



Mechanical & Electrical



hss

ENGINEERS

total engineering services



Mission Statement

“To be recognised as Malaysia’s premier one stop one engineering service provider, as reflected in our continuous outstanding contribution to the development of major infrastructure; and maintain this position through excellent services and superior technical quality, innovation and performance”.

This vision is realised through:

Personal involvement of the directors to provide strong leadership to ensure timely and speedy implementation of both corporate objectives & goals.

Existing effective and efficient corporate structure to provide maximum operating efficiencies to the Group.

The vast base of experience within the Group that helps to leverage its niche in the engineering arena.

The availability of capital within the Group to provide adequate funding strength for Group operations.

Continuous quality engineering services upgrading through constant re-engineering process and training while maintaining the existing standard of professionalism.



Corporate Information

HSS Engineers Berhad (HEB or the Company) is an investment holding company which was incorporated on 23 January 2015 under the Companies Act 1965 as a private limited company under the name of HSS Engineers Sdn. Bhd. before it converted into a public limited company. The Company assumed its present name on 31 March 2015. The Group operates from 3 main offices which are based in Kuala Lumpur and Penang in Malaysia as well as Chennai in India. HEB, had on 28 March 2018, completed the acquisition of SMHB Engineering Sdn Bhd (SMHB) which provides engineering services and project management consultancy for the water sector.

Its associate company, HSSM&E was established in 2004, registered with the Malaysian Registration of Engineers Act 1967 as an engineering consultancy practice under the Mechanical and Electrical category and is also registered with the Ministry of Finance. HSSM&E is accredited with ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007. HSSM&E is a firm with shared values, an open culture, commitment to services & quality, provision of high standards of professionalism and business ethics, along with a leading edge approach to delivering a sustainable future.

Our expertise includes project management, master planning, preliminary and detailed engineering designs, construction supervision, contracts administration, feasibility studies for major infrastructure project in South East Asia, Middle East and North Africa (MENA) and South Asia. The Group's results are evident from the track records of vast experience and timely delivery of projects in addition to the established good working relationships with clients from both the public and private sectors.

As a total engineering solution Firm with a global total workforce of over 1000 staff of which more than half are engineers, HEB is able to draw on resources within and is well equipped to handle projects of varying magnitudes. HEB is confident that as a group, similar engineering consultancy services can be provided in other parts of the world mainly in the transportation and urban infrastructure development projects. The group is confident that with the experience and track record, it will be able to provide a high standard of engineering services to any client.



M&E Capability

HSS Mechanical and Electrical was incorporated to provide mechanical and electrical services by our highly experienced professionals in Engineering Consultancy for several prestigious projects in Malaysia and abroad.

Design

We have designed the mechanical and electrical system for various types of project developments such as Ports, Airports, Mixed Developments, Highways, Hospitals, University Campus and High-rise building complexes.

Our design capabilities include the following :

Electrical and Extra Low Voltage Systems

- High Voltage & Medium Voltage System
- Low Voltage & Extra Voltage System
- Lightning and Surge Protection System
- ICT Infrastructure
- Telecommunication System
- Integrated Building Management System
- Highway, public and tunnel lighting
- Power generation

Mechanical Systems

- Mechanical Systems
- Air Conditioning and Ventilation
- Fire Fighting and protection System
- Plumbing and Sanitary Piping System
- Vertical Transportation
- Medical Gases & Compress Air System
- Gas Distribution System
- Mechanical Handling Equipment

Deliverables

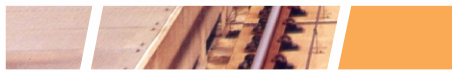
Through shared group synergy and requisite knowledge, we ensure our services are always at the forefront of world trends to provide safe, innovative, reliable, efficient and cost effective engineering designs to clients.

Construction Supervision

Supervision will be carried out by our highly experienced professionals from initial construction stage until handing over for operation. We facilitate and manage project completions successfully on time taking into consideration of cost and quality.

Pre-Contract and Post Contract Management

We also provide the Pre and the Post Contract administration assistance from project inception until the project handing over.



Services



Project Identification and Assessment of Needs

Location Studies

Land and Geotechnical Survey

Technical and Engineering Feasibility

Environmental Impact Assessment

Economic and Financial Appraisals

Preliminary and Detailed Design

Value Engineering

Specifications and procurement

Contract Documentation and Administration

Project Scheduling

Material Testing and Inspection

Quality Control and Construction Supervision

Cost and Budget Control

Total Project Management

M & E Experience

SOSCO Rehabilitation Centre in Alor Gajah, Melaka

Description : The Rehabilitation Centre is one of the first in Malaysia and is considered a high profile project comprising of Administration Building, Medical rehabilitation Block, Hostel and Accommodation, Vocational Rehabilitation Block, Allied Training College and Sports Complex. The project occupying within 53 acres of land located in primer area of Melaka.

Services : HT and Telephone Services Infrastructure, Sub-stations, Building Services, ELV, Mechanical Services, Medical Equipment, Tendering Exercise, Site supervision and Construction up to DLP

Project Value : *RM 163 mil (USD 47 mil)*

Upgrading and Improvement of Twenty-Four (24) Ampang Line Stations

Description : The proposed upgrading of the twenty four (24) station on the Ampang LRT Line to enhance the service provided, JTK Consult JV with HSSI M&E undertook the Consultancy Services for the upgrading works.

Services : Provide professional engineering services relating to all specialized and detailed design as well as supervision of the works. Civil and Structural Engineering (JTK Consult), Mechanical and Electrical Engineering (HSSM&E)

Project Value : *RM 12 mil (USD 3 mil)*

Kuantan Port City Masterplan Study, Kuantan

Description : To accelerate the growth of the East Coast Economic Region(ECER) in a viable, equitable & sustainable manner the East Coast Economic Region Development Council (ECERDC) is implementing the ECER Masterplan. Kuantan Port City (KPC) is the catalyst project for the ECER. It is strategically located at the apex of the prime industrial development corridor between KL and Kuantan. Total area of the development is approximately 12,700 ha.

Services : Masterplan for C&S and M&E infrastructure

Project Value : *RM 65 bil (USD 19 bil)*



M & E Experience

Proposed Titiwangsa Health Clinic and Quarters at Jalan Fletcher, Kuala Lumpur

Description : Provided Mechanical and Electrical engineering consulting services for the project comprising of one block of 4-storeys of polyclinic and three units of 10-storey staff quarters.

Services : Mechanical Services - Cold Water Piping system, Sanitary Piping System, Air Conditioning System fire Fighting System and Lift.

Project Value : *RM 75 mil (USD 21 mil)*

KL-Kuala Selangor Expressway (KLS Expressway)

Description : HSSI was appointed as Project Management Consultant for the KL-Kuala Selangor Expressway of 33km new alignment with two lane dual carriageway and forms part of the KL Outer Ring Road linking the coastal area in the north-western region of Selangor and the northern region of Kuala Lumpur which corridor has been earmarked since late 1980s. The expressway namely from Assam Jawa to Kundang and from Kundang to Templer Park.

Services : Project Management Consultancy

Project Value : *RM 1 bil (USD 285 mil)*

Proposed Construction Project of Senawang Secondary School (SMK), 36 class rooms in Negeri Sembilan

Description : Provided Mechanical and Electrical engineering consulting services for this project. The proposed school is located in Senawang, Seremban, Negeri Sembilan and comprises of 36 class rooms, laboratory, workshop, administration building, residential building, surau, canteen and associated facilities.

Services : Services included 11/0.4kV Sub-Station, LV Electrical system, Telecommunication Telephone and ICT and Extra Low Voltage System. Mechanical Services - Cold Water Piping system, Sanitary Piping System, Air Conditioning System and Fire Fighting System.

Project Value : *RM 30 mil (USD 9 mil)*



M & E Experience

Proposed UiTM Terengganu, Kampus Bukit Besi, Bangunan Asrama

Description : Provide Mechanical and Electrical engineering consulting services for the proposed campus located at Bukit Besi, Dungun, Terengganu comprising six (6) hostel building of 4 storey each and a canteen.

Services : Installation of Electrical Low Voltage and Telephone Services, Extra Low Voltage System comprises of Public Address and SMATV System. For Mechanical Services, system installed comprises of Cold Water Piping system, Sanitary Piping System, Air Conditioning System and Fire Fighting System.

Project Value : *RM 28 mil (USD 8 mil)*

Techno Park Development

Description : Techno Park Development comprises of approximately 1760 hectares, which is intended to be developed as a “high tech hub” with clusters of similar technological industries.

Services : Detailed Design and Construction Supervision for the infrastructure works and utility requirement, review of ongoing masterplan and Utility detailed designs for water supply, sewerage, district cooling, gas and power supply.

Project Value : *RM 1.2 bil (USD 340 mil)*

Proposed Construction Project of Serdang Baru Secondary School (SMK) in Kedah Darul Aman

Description : Provided Mechanical and Electrical engineering consulting services for this project. The proposed school is located in Serdang Baru, Bandar Bahru, Kedah and comprises of 18 class rooms, laboratory, workshop, administration building, residential building, surau, canteen and associated facilities.

Services : Electrical Services comprises of 11/0.4kV Sub-Station, LV Electrical system, Telecommunication Telephone and ICT and Extra Low Voltage System. Mechanical Services - Cold Water Piping system, Sanitary Piping System, Air Conditioning System and Fire Fighting System.

Project Value : *RM 16 mil (USD 5 mil)*



Pos Utama

SI TEKNOLOGI MARA
TERENGGANU

M & E Experience

Corporate Office and Factory for SIDEL Industry (M) Sdn. Bhd.

- Description** : Provided design and supervision of Sidel's new factory/office building on a 7.75 acres of land, the overall building of 15,000sqm.
- Services** : Project Management in Mechanical and Electrical Services Matter. Provide Detailed Engineering Consultancy Services For Mechanical and Electrical Services during Design stage, Tender, Construction and Defect Liability Period.
- Project Value** : RM 40 mil (USD 11 mil)

New Yard Development Works at Pasir Gudang for Sime Semcorp Engineering

- Description** : Provide engineering consultancy services and site supervision for the development of wharfs, warehouse building, maintenance workshop building and street lighting works within Sime Semcorp yard development area at Pasir Gudang industrial area, Johor.
- Services** : Provide Detailed Design for Mechanical and Electrical Services. Consultancy Services during Pre, Construction and Post Construction. Supervision and Monitoring Works during Construction Stage.
- Project Value** : RM 90 mil (USD 26 mil)

North South Expressway (PLUS) Proposed KL-Penang Through Traffic

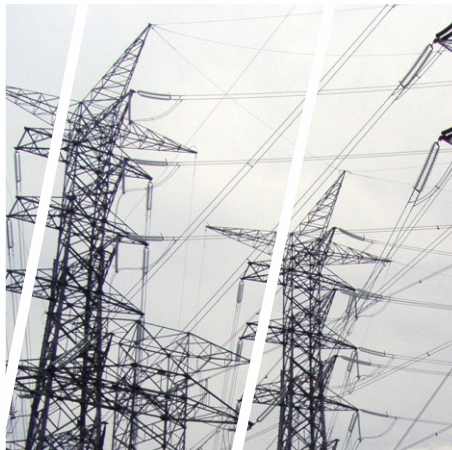
- Description** : Upgrading of the then existing North-South expressway between Ipoh South toll barrier and the Jelapang toll barrier. The project involves the isolation of the local Ipoh traffic from the inter-urban traffic on the expressway by providing two parallel local roads on either side of the expressway. HSS Mekanikal and Elektrikal Sdn. Bhd. is required to carry out both the preliminary and detailed engineering designs including the construction supervision.
- Services** : Provide design and supervision services of highway Streetlighting & High mast installation, Traffic Surveillance Control System and Electrical LV, Telephone Service and Mechanical Services.
- Project Value** : RM 240 mil (USD 68 mil)

Renovation Works at MAXIS Johor Bahru

- Description** : The site is located at mukim Tebrau Johor Bahru. HSS was responsible to provide engineering design on refurbishing the Maxis Telecommunication Office Centre building (TOC). The works basically was to convert the Storeroom into a new DC plant room.
- Services** : Provide engineering Design for Upgrading of Telecommunication Office Centre that focus mainly on Electrical Services and Fire Fighting System.
- Project Value** : RM 1 mil (USD 0.3 mil)

Penang Bridge Widening

- Description** : HSS were appointed as the Engineering Consultants to the third lane widening of the existing Penang Bridge due to the increasing traffic volume.
- Services** : Provide design and supervision services of the bridge infrastructure comprises of Street lighting & High mast installation, Traffic Surveillance Control System, Telecommunication System and Toll Plaza Building Services.
- Project Value** : RM 500 mil (USD 143 mil)



M & E Experience

Integrated Transportation System (ITIS) for Klang Valley and Multimedia Super Corridor

Description : This building is a 4 storey RC Structure located on a 3.15 acre site with a total floor area is approximately 6000m². The function of this centre is for traffic surveillance, congestion management, incident reporting and data management and dissemination.

Services : Provide comprehensive Electrical and Mechanical Services consultancy works for Transports Management Centre Building and Refurbishment Works of Traffic Information Centre in DBKL.

Project Value : RM 14 mil (USD 4 mil)

Six Interchanges on the LDP

Description : HSSM&E was appointed as the consultants to design the interchanges to ease traffic congestion. Highlights of the design include dual two-lane fly-overs, 3-tier two-lane fly-overs, in addition to the construction of ramps and elevated U-turns, to name a few.

Services : Provide detailed engineering design, liaison with authorities and supervision works for street lighting, viaduct, underpass and high mast lighting for 6 nos of interchanges.

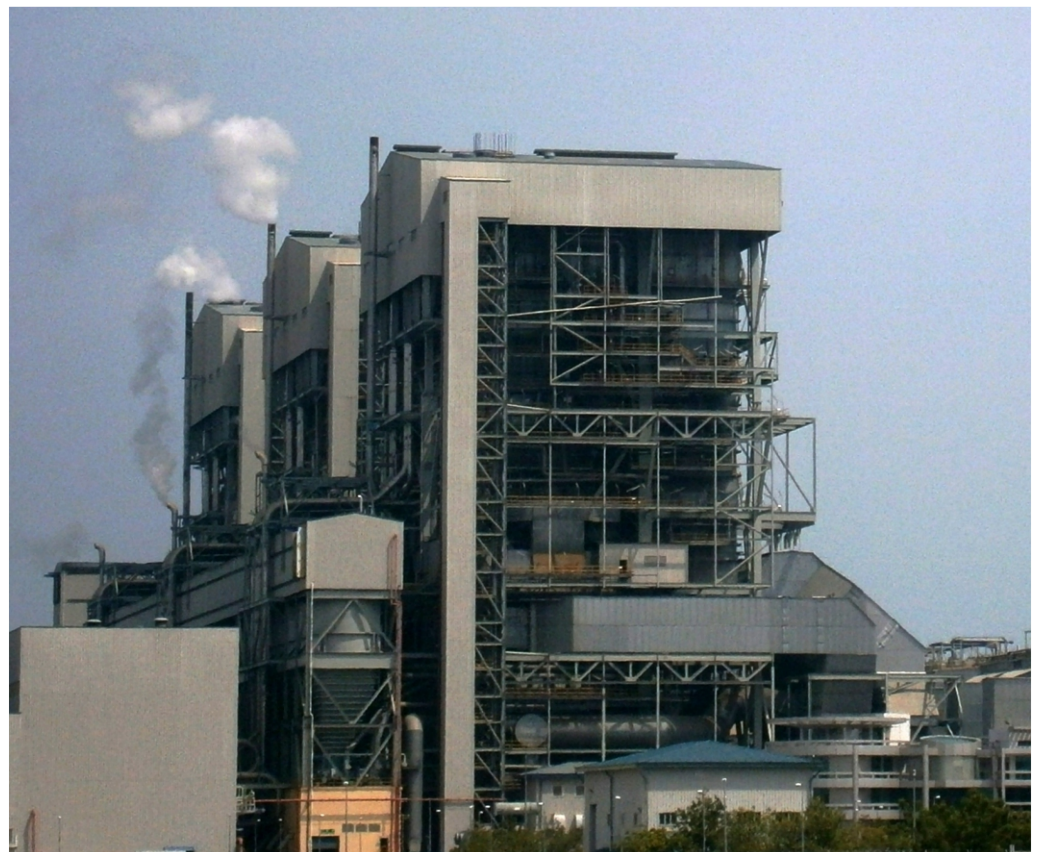
Project Value : RM 95 mil (USD 27 mil)

Ipoh – Lumut, Upgrading of FR5

Description : Upgrading of Federal Route 5 from Ipoh to Lumut for a length of approximately 75km under Design & Build contract. HSS Mekanikal & Mekanikal Sdn Bhd was appointed as the Design and Supervising Consultant for the Electrical Works for Package A of the project which is approximately 42km. .

Services : Street Lighting and Traffic Light system Installation

Project Value : RM 265 mil (USD 76 mil)



M & E Experience

Proposed Construction & Completion of Container Yards 4, 5, 6 & 7, Westport

Description : Civil and Structural design and supervision for construction of container yards 3, 4, 5, 6 & 7 which was constructed in phases as per clients programme and needs. The yards contain stacking area, CFS building, workshops and other ancillary buildings/ structures

Services : Forecast Load Growth, Detailed Design for 33kV HT Sub-Station, 11kV, LV and Telecommunication Infrastructure Reticulation for entire Westport development. Provide electrical and mechanical services for buildings, container crane yard/stacking area by phases.

Project Value : *RM 200 mil (USD 58 mil)*

Sultan Idris Educational University Project – M & E Design Services

Description : M & E design services for one of the six packages comprising the faculty of Science and Technology complex and maintenance centre, workshop and garage. This includes eight building blocks while the maintenance centre, workshop and garage comprises of four building blocks.

Services : Concept design, detailed design, construction supervision and technical advice for Electrical and Mechanical Services.

Project Value : *RM 50 mil (USD 14 mil)*

The Kajang Seremban Highway Project

Description : The Design, Build, Operate and Maintenance of 48 km of Highway from Kajang to Paroi Interchange

Services : Comprehensive Engineering consultancy Services for Street and High mast Lighting Design Installation throughout the highway, Mechanical and Electrical Services for Toll Plaza and Rest Service Area Building.

Project Value : *RM 700 mil (USD 200 mil)*



M & E Experience

University Malaysia Sabah – Design Consultant

Description : The expansion of Phase II of University Malaysia Sabah (UMS) includes five new faculty buildings, sports facilities, hostels and relevant infrastructure works. We were appointed as the design consultants for mechanical and electrical scope of works while Chase Perdana Berhad acted as the turnkey contractor.

Services : Provide concept design during inception stage, detailed design, tender documentation, construction management and technical advice for Electrical and Mechanical Services.

Project Value : *RM 500 mil (USD 143 mil)*

Matriculation College – Construction of College

Description : Located in Banting, Selangor on a 90 acre site comprises academic, administration, residential, recreational and associated facilities.

Services : Comprehensive Mechanical and Electrical Services for a whole development from Inception stage up to Project handover.

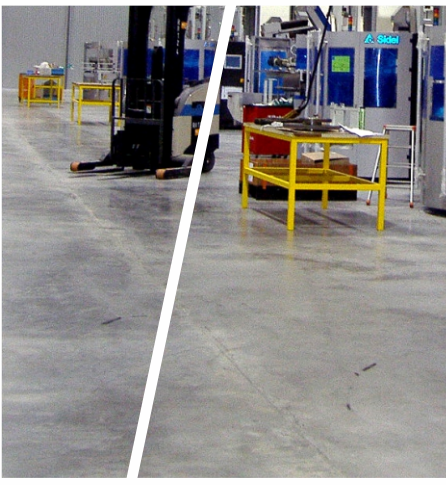
Project Value : *RM 200 mil (USD 58 mil)*

Upgrading of Federal Route 98 from Temerloh to Jerantut, Pahang

Description : Upgrading and improvement to the existing Federal Route 98 from Termeloh to Jerantut, Pahang. A total of 5 existing bridges will also be replaced with new structures.

Services : Relocation of existing electrical and telephone cable. New installation of Street Lighting and Traffic Light system.

Project Value : *RM 130 mil (USD 37 mil)*



M & E Experience

Duta – Ulu Kelang Expressway (DUKE)

Description : The services provided for the Design, Build, Operate & Maintenance of 18 km of Urban Expressway included the preliminary design of 7 interchanges and ramps, 1.5km of elevated viaduct, 15 road under bridges and over bridges, 3km of RE Walls with piled embankments, 3 Toll Plazas.

Services : Street Lighting and Toll Plaza Lighting, Coordination with other relevant authorities and parties.

Project Value : *RM 800 mil (USD 230 mil)*

Construction of Container Terminal No.3 Wharf and Access Bridges

Description : Container terminal no.3 is part of Westport and is located at Pulau Indah Port Klang, Selangor, Darul Ehsan. Westport is a multi Terminal comprising of 9 terminals. The project involved the construction of the Container Terminal No.3 Wharf, Access Bridges and the associated infrastructure facilities.

Services : Forecast Load Growth, Detailed Design for 33kV HT Sub-Station , 11kV, LV and Telecommunication Infrastructure Reticulation for entire Westport development. Provide electrical and mechanical services for buildings, container crane yard/stacking area by phases.

Project Value : *RM 74 mil (USD 21 mil)*

Universiti Teknologi Petronas, Tronoh, Perak

Description : 400-hectare landmark university campus with its “state-of-the-art” facilities where the concept is known as “University in the Forest”. It is located at Bandar Sri Iskandar, Tronoh. We provide engineering input to the infrastructure masterplan including site investigation, design and supervision of M & E infrastructure works.

Services : Detailed Infrastructure Design, Mechanical and Electrical Services for each campus building

Project Value : *RM 1 bil (USD 290 mil)*

Polyfelt Factory (Geotextile) Shah Alam

Description : The factory consist of a production building, warehouse, office and other miscellaneous structures(approximately 6700m2).

Services : HT and LV external reticulation. Mechanical and electrical services for factory plant.

Project Value : *RM 13 mil (USD 4 mil)*

Maju Expressway (Kuala Lumpur - Putrajaya Highway)

Description : HSSM&E was been appointed as a consultant for design and supervision of mechanical & electrical works for the 42km expressway that links KL to Putrajaya to the new KL International Airport, Sepang.

Services : Design works for the street lighting and high mast, LV electrical and telephone services for the Toll Plaza and Supervision Building. Design works for the mechanical services i.e. fire fighting, air-condition, cold water plumbing and sanitary plumbing. Site supervision.

Project Value : *RM 1.4 bil (USD 400 mil)*





M & E Experience

Century Batteries Malaysia (CBM) Relocation and Expansion Project

Description : Carried out detailed design and construction supervision for the construction of a new Manufacturing and Assembly Plant for Century Batteries (M) Sdn Bhd on a 16 acres land in Kapar, Selangor.

Services : Design for kV sub-station and reticulation. Mechanical and Electrical services detailed design. Tender and construction management.

Project Value : *RM 22 mil (USD 6 mil)*

Petrochemical Plant At Teluk Kalong Industrial Area, Kemaman, Terengganu

Description : A petrochemical plant to produce Phthalic Anhydride and Maleic by Thirumalai Chemical Ltd. Of India has joint venture with Yayasan Terengganu, Promet Berhad and Singapore Highpolymer Chemical Products Pte. Ltd.

Services : Design and supervision of 11kV Sub-station, electrical Low voltage, telecommunication system, mechanical services-fire protection, air condition and ventilation system, domestic water supply and sanitary piping system and control.

Project Value : *RM 65 mil (USD 17 mil)*

LRT System 2, Package 1C, Kerinchi to Pasar Seni

Description : HSSM&E was engaged by Putra as the Detailed Design Consultant, for the mechanical & electrical services works for 5 numbers of LRT passenger stations named as Kerinchi Station, University Station, Bangsar Station Abdullah Hukum Station and Pasar Seni Station

Services : Focus mainly on the reticulation external electrical cabling system, tunnel lighting, telecommunication and network system and control.

Project Value : *RM 360 mil (USD 103 mil)*





ENGINEERS

HSS ENGINEERS BERHAD

HEB Group comprises the following companies:

HSS Engineers Berhad (1128564-U)

HSS Engineering Sdn. Bhd. (450753-X)

SMHB Engineering Sdn Bhd (167729-A)

BIM Global Ventures Sdn. Bhd. (1008362-V)

HSS BIM Solutions Pvt. Ltd. (incorporated in India)(U74900TN2012PTC086741)

SMHB Environmental Sdn. Bhd. (258815-X)

Our associated companies held through HSS Engineering Sdn Bhd are as follows:

HSS Integrated Sdn. Bhd. (173262-T)

HSS Mekanikal & Elektrikal Sdn. Bhd. (228667-K)

The associated company held through SMHB Engineering Sdn Bhd is as follows:

SMHB Sdn. Bhd. (63281-X)

HSS Engineers Berhad

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