bin, Johor (Package H - Coal Unloading Jetty)

Project coordination; deeply involved in this project from preparation of jetty layout, preliminary structural design of dolphin, trestle, fender system for 4500 kN, conceptual design drawings, and cost estimation.

Feasibility Study of Coastal Road (Teluk Air Tawar to Kuala Kedah)

The coastline of the State of Kedah has been neglected in terms of development, mainly due to poor accessibility and inadequate infrastructure. In recognition of this, the State Government of Kedah has initiated the development of the region along the coast in order to provide a more balanced and widespread development. To generate the development in this area, the Government of Malaysia had approved the construction of the coastal road from Kuala Sanglang to Kuala Kedah in 2001. The

continuation of this road southwards from Kuala Kedah need to be studied in detail in order to determine its viability before the Government embarks into its construction.

In this connection, the GOM through the Highway Planning Unit (HPU), Ministry of Works has directed a feasibility study be carried out for the proposed coastal road from Kuala Kedah in Kedah to Teluk Air Tawar in Seberang Perai Utara, Pulau Pinang.

Twenty-two (22) numbers of bridges are required to cross the permanent obstacles such as rivers and canals. The bridge comprises of a dual carriageway 2 -lane road of 3.5m wide each with 3.0m wide shoulders on both sides of the deck. This is on line with the requirements of the government, which requires the proposed bridges to be of a 4-lane structure (inclusive of shoulder) in anticipation of future development within the study area. The approximate width of the 4-lane structure between parapets is 13.9 m and the proposed width conforms to the requirement of JKR R5 geometric standard.

The superstructures consist of cast- in-situ deck slab on precast post-tensioned I-beams / T-Beams resting on elastomeric bearings placed on abutment and pier caps. The sub-structures consist of solid wall type abutments and piers resting on pile foundations. The abutments consist of solid wall type resting on large pilecap to accommodate the base for long and high wing wall. As the piers for Sg. Merbok is very high (approx. 24 m), a box-type of pier wall has been proposed.

- Project technical team, responsible for the planning and conceptual design of the alignment and bridges.

Machang Bypass

The Machang bypass involves construction of bridges over Sg. Sat, Sg. Pinang, Sg. Hala, Sg. Kweng Hitam and bridge over East-West Highway (Diamond Interchange). The portion is under Package E of the Kota Bharu – Kuala Krai Road construction. The superstructure consists of cast-in- situ deck slab over precast prestressed JKR standard beams resting over piers/abutments supported on piled foundation. The structures have been made continuous by providing wide in-situ RC diaphragm over pier.

- Project coordination, responsible for the planning of concept and detail design of 6 nos. bridges over rivers and bridge over East-West Highway (Diamond Interchange), preparation of specification, drawings and bill of quantities and tender documents. Trained graduate engineers under supervision.

Kuantan-Kertih Railway Project (Kemaman Branch Line)

A 13 km Railway line project comprises of 3 nos. highway bridges to cross railway, 1 no. of River Bridge carrying railway line, 1 no. of Railway Bridge crossing roadways and 1 no. of Railway Bridge crossing river and roadway. The bridges proposed with pre-tensioned and post tensioned beams and slab bridges with RC substructures and bored and pre-stressed spun pile foundations.

- Project coordination, responsible for the planning of concept and detailed engineering design of the bridges and preparation of specification, drawings and bill of quantities. Trained graduate engineers under supervision.

Senior Engineer (June 2000 – April 2002)

Job Scope

- Carry out designs and to assist the Principal Engineer or Manager in the technical aspects of the projects.
- To check designs carried out by other staff.
- To assist Manager / General Manager in assessment of subordinate staff.
- Liaison with other divisions.
- Attend meetings with clients, architects, etc.

Audit and Assessment for the Physical Infrastructure and Computerisation of 500 Secondary and Primary Schools in the Northern Region of Peninsular Malaysia under Ministry of Education

- Project Management
- Gathering pertinent facts supported by sufficient evidence including pictorial on the implementation of the project at all 500 sites.

West Port Development

Construction and Completion of 600 Metres Container Wharf 3 (CT3) at West Port, Pulau Indah, Port Klang, Selangor.

Klang Multi Terminal wished to extend their facilities to Westport by the construction of an additional 600, 1200 or 1800 metres

of container berths. The wharf deck has been designed to transfer berthing forces of 80,000 DWT (TEU Capacity of 6,000 TEU) to “strong points” formed by group of raking piles. The forces would be resisted by portal action of the piles and by tension and compression forces by raked piles

Composite concrete construction has been adopted for the wharf deck slab, pile beams, crane beams, trench beams etc. using PC prestressed soffit units with insitu concrete topping.

- Independent Consulting Engineer (ICE) for the project.

- Reviewing, monitoring (construction and commissioning & handover) and overseeing that the project is carried out according to established engineering and commercial practices.

Rawang – Ipoh Double Track Project

The Electrified Double Track metre gauge Project consists of double track railway lines from Rawang to Ipoh with a design speed of 160 kph & 20T axle load. Out of this 67.5km stretch that is from Bidor to Ipoh is our scope of work. The total construction cost of the project from Bidor to Ipoh is USD 237 million. The bridge requirements for this stretch are as follows: -

- 12 nos. railway bridges, carrying trains over permanent obstacles.

- 15 nos. road bridges, carrying general highway traffic over railway.
- 7 nos. motorcycle bridges, carrying motorcycles and pedestrian traffic over railway lines.

The superstructure (all road bridges, motorcycles and 2 rail bridges) consists of cast -in-situ deck slab over piers supported by piled foundations. The rest of the rail bridges consist of solid slab cast monolithically with pile/column to form a frame type of continuous structures.

- Responsible for planning of concept and detail design of road bridges and pedestrian/cycle bridges.

- Deeply involved in design of all the structural components of the road bridges and preparation of working drawings also.

- Taking off Quantities.

- Liaison with Local Authorities.

Perlis Combined Cycle Power Plant Project

- Responsible for planning of concept and detail design of access bridge to project site.

- Taking off Quantities.

Study and Design of Bogak Pump House Bagan Serai Project

- Responsible for the design of bridge crossing at CH 870m of Bogak Canal for agriculture vehicles.

- Taking off Quantities.

Kota Bharu – Kuala Krai Highway Project

- Assessment of Bridge designs to ensure compliance with BD37/88 and BS5400: PART 4:1990 for various span simply supported superstructures of precast prestressed beam and insitu slab design, supported on piled substructures.

Kuala Lumpur Sentral Project

This is a huge infrastructure development with a concept of building a modern township with all facilities such as buildings, hotels, recreational facilities, modern transport facilities etc. As a part of this projects certain new bridges and widening of existing bridges to provide a smooth traffic in and out of this township into main Kuala Lumpur city has been planned. These bridges, about 6 nos., are located in densely developed areas requiring good skills in minimum disturbances to the existing public utility services. RC voided deck slabs with spans of 20m to 25m and pre-stressed post-tension insitu curved in plan box girder beam bridges of 50m spans are proposed. Substructures comprised of RC construction and pile foundations.

- Resident Engineer for the project. Responsible for the construction supervision of external roads phase 1A.

- Responsible for the construction supervision of external roads phase 1A. Checking and supervision of construction of two bridges, ramps, reinforced earth wall and reinforced concrete wall, and roads.

- Review and checking of construction drawing and other details to ensure that these works are made as per design standard and specification.

- Monitor earthworks and ground improvement for Retaining Walls and Bridge approaches, piling works for the ramps and bridges, drainage and culvert construction activities.

- Prepare and finalized interim progress payment prior submission to client and attending construction meeting with the client and contractor.

Design Engineer (June 1995 – May 2000)

Kemabong Steel Bridge Project

- Responsible for the design of 210-meter long continuous steel composite bridge with spans ranging from 40 to 80m. The superstructure used is 4.00-meter plate girder in 80m spans and 2.65-meter plate girder with 250mm thick deck slab. The substructure is RC piers and pile foundations. The bridge was designed as continuous over intermediate supports and two 75mm expansion joints provided over the abutments.

Kuantan-Kerteh Railway Project

A 77km Railway line project comprises of 13nos. highway bridges to cross railway, 9nos. river bridges carrying railway line and 3nos. railway bridges crossing roadways. The bridges proposed with pre -tensioned beam and slab bridges with RC substructures and bored and pre-stressed spun pile foundations - Span-by-Span construction with structurally continuous slab providing continuity.

- Involved in design and analysis of substructures and superstructures of road bridges by using Pile3D and Staad III respectively.

- Liaison with Local Authorities.

Rehabilitation and Improvement Programme for Federal Roads in Johor (Package IV) - Bridge over Sg. Ambat.

- Assessment of Bridge designs to ensure compliance with BD37/88 and BS5400:PART 4:1990 for four spans simply supported superstructures of precast prestressed beam and insitu slab design, supported on piled substructures.

East West Highway Project, Phase II – West Section (Package IV) – from Grik to Kupang – Bridge Over Sg. Tiak.

- Responsible for the design of 11nos. of precast prestressed pretensioned and post-tensioned bridges of spans ranging from 20m to 35m. – RC substructure and pile foundations - Span-by-Span construction with structurally continuous slab providing continuity.

East West Highway Phase II – West Section (Package V)

- Responsible for the design of 5nos. of precast prestressed pretensioned and post-tensioned bridges of spans ranging from 20m to 35m. – RC substructure and pile foundations - Span-by-Span construction with structurally continuous slab providing continuity.

Kertih Marine Facilities Expansion Project for Kertih Port Sdn. Bhd.

Handled this huge marine construction project independently as Project Engineer, for which the client is Malaysian Multinational oil major PETRONAS, in the South China Sea, consisting offshore and onshore construction costing around US$ 100 million. Provide all aspect of technical and management services inclusive of environmental management. Preparation of project payout, preliminary structural design, tender document preparation, conceptual design drawings, cost estimation, tender evaluation and award.

The project consists of 4 Jetties (53m. x 24.5m.) to handle Petrochemical, Gaseous products, Ammonia etc., hazardous materials with all facilities such as Berthing dolphins, Mooring dolphins, fendering system, access bridges, approach bridges, Coastal protection works etc., approximately 4 million cubic meters of dredging works, Groyenes, Pipeline protection works, Onshore Administration Building, Access Road, Coastal Access Road etc**.**

- Responsible for the design of Fender System for 40,000 DWT, Design of Berthing Dolphin for 40,000 DWT, E&I Building, Berth B3b Layout, Access Bridges to Mooring Dolphin and Berthing Dolphin, RC Road Crossing, Guard Houses using STAAD III.

- Taking Off Quantities of Berths.

- Assisting in preparing tender proposal.

- Reviewing the Design Specification, Design Calculations and Engineering Drawings.

- Acting as QA Engineer for the project. Implementation of project quality system on document control and liaison with Local Authorities.

National Sports Complex

- Checking the Contractor's as built drawings. Inspection of outdoor stadium comprising of precast beam at gallery portion and the staircases and more or less all the structural elements.

Sungai Buloh Development Project.

- Sectional properties calculations for precast pretensioned concrete beam for underpass bridge using Microsoft EXCEL Package. Design of bridge involving grillage analysis using LUSAS finite element software suitable for analysis of multispan precast pretensioned concrete beam.

- Taking off quantities for overpass bridge.

Kuala Lumpur Sentral Project

- Responsible for the design of bridge involving grillage analysis using LUSAS finite element software suitable for analysis of multispan continuous reinforced concrete voided slab structure with varying deck width ties into existing road bridge.

Relocation of Passenger Barge Jetty Facilities at South Port, Port Klang for Asa Niaga Sdn. Bhd.

This project was taken up by Port Klang Development Authority – Layout planning, structural design to handle barges unto 500 DWT fishing vessels, timber piles importing vessels and passenger boats. Planning and design of all necessary facilities like fendering systems, mooring dolphins, on shore administration building etc.

- Responsible for the design of jetty, passenger jetty and bakau loading bay, periodic site supervision and attending site progress meeting.
- Liaison with Local Authorities.

Proposed Expansion of Perodua Audit Track

- Responsible for the design of Civil and Structural works. Preparation of detailed engineering design and drawings.

- Checking the Contractor's as built drawing and liaison with Local Authorities.

- Liaison with Local Authorities.

LPG Bottling Plant for Petronas at Hai Phong, Vietnam

- Involved in design of Civil and Structural works LPG storage and distribution.

LPG Bottling Plant at Pulau Indah, West Port, Port Klang for Mobil Malaysia Sdn. Bhd. and BP Malaysia Sdn. Bhd.

- Involved in design of Civil and Structural works of a 6000 metric tonne LPG storage and distribution.

- Liaison with Local Authorities.

Ethylbenzene and Stryrene Monomer Plant at Pasir Gudang, Johor

- Design Engineer for civil and structural works of Stryrene Monomer and Ethylbenzene Plant at Pasir Gudang, Johor. The owner of this plant is Idemitsu Chemical (Malaysia) Sdn Bhd and the turnkey contractor is Niigata Engineering Co. Ltd. The plant covers an area of approximately 480 hectares with the capacity of production of 200,000 MT/year of stryrene monomer and 220,000 MT/year of ethylbenzene.

- Design of Equipment Foundations, Pipe Sleepers and Pipe Rack Foundations, Oily Water Drainage, Waste Water Treatment Foundations, Water Treatment Facilities Foundations, Heat Exchanger Foundations, Retaining Walls.

- Liaison with Local Authorities.

H. COURSES/TRAINING ATTENDED

COURSES

(M. Sc in Integrated Construction Project Management)

Code	**Courses**
DCM 613	Design Process & Contract Management
ISP618	Integrated Simulation Project 1 (Management of Construction Operations)
RFM 616	Risk & Financial Management
IIC 614	Integrated Information Technology in the Construction Industry1
ECM 651	Evaluation of Construction in the International Market

ISP658 Integrated Simulation Project 2
HRM 655 Human Resource Management
CSB 662 Corporate Strategic Management & Organizational Behavior in the Construction Industry
MPE 657 Management of Property and the Environment
IIC 664 Integrated Information Technology in the Construction Industry2
ISP 718 Integrated Simulation Project 3
DIS 709 Dissertation

TRAINING

a. ISO 9000 Internal Quality Auditing conducted by SIRIM Berhad.

b. Internal Quality Auditor of Minconsult Sdn. Bhd.

c. Training of Health, Safety and Environment Management.

d. Internal Quality Auditing 'Refresher' Training.

e. ISO 9001:2000 Auditor Transition Training.

f. Technical Education Programe on Geosynthetics

g. Analysis of the Structure organised by Minconsult Sdn Bhd

h. Safety Induction Course organised by Minconsult Sdn Bhd

i. Engineering Management Practice organized by Board of Engineers Malaysia.

j. Seminar on Design and Construction of Pre-stressed Concrete Cable Stayed Bridges organised by Jabatan Kerja Raya Malaysia.

k. Performance Management System organised by UEM Academy. 4E + 1P Jack Welch's Way Training organised by UEM Academy Executive Present organised by Numoment.

l. Disaster Management & Mitigation on Earthquake Risk for Building in Malaysia organised by Universiti Teknologi Malaysia

m. Post Tensioned Building – Beyond the Basics organised by VR-CAM Technologies Sdn Bhd

n. Introduction to Building Information Modelling (BIM) for Professionals organised by Institution of Engineers Malaysia